#### **INFORMATION DOCUMENT**



#### **Rana Gruber AS**

(A private limited liability company incorporated under the laws of Norway)

#### Admission to trading of shares on Euronext Growth Oslo

This information document (the "**Information Document**") has been prepared by Rana Gruber AS (the "**Company**" or "**Rana Gruber**" and, together with its subsidiary, the "**Group**") solely for use in connection with the admission to trading of the Company's 37,392,000 shares, each with a nominal value of NOK 0.25 (the "**Shares**") on Euronext Growth, operated by Oslo Børs ("**Euronext Growth Oslo**").

The Company has applied for admission to trading of its Shares on Euronext Growth Oslo and it is expected that the Shares will start trading on or about 26 February 2021 under the ticker symbol "RANA".

The present Information Document has been drawn up under the responsibility of the Company. It has been reviewed by the Euronext Growth Advisors and has been subject to an appropriate review of its completeness, consistency and comprehensibility by Euronext Growth Oslo.

Euronext Growth is a market operated by Euronext. Companies on Euronext Growth, a multilateral trading facility (MTF), are not subject to the same rules as companies on a Regulated Market (a main market). Instead they are subject to a less extensive set of rules and regulations adjusted to small growth companies. The risk in investing in a company on Euronext Growth may therefore be higher than investing in a company on a Regulated Market. Investors should take this into account when making investment decisions.

The present Information Document does not constitute a prospectus within the meaning of Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71. The present Information Document has been drawn up under the responsibility of the Issuer. It has been reviewed by the Listing Sponsor and has been subject to an appropriate review of its completeness, consistency and comprehensibility by Euronext.

THIS INFORMATION DOCUMENT SERVES AS AN INFORMATION DOCUMENT ONLY, AS REQUIRED BY THE EURONEXT GROWTH MARKETS RULE BOOK AND NOTICES ISSUED BY OSLO BØRS. THIS INFORMATION DOCUMENT DOES NOT CONSTITUE AN OFFER TO BUY, SUBSCRIBE OR SELL ANY OF THE SECURITIES DESCRIBED HEREIN, AND NO SECURITIES ARE BEING OFFERED OR SOLD PURSUANT HERETO.

Investing in the Shares involves a high degree of risk. Prospective investors should read the entire document and in particular Section 1 "Risk factors" and Section 3.3 "Cautionary note regarding forward-looking statements" when considering an investment in the Company and its Shares.

#### **Euronext Growth Advisors / Listing Sponsors**

**Clarksons Platou Securities AS** 

**DNB Markets** 





Markets

SpareBank 1 Markets AS



The date of this Information Document is 25 February 2021

#### **IMPORTANT INFORMATION**

This Information Document has been prepared solely by the Company in connection with the admission to trading of the Shares on Euronext Growth Oslo. This Information Document has been prepared solely in the English language. For definitions of terms used throughout this Information Document, see Section 12 "Definitions and glossary of terms".

The Company has engaged Clarksons Platou Securities AS, DNB Markets, a part of DNB Bank ASA and SpareBank 1 Markets AS as its advisors in connection with the admission to trading on Euronext Growth Oslo (the "**Euronext Growth Advisors**"). This Information Document has been prepared to comply with the Euronext Growth Markets Rule Book and related Notices for Euronext Growth Oslo, and the Content Requirements for Information Documents for Euronext Growth Oslo. Oslo Børs ASA has not approved this Information Document or verified its content.

The Information Document does not constitute a prospectus under the Norwegian Securities Trading Act and related secondary legislation, including Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market (the "**Prospectus Regulation**"), and has not been reviewed or approved by any governmental authority.

All inquiries relating to this Information Document should be directed to the Company or the Euronext Growth Advisors. No other person has been authorized to give any information, or make any representation, on behalf of the Company and/or the Euronext Growth Advisors in connection with the admission to trading, if given or made, such other information or representation must not be relied upon as having been authorized by the Company and/or the Euronext Growth Advisors.

The information contained herein is current as of the date hereof and subject to change, completion or amendment without notice. There may have been changes affecting the Company subsequent to the date of this Information Document. Any new material information and any material inaccuracy that might have an effect on the assessment of the Shares arising after the publication of this Information Document and before the admission to trading on Euronext Growth Oslo will be published and announced promptly in accordance with the Euronext Growth Oslo regulations. Neither the delivery of this Information Document nor the completion of the admission to trading on Euronext Growth Oslo at any time after the date hereof will, under any circumstances, create any implication that there has been no change in the Company's affairs since the date hereof or that the information set forth in this Information Document is correct as of any time since its date.

The contents of this Information Document shall not be construed as legal, business or tax advice. Each reader of this Information Document should consult with its own legal, business or tax advisor as to legal, business or tax advice. If you are in any doubt about the contents of this Information Document, you should consult with your stockbroker, bank manager, lawyer, accountant or other professional advisor.

The distribution of this Information Document may in certain jurisdictions be restricted by law. Persons in possession of this Information Document are required to inform themselves about, and to observe, any such restrictions. No action has been taken or will be taken in any jurisdiction by the Company that would permit the possession or distribution of this Information Document in any country or jurisdiction where specific action for that purpose is required.

The Shares may be subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under applicable securities laws and regulations. Any failure to comply with these restrictions may constitute a violation of the securities laws of any such jurisdiction. Investors should be aware that they may be required to bear the financial risks of this investment for an indefinite period of time.

This Information Document shall be governed by and construed in accordance with Norwegian law. The courts of Norway, with Oslo District Court as legal venue, shall have exclusive jurisdiction to settle any dispute which may arise out of or in connection with the Information Document.

### Investing in the Company's Shares involves risks. Please refer to Section 1 "Risk factors" of this Information Document.

#### TABLE OF CONTENTS

1.	RISK	FACTORS	. 5
	1.1	Risks relating to the Group's business and the industry in which it operates	5
	1.2	Risks related to the Shares and the admission to trading on Euronext Growth Oslo	12
2.	STAT	EMENT OF RESPONSIBILITY	15
3.	GENE	RAL INFORMATION	16
5.	3.1	Other important investor information	
	3.2	Presentation of financial and other information	
	3.2 3.3		
		Cautionary note regarding forward-looking statements	
4.	BUSI	NESS OVERVIEW	
	4.1	Introduction	18
	4.2	History and important events	18
	4.3	Group structure	19
	4.4	Overview of principal activities	19
	4.5	Mineral resources	
	4.6	Mining	24
	4.7	Logistics	26
	4.8	Processing	27
	4.9	Sales and marketing	32
	4.10	Suppliers and contractors	32
	4.11	Sustainable mining operations is key priority for the Group	33
	4.12	Material contracts, business-critical patents or licenses and related party agreements	35
	4.13	Legal and regulatory proceedings	37
	4.14	Regulatory matters	37
	4.15	Illustrative examples for the Group's financial performance in the years 2021 and onwards	39
		Illustrative examples for the Group's financial performance in the years 2021 and onwards Hedging	
5.	4.16		48
5. 6.	4.16 <b>PRIN</b>	Hedging	48 <b>49</b>
	4.16 <b>PRIN</b>	Hedging	48 <b>49</b> 51
	4.16 PRIN SELE	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION	48 <b>49</b> 51
	4.16 PRIN SELE 6.1	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation	48 <b>49</b> 51 51
	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation Summary of accounting policies and principles	48 <b>49</b> 51 51 51
	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation Summary of accounting policies and principles Statement of income	48 <b>49</b> 51 51 51 51 52
	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation Summary of accounting policies and principles Statement of income Statement of financial position	48 <b>49</b> 51 51 51 52 52 54
	4.16 PRIN SELE 6.1 6.2 6.3 6.4 6.5	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation Summary of accounting policies and principles Statement of income Statement of financial position Statement of cash flows	48 <b>49</b> 51 51 51 52 54 55
	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation Summary of accounting policies and principles Statement of income Statement of financial position Statement of cash flows Statement of changes in equity	48 <b>49</b> <b>51</b> 51 51 51 52 54 55 55
	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation Summary of accounting policies and principles Statement of income Statement of financial position Statement of cash flows Statement of changes in equity Significant changes in the Group's financial or trading position	48 <b>49</b> <b>51</b> 51 51 52 54 55 55 55
	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation Summary of accounting policies and principles Statement of income Statement of financial position Statement of cash flows Statement of changes in equity Significant changes in the Group's financial or trading position Working capital statement	48 <b>49</b> <b>51</b> 51 51 52 54 55 55 55
6.	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9	Hedging CIPAL MARKETS CTED FINANCIAL INFORMATION Introduction and basis for preparation	48 <b>49</b> 51 51 52 55 55 55 <b>55</b> <b>57</b>
6.	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 <b>THE</b>	Hedging	48 <b>49</b> 51 51 52 55 55 55 <b>55</b> <b>57</b> <b>57</b>
6.	4.16 <b>PRIN</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 <b>THE</b> 7.1	Hedging	48 <b>49</b> 51 51 52 55 55 55 <b>55</b> <b>57</b> 57 57
6.	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 <b>THE</b> 7.1 7.2	Hedging         CIPAL MARKETS         CTED FINANCIAL INFORMATION         Introduction and basis for preparation         Summary of accounting policies and principles         Statement of income.         Statement of financial position         Statement of cash flows         Statement of changes in equity         Significant changes in the Group's financial or trading position         Working capital statement         Borrowings         BOARD OF DIRECTORS, MANAGEMENT AND EMPLOYEES         Overview         The Board of Directors	48 <b>49</b> <b>51</b> 51 51 52 55 55 <b>55</b> <b>57</b> 57 57 58
6.	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 <b>THE</b> 7.1 7.2 7.3	Hedging         CIPAL MARKETS         CTED FINANCIAL INFORMATION         Introduction and basis for preparation         Summary of accounting policies and principles         Statement of income         Statement of financial position         Statement of cash flows         Statement of changes in equity         Significant changes in the Group's financial or trading position         Working capital statement         Borrowings         BOARD OF DIRECTORS, MANAGEMENT AND EMPLOYEES         Overview         The Board of Directors	48 <b>49</b> <b>51</b> 51 52 55 55 <b>55</b> <b>57</b> <b>57</b> <b>57</b> <b>58</b> <b>59</b>
6.	4.16 <b>PRIN</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 <b>THE</b> 7.1 7.2 7.3 7.4	Hedging         CIPAL MARKETS         CTED FINANCIAL INFORMATION         Introduction and basis for preparation         Summary of accounting policies and principles         Statement of income.         Statement of financial position         Statement of cash flows         Statement of changes in equity         Significant changes in the Group's financial or trading position         Working capital statement         Borrowings         BOARD OF DIRECTORS, MANAGEMENT AND EMPLOYEES.         Overview         The Board of Directors         Management         Employees	48 <b>49</b> 51 51 52 55 55 55 57 57 58 59 59
6.	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 <b>THE</b> 7.1 7.2 7.3 7.4 7.5 7.6	Hedging         CIPAL MARKETS         CTED FINANCIAL INFORMATION         Introduction and basis for preparation.         Summary of accounting policies and principles         Statement of income.         Statement of financial position         Statement of cash flows         Statement of changes in equity .         Significant changes in the Group's financial or trading position         Working capital statement         Borrowings         Overview         The Board of Directors         Management         Employees         Corporate governance requirements	48 <b>49</b> <b>51</b> 51 51 52 55 55 <b>57</b> 57 57 59 60
6.	4.16 <b>PRIN</b> <b>SELE</b> 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 <b>THE</b> 7.1 7.2 7.3 7.4 7.5 7.6	Hedging         CIPAL MARKETS         CTED FINANCIAL INFORMATION         Introduction and basis for preparation.         Summary of accounting policies and principles         Statement of income.         Statement of financial position         Statement of cash flows         Statement of changes in equity         Significant changes in the Group's financial or trading position         Working capital statement         Borrowings         Board OF DIRECTORS, MANAGEMENT AND EMPLOYEES         Overview         The Board of Directors         Management.         Employees         Corporate governance requirements         Conflicts of interests, etc.	48 <b>49</b> <b>51</b> 51 52 55 55 <b>57</b> 57 57 57 59 60 <b>61</b>

	8.3	Ownership structure
	8.4	Information on the Private Placement61
	8.5	Reasons for the Admission
	8.6	Lock-up
	8.7	Financial instruments
	8.8	Shareholder rights
	8.9	Articles of Association
	8.10	Dividend policy
	8.11	Near term financial reporting and general meeting64
	8.12	Takeover bids and forced transfer of shares
	8.13	Insider trading
	8.14	Certain aspects of Norwegian corporate law
9.	NOR	WEGIAN TAXATION
	9.1	Introduction
	9.2	Norwegian shareholders
	9.3	Non-Norwegian shareholders – Norwegian taxation
	9.4	Inheritance tax
	9.5	Stamp duty69
10.	SELL	ING AND TRANSFER RESTRICTIONS
	10.1	General
	10.2	Selling restrictions
	10.3	Transfer restrictions
11.	ADD]	TIONAL INFORMATION
	11.1	Admission to trading on Euronext Growth Oslo74
	11.2	Auditor74
	11.3	Advisors
	11.4	Documents on display
	11.5	Third-party information74
12.	DEFI	NITIONS AND GLOSSARY TERMS

APPENDIX A Articles of Association
------------------------------------

- APPENDIX C Audited unconsolidated financial statements for the financial year ended 31 December 2018
- APPENDIX D Unaudited consolidated interim financial statements for the nine months ended 30 September 2020
- APPENDIX E Independent mineral resource estimate for Rana Gruber AS dated June 2019

#### 1. RISK FACTORS

An investment in the Shares involves inherent risks. Before making an investment decision with respect to the Shares, investors should carefully consider the risk factors set forth below and all information contained in this Information Document, including the financial information and related notes. The risks and uncertainties described in this Section 1 are the principal known risks and uncertainties faced by the Company and/or the Group as of the date hereof that the Company believes are relevant to an investment in the Shares. An investment in the Shares is suitable only for investors who understand the risks associated with this type of investment and who can afford to lose all or part of their investment. The absence of negative past experience associated with a given risk factor does not mean that the risks and uncertainties described herein should not be considered prior to making an investment decision.

If any of the risks were to materialise, individually or together with other circumstances, it could have a material and adverse effect on the Group and/or its business, financial condition, results of operations, cash flows and/or prospects, which may cause a decline in the value of the Shares that could result in a loss of all or part of any investment in the Shares. The risks and uncertainties described below are not the only risks the Group may face. Additional risks and uncertainties that the Company currently believes are immaterial, or that are currently not known to the Company, may also have a material adverse effect on the Group's business, financial condition, results of operations and cash flow. The order in which the risks are presented below does not reflect the likelihood of their occurrence or the magnitude of their potential impact on the Group's business, financial condition, results of operations, cash flows and/or prospects. The risks mentioned herein could materialise individually or cumulatively. The information in this Section 1 is as of the date of this document.

#### **1.1** Risks relating to the Group's business and the industry in which it operates

### The Group's business operations have been and will continue to be affected by general economic and political conditions in the markets in which it operates

The Group is one of Norway's largest companies within mining and iron ore beneficiation, serving primarily steel producers and the chemical industry with products based on its own natural mineral resources, upgraded and tailored for applications and exported to customers worldwide. Its operations may be affected by global economic and political conditions in the markets in which it operates.

As of the date of this Information Document, the outlook for the world economy remains subject to uncertainty. Downturns in general economic conditions, whether globally or in the specific regional and/or end markets segments in which the Group operates, can result in reduced demand for, and lower prices of, the Group's products, which could have a material negative impact on the Group's revenues, profitability and growth prospects. Furthermore, downturns in general economic conditions may affect the customers' income, capital and liquidity, which in turn could affect the customers' payment ability for the Group's products. Factors relating to general economic conditions, such as business and customer confidence, employment trends, business investment, government spending, inflation, volatility and strength of both debt and equity markets, may all affect the prices and demand for the Group's products, and thereby affect the revenue, profitability and financial condition of the Group. Furthermore, political conditions may affect the mining and iron ore market in general. For example, laws and regulations may be implemented which could result in increased costs for the Group in order to operate within the mining and iron ore market or impose restrictions on the Group's business operations or could affect the demand or need for the Group's products, and political changes may impact the prices in the mining and iron ore market and result in fluctuations in the market which could affect the Group's operations.

Furthermore, the ongoing outbreak of Covid-19 has had a significant negative impact on global trade and economic activity, and it is difficult to predict the continued impact it will have on the world economy going forward. The outbreak of Covid-19 has led to governmental shutdowns of cities, borders and companies to close business operations. The impact of these restrictions and potential further restrictions on the Group are difficult to predict, but they have had and are likely to continue to have a negative effect on the general economy, and this may in turn have negative consequences for the Group's business.

Many of the risks related to general economic and political conditions are outside of the Group's control, and the Group may not be able to predict the exact nature of all the risks and uncertainties that it faces as a result of the current economic and political conditions, as well as economic and political outlook in the markets in which it operates. If any of these risks or related risks materialise, it could have a material adverse effect on the Group's business, financial position and profits.

#### The Group operates in a highly competitive market

The mining industry is highly competitive in all of its phases, including quality, quantity, price of products and production costs. Such competition may affect the Group's exploration activities, development activities and financial condition. Some of the Group's competitors are large, sophisticated and wellcapitalised mining companies that may have greater financial, technical and marketing resources than the Group. Furthermore, these competitors may have larger research and development expenditures, and thereby, have a greater ability to fund product research and can respond more quickly to changes in customer demands. Increased competition in the mining and iron ore market could result in price reductions, loss of market share, reduced margins and fewer customer orders. There can be no assurance that the Group will continue to compete successfully against current or new entrants on the mining and iron ore market. Any failure by the Group to compete successfully against current or new competitors could have a material adverse effect on the Group's business, financial position and profits.

### Decreases in iron ore prices may have a material adverse effect on the business, results, profitability and financial position of the Group

The Company is exposed to the development in commodity prices, and in particular iron ore. Commodity prices can fluctuate widely and are affected by many factors beyond the Company's control. Iron ore prices and demand are cyclical and influenced strongly by world economic growth, particularly in the United States and Asia (particularly China). The Company has entered into an off-take agreement with Cargill International Trading Pte Ltd ("Cargill") in which the Company delivers its entire annual production of hematite iron ore for steel making applications to Cargill (the "Cargill Agreement"). The pricing mechanism under the Cargill Agreement is linked to iron ore spot prices. The Company carried out certain short-term hedging transactions to reduce the exposure to iron ore spot price fluctuations. However, such hedging transactions only concerns a very limited volume of the Company's future production and applies for a limited time period. Such hedging transactions may also be imperfect. Accordingly, despite of such hedging transactions, the Group remains heavily exposed to iron ore future marked price fluctuations. If the price of iron ore drops significantly or over an extended period, in addition to adversely affecting the Company's anticipated revenues from the sale of iron ore, the economic prospects of the Company could be significantly reduced. Such conditions could result in the cessation of mining activities that become uneconomic, halt or delay the development of the Group's activities and other new areas to mine, and reduce funds available for proving reserves, which would result in the depletion of reserves. A decline in the market price of iron ore would materially and adversely affect the production, earnings, asset values and growth prospects of the Group, which consequently could have an overall material adverse effect on the Group's business, financial position and profits.

#### The Group's business is subject to currency and exchange rate risk

Movements in currency exchange rates may have a material negative effect on the Group's financial condition and result of operations. The majority of the Group's products are sold in USD, while most of its specialty products are sold in EUR. Most of the Group's costs are denominated in NOK. If the value of NOK appreciated against the USD and/or EUR, there would be an adverse impact on the Group's results of operations. The Company carries out certain short-term hedging transactions for hedging fluctuations in the price of iron ore and similarly for fluctuations in the USD/NOK exchange rate. These hedging positions currently only in very limited degree removes the Group's total exposure to fluctuations in the market price of iron ore and currency fluctuations in the future and only for a limited time period. Accordingly, despite of such hedging transactions, the Group remains heavily exposed to iron ore future marked price fluctuations, stated in USD and EUR, and currency fluctuations. In particular, a strengthened NOK against the USD could have a material adverse effect on the Group's results of operations.

#### The Group is dependent on a few key suppliers and contractors which subject the Group to, among others, risk of delays in deliveries and production, disruption in operations and increased costs

The Group has a number of Norwegian and international suppliers and contractors. In the event that any supplier or contractor should experience financial difficulties or otherwise be unable to provide services to the Group, the Group's operations and productions may experience delays or short-fall. Even though the Company believes that the Group is not dependent upon a single supplier, the Group may not be able to replace its suppliers in a timely manner to continue production at the forecasted rate. Should these events materialize, they may have a material adverse effect on the Group's financial performance and results of operations. Furthermore, should certain of the risks described herein materialise, counterparties to any supplying or contracting agreements could, among other things, exercise their rights of renegotiation, termination and/or right to payment of liquidated damages or other amounts. Further, any termination of agreements or change of supplier may cause delay or shortfall of the Group's production. If any of these risks materialize it could have a material adverse effect on the Group's business, financial position and profits.

#### The Group depends on the Cargill Agreement

The Group is highly dependent on the Cargill Agreement as Cargill has agreed to purchase the Company's entire annual production of hematite iron ore for steel making applications. The loss of business from Cargill or the failure to perform under any contract with a significant customer, and in particular the Cargill Agreement, could have a material adverse effect on the business, results of operations and financial condition of the Group. The Cargill Agreement has a term until 31 March 2025. There is a risk that the Group may not be able to re-new or renegotiate the Cargill Agreement, or any of its customer contracts on favourable terms or at all. The Cargill Agreement may be terminated in the event of breach or deadlock. A commercial success of the Group requires that the Group retains the Cargill Agreement or enters into new customer contracts on commercially favourable terms in order to develop and increase its customer base. However, there is a risk that the Group may lose the Cargill Agreement or other existing customers, important customer collaborations may be terminated, existing customers may refrain from renewing contracts on the same or more favourable terms and the Group may not be able to attract new customers, all of which could result in a significant loss of revenues which may in turn adversely impact the Group's business, financial position and profits.

# The Group's future results may differ materially from what is expressed or implied by projections, estimates and illustrative examples of future financial performance included in this Information Document, and investors should not place undue reliance on such information

The Group's financial projections, estimates and illustrative examples included in this Information Document reflect various material assumptions about future events, many of which are outside the Group's control, including but not limited to that future foreign exchange rates and iron ore prices develop in accordance with the forward curves for the USD/NOK and the Fe 62% China Platts Index. Such assumptions may or may not prove to be correct. Currency exchange rates and iron ore prices can be very volatile and any deviations in actual development of such exchange rate and iron ore market prices will have potentially material impact on the actual financial performance of the Group's financial projections, estimates or illustrative examples of future financial performance. Investors should not place undue reliance on such information.

#### The Group's development and operating activities involve a high degree of risk

The Group's development and operating activities involves a high degree of risk, which even a combination of careful evaluation, experience and knowledge cannot eliminate. Major expenses may be required to develop metallurgical processes and to construct mining and processing facilities at a particular site. There is no assurance that the Group will be successful in developing metallurgical processes and its processing activities in general. If any of these risks materialize it could have a material adverse effect on the Group's business, financial position and profits.

### The Group may experience practical and/or technical problems in the operation of its processing plants

The Group operates processing plants in Mo i Rana, Norway. The Group may experience practical or technical problems in the operation of technical advanced mineral processing equipment. Break down of vital equipment may lead to prolonged outage or shutdowns of the processing plants. This could substantially increase production costs and/or result in production shortfall. The Group's inability to efficiently process iron ore into iron ore concentrate in a cost effective and timely manner, in the grades and quality that it currently anticipates and as required under its off-take agreement, could materially adversely affect the sale ability of the product and the Group may not be able to realize the anticipated premiums or may even be required to apply discounts to its prices or its customers may reject the product. This could materially and adversely affect its business, results of operations, contractual obligations under various supply agreements and its financial condition or prospects.

Furthermore, there are risks related to the Group's logistics system with respect to its railway connection used to transport the iron ore from the iron ore deposits to the Group's processing plant at Gullsmedvik, Norway. Any operational or technical problem related to the railway, leading to downtime of the railway and/or fewer runs of wagon sets per day, may result in a significant disruption in the Group's processing operations. This could subsequently result in material delays in the delivery of the Group's iron ore products to its customers which could have an adverse effect on the Group's business and financial position. Further, any operational or technical problems related to the railway, as well as any accidents on the railway, may lead to unexpectedly higher operating costs, loss of earnings and significant repair costs. While the Company believes that its railway and its wagons, as well as the third-party operated

locomotives, are in good conditions, the railway and wagons will periodically need to undergo repairs and upgrading. The timing and costs of repairs and upgrades are difficult to predict with certainty and may be substantial, and large repair expenses could decrease the Group's profits. As for the Group's shipping operations, the Group is also exposed to shipping freight costs which will generally increase depending on the distance to the final customer and also is subject to market price fluctuations in freight rates.

### The Group's insurance policies may not be adequate to cover all types of risks, which could result in significant costs and liability for the Group

The Group's business is subject to a number of risks and hazards generally, including adverse environmental conditions, industrial accidents, labour disputes, unusual or unexpected geological conditions, ground failures, drill hole cave-ins and natural phenomena such an inclement weather conditions, floods, snow falls and avalanches. Such occurrences could result in damage to exploration equipment, personal injury or death, environmental damage to the Group's properties or the properties of others, delays in exploration and production activities, monetary losses and possible legal liability.

Although the Group maintains insurance policies to protect against certain risks in such amounts as it considers reasonable, its insurance will not cover all the potential risks associated with the Group's business and operations and may not be adequate to cover any particular liability. It is not always possible to obtain insurance against all such risks and the Group may decide not to insure against certain risks because of high premiums associated with insuring against those risks or for other reasons. Furthermore, insurance coverage may not continue to be available at economically feasible premiums, or at all. Thus, there can be no assurance that the Group will be able to enter into full complement of insurance policies for expanded and/or future operations. Losses arising from events that are not insured or are not adequately insured may cause the Group to incur significant costs that could have a material adverse effect upon the Group's business, financial position and profits.

#### The Group is subject to risks related to health and safety hazards

Further to the above, the Group cannot guarantee that none of its employees will ever be injured or become ill from any occupational disease related to the workplace or that such injuries or diseases may not have any implications on the Group. The materialization of such injuries or diseases may have a material and adverse effect on the Group's business, financial position and profits.

#### The Group's business may lead to pollution and damage to the environment, and may expose the Group to negative attention and consequently harm its reputation

Mineral extraction involves processes that interfere with the natural environment and may, even if the Group remains compliant with all applicable regulations, lead to pollution or damage to the environment or the properties of others. The mining industry and the Group is exposed to negative attention from environmental organizations as well as local campaign initiatives. If the Group is involved in an accident leading to pollution or damage to the environment such organizations or campaigns may generate negative media attention. Even if no accidents or pollution occur, the inherent risk of accidents, pollution or environmental damage associated with the mining industry and the Group may generate negative media attention, which may have a material adverse effect on the Group's business, financial position and profits.

#### The Group is dependent on permits and registrations in order to carry out is operation, and there is a risk that such permits and registrations may be withdrawn, amended or not renewed

Various competent authorities' approvals and permits are required in connection with the Group's activities. To the extent approvals and permits are required and not obtained, the Group may be curtailed or prohibited from proceeding with planned operation or development of mineral properties. Although the Group has all permits and registrations required to operate its business, there is no guarantee that title to the Group's assets will not be challenged or impugned. The Group's concessions, permits and licenses may be subject to prior unregistered agreements, transfers, leases or native land claims and title may be affected by such unidentified or unknown claims or defects. Furthermore, there is a risk that any concession, permit or license may be withdrawn or not be renewed for a number of reasons, some of which may be outside of the Group's control. Terms and conditions of any concession, permit and/or license may also be changed by the relevant authority in case the Group does not comply with its obligations under applicable laws or such specific concession, permit or license or if there otherwise are compelling reasons, e.g. effects of the operations that could not have been foreseen at the time of authorization of such concession, permits and licenses. There can be no assurance that the Group will be able to maintain or obtain all necessary licenses and permits that may be required to carry out exploration, development and mining operations at its projects. If these risks materialize it could have a material adverse effect on the Group's business, financial position and profits.

The Group's current environmental permit and emission standards set out in this permit is based on a yearly production of 4.5mt crude ore. The Group's production exceeds 4.5mt per year, but this exceedance does not affect the Group's production or emission standards in the environmental permit. The Norwegian Environmental Agency, which grants environmental permits and carries out periodical audits of the licensee's, is aware of the Group's current production quantities and the Group is in dialogue with the agency regarding increasing the production quantity.

### The Group may not be able to acquire and profitably develop ore/mineral reserves which is required by the Group in order to continue its production activities

Mines have limited lives based on proven and probable ore/mineral reserves. The Group must continually replace and expand its ore/mineral reserves for a mine to continue production. The estimates for the Group's anticipated operations may not be correct and ultimately the Group's ability to maintain or increase its anticipated annual production will depend on its ability to bring new mines into production and/or to expand ore/mineral reserves at its then existing mines. Furthermore, there is a risk that additional ore/mineral reserves may not be available for the Group or that available ore/mineral reserves may not be of sufficient size/volume in order to replace and expand the Group's current ore/mineral reserves. If any of these risks materialize it could have a material adverse effect on the Group's business, financial position and profits.

### Risks related to estimation of ore/mineral reserves, mineral resources and metallurgical sampling and studies

The figures for ore/mineral reserves and mineral resources contained in this Information Document are estimates only and no assurance can be given that the anticipated tonnages and grades will be achieved, that the indicated level of recovery will be realized or that ore/mineral reserves can be mined or processed profitably, if at all. There are numerous uncertainties inherent in estimating ore/mineral reserves and mineral resources, including many factors beyond the Group's control. Such estimation is a subjective process and the accuracy of any reserve or mineral resource estimate is a function of the quantity and quality of available data and of the assumptions made and judgments used in engineering and geological interpretation. Short-term operating factors relating to the ore/mineral reserves, such as the need for orderly development of the ore bodies or the processing of new or different ore grades, may cause any ore body to be unprofitable in any particular accounting period. In addition, there can be no assurance that recoveries derived from small scale laboratory tests will be duplicated in larger scale tests under on-site conditions or during production. Fluctuation in commodity prices, results of drilling, metallurgical testing and production and the evaluation of mine plans subsequent to the date of any estimate of ore/mineral reserves or mineral resources may require revision of such estimates. The actual volume and grade of reserves mined and processed and recovery rates may not be the same as currently anticipated. Any material reductions in estimates of ore/mineral reserves and mineral resources or of the Group's ability to extract these ore/mineral reserves could have a material adverse effect on the Group's results of operations and financial condition. There is a risk that the figures do not provide a fully accurate or complete description of the Group's ore/mineral reserves and mineral resources.

### Risks that measured, indicated and inferred mineral resources cannot be converted into mineral reserves

There is a risk that measured, indicated and inferred mineral resources cannot be converted into mineral reserves as the ability to assess geological continuity is not sufficient to demonstrate economic viability. Due to the uncertainty of measured, indicated and inferred mineral resources, there is no assurance that inferred mineral resources will be upgraded to proven and probable mineral reserves as a result of continued exploration. Actual recoveries of mineral products may differ from reported mineral reserves and resources due to inherent uncertainties in acceptable estimation techniques. In particular, indicated and inferred mineral resources have a great amount of uncertainty as to their existence, economic and legal feasibility. It cannot be assumed that all or any part of an indicated or inferred mineral reserves do not have demonstrated economic viability. Investors are cautioned not to assume that all or any part of the deposits in these categories will ever be converted into proven and probable mineral reserves or that any proven or probable reserves will lead to economically viable production or production at all.

To illustrate the level of confidence on the reported mineral resource estimations, the Company applies similar terminology as used in international standards for reporting and displaying information related to mineral projects such as the Canadian National Instrument 43-101 and the Australian JORC standard (measured, indicated and inferred mineral resources). The Company's resource estimation follow the principles laid out by these standards but as of the date of this I does not comply with these standards, as the Company cannot document how the resource estimates were obtained and what routines were

followed when the estimates were obtained by drilling and logging procedures and laboratory procedures in the 1970s and 1980s. Further, the resource estimates have not been signed off by qualified persons as laid out by these standards.

If any of the risks related to measured, indicated and inferred mineral resources materialize it could have a material adverse effect on the Group's business, financial position and profits.

#### The Group may not be able to maintain or improve the strength of its brand

The Group's business depends upon the strength of its brand Rana Gruber. A critical component of the Group's future growth is its ability to maintain, improve and promote the strength of its brand in the Group's markets. The Group believes this can be achieved by providing high-quality products. The Group has invested and will continue to invest substantial amounts of resources in the control and development of its products. However, there can be no assurance that the Group will be able to provide high-quality and safe products. Any failure to provide customers with high-quality and safe products for any reason could harm the Group's reputation and adversely impact the Group's efforts to develop its brands as a trusted, high-quality and secure brand, which could in turn adversely impact the Group's business, financial position and profits.

#### The Group is subject to several laws and regulations in relation to its business

Exploration, development, mining and construction operations in Norway are subject to a variety of general and industry-specific laws, regulations and permits concerning the environment, the health and safety of employees, land access, infrastructure creation and access, royalties, taxation, accounting policies and other matters. In addition, certain types of operations require the use of certain mining and construction methods and equipment, submission of impact statements and approval thereof by government authorities. Compliance with such existing laws, regulations and permits may cause delays or require capital outlays in excess of those anticipated, which, in turn, could have a material adverse effect on the Group's financial condition and results of operations. Environmental legislation is evolving in a manner which may result in stricter standards and enforcement, increased fines and penalties for noncompliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees.

There is no assurance that future changes in laws, regulations or permitting will not adversely affect the Group's activities, for example delay or add material additional expenditures. The Group's operations may be affected in varying degrees by government regulations with respect to, for example, restrictions on exploration, development, processing, production, price controls, export controls, currency remittance, income taxes, expropriation of property, foreign investment, maintenance of claims, environmental legislation, land use, land claims of local people, water use and mine safety. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions, including orders issued by regulatory or judicial authorities, pursuant to which the Group may be required to cease or curtail its operations or take corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties, such as the Group, engaged in mining operations or in the operation or development of mineral properties may be required to compensate those suffering loss or damage by reason of their operations and development activities and may be subjected to civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Amendments to current laws, regulations and permits governing operations and activities of mining and exploration companies or more stringent implementation thereof could have a material adverse impact on the Group and cause increases in operation and exploration expenses or require abandonment of or delays in the exploration and development of new mining properties. There can be no assurance that future changes in environmental regulation will not adversely affect the Group's activities. Any delays or increased costs as a result of existing regulations, new regulations or fines for a breach of such regulations could materially and adversely affect the Group's business, results of operations, financial condition or prospects. Further, failure to comply strictly with applicable laws, regulations and local practices relating to mineral right applications and tenure, could result in loss, reduction or expropriation of entitlements, or the imposition of additional local or foreign parties as joint venture partners with carried or other interests. If any of the above-mentioned risks materialize it could have a material adverse effect on the Group's business, financial position and profits.

### The Group operates in a legal and regulatory environment that exposes and subjects it to litigation and disputes, which could have a negative impact on the Group's operations

The Group may from time to time be subject to commercial disagreements, contractual disputes, and, possibly, litigation with its counterparties, in the ordinary course of its operations such as liability claims, administrative claims and in relation to insurance matters, environmental issues, and governmental claims for taxes or duties. The Group cannot predict with certainty the outcome or effect of any future

disagreement, dispute or litigation involving the Group. The ultimate outcome of any disagreement, dispute or litigation, and the potential costs, time and management focus associated with prosecuting or defending such, could have a material adverse effect on the Group's business, financial condition and cash flows. In addition, the Group might suffer economic and/or reputational damage from involvement in claims or disputes, which could have a material adverse effect on the Group's business, financial position and profits, as well as lead to the deterioration of existing customer relationships and the Group's ability to attract new customers.

#### The Group may be subject to disputes or other claims in relation to its title to its properties

Further to the above, the Group's title to its properties may be subject to disputes or other claims. Although the Group has, in its opinion, exercised reasonable due diligence with respect to determining title to properties in which it has a material interest, there is no guarantee that title to such properties will not be challenged or impugned. Although the Group does not have knowledge of any valid challenges to the title of the Group's properties, no assurance can be given that no such challenges may exist, which, if successful, could impair the Group's ability to explore, develop and/or operate its properties or to enforce its rights with respect to its properties.

The Group's title to the properties in which it has an interest may be challenged or disputed, and such properties may be subject to prior unregistered agreements or transfers and title may be affected by undetected encumbrances or defects or government actions. An impairment to or defect in the Group's title to its properties could have a material adverse effect on the Group's business, financial condition or results of operations. In addition, such claims, whether or not valid, will involve additional costs and expenses to defend or settle which could adversely affect the Group's business, financial position and profits.

### The Group is dependent upon its key personnel, and retaining and attracting current and prospective highly skilled personnel

The success of the Group is dependent on its senior management and other key personnel. The experience of these individuals will be a factor contributing to the Group's development and growth. The loss of one or more of these individuals could have a material adverse effect on the Group's business prospects. Furthermore, the Group's ability to operate its business depends, in part, on the skills, experience and efforts of its key personnel involved in, among others, management, research, technical operations and sales. As a result, the Group believes that its success depends to a significant extent upon its ability to retain such personnel, and attract prospective key employees, competition for whom may be intense. If the Group were to lose the service of one or more of its executive officers or other highly skilled personnel, it may not be able to execute its business operations effectively. There can be no assurance, however, that the Group will be able to retain such personnel on acceptable terms or at all. The loss of such personnel could affect the Group's ability to develop and sell its products effectively, which could have a material adverse effect on the Group's business, financial position and profits.

## The Group relies on IT and other infrastructure systems to conduct its business and any disruption, failure or security breaches of these systems could adversely affect its business operations

The Group is highly dependent on IT and other infrastructure systems in its day-to-day business, in order to achieve its business objectives and in order to carry out its operations. The Group is consequently subject to several risks associated with maintaining, developing and securing its IT and other infrastructure systems. The Group relies upon industry accepted security measures and technology such as access control systems to securely maintain confidential and proprietary information maintained on its IT systems, and market standard virus control systems. However, the Group is exposed to external threats associated with data security. There is a risk of virus attacks, attempts at hacking, social manipulation and phishing scams. Further, the Group electronically maintains sensitive data, including proprietary business information and that of its customers, and some personally identifiable information of customers and employees, on the Group's networks. Any failure or disruption of the Group's IT systems to perform as anticipated for any reason could disrupt the Group's business and day-to-day operations and result in decreased performance, significant remediation costs, transaction errors, loss of data, processing inefficiencies, litigation, claims from customers and downtime, all of which could have a material adverse effect on the Group's business, financial position and profits.

#### Risks related to majority shareholders and majority shareholder rights

LNS Mining AS ("**LNS Mining**") is and will be the majority shareholder of the Company following the admission to trading on Euronext Growth Oslo. LNS Mining will, as the majority shareholder, be able to make decisions regarding the Company in which other shareholders might disagree with. Any conflict or disagreement between the majority shareholder and other shareholders of the Company may lead to disputes and could result in other shareholders selling their shares in the Company.

Furthermore, one of the Group's main suppliers is Leonhard Nilsen & Sønner AS ("**LNS**") which provides services related to the open-pit mine and smaller entrepreneur services to the underground mine as well as general maintenance services to the Group. Leonhard Nilsen & Sønner - Eiendom AS, which is the majority shareholder of LNS Mining, owns all of the shares in LNS. The Group's service agreements with LNS will remain in place following the Transaction and the admission to trading on Euronext Growth Oslo, and there is consequently a risk of potential conflict of interests in connection with the service agreements in relation to the Company, its majority shareholder LNS Mining and other shareholders of the Company.

#### The Group may not be able to meet its funding needs as they arise

The Group may be unable to raise sufficient funds in the future to meet its ongoing or future capital and operating expenditure needs. Similarly, the Group may be unable to obtain funding in order for it to take advantage of opportunities for acquisitions, investments or other business opportunities. The Company may in the future decide to offer additional Shares or other securities in order to finance new capital-intensive projects, in connection with unanticipated liabilities or expenses or for any other purposes. The Company cannot predict what effect, if any, future issuances and sales of Shares will have on the price of the Shares (particularly following the admission to trading on Euronext Growth Oslo). Furthermore, depending on the structure of any future offering, existing shareholders may not have the ability to subscribe for or purchase additional equity securities.

There can be no assurance that any funding will be available to the Group on sufficiently attractive terms or at all. Available sources of funding may be affected by general market conditions, if the Group faces an economic downturn in its main markets, or if the creditworthiness of the Group is weakened. If financing available to the Group is insufficient to meet its financing needs, the Group may be forced to reduce or delay capital expenditures, sell assets at unanticipated times and/or at unfavourable prices, seek additional equity capital or restructure or refinance its debt. There can be no assurance that such measures would be successful or adequate to meet the Group's financing needs or would not result in the Group being placed in a less competitive position. If the Company raises additional funds by issuing additional equity securities, this may result in a significant dilution of the existing shareholders, including in relation to dividends, shareholding percentages and voting rights. If any of these risks materialise, it could have a material adverse effect on the Group's business, financial positions and profits.

# The Group may from time to time make acquisitions and engage in other transactions to complement or expand its existing business, but the Group may not be successful at identifying and acquiring suitable targets

The Group may from time to time consider acquiring or making investments in other companies or forming joint ventures. There can be no assurance that any future acquisition or investment will be successful. The Group may not be able to identify or acquire suitable targets, and the Group may not be able to complete acquisitions or other transaction on acceptable terms or at all. Moreover, if, in the future, the Group seeks to acquire an acquisition target that is of a significant size, it may need to finance such an acquisition with either additional debt or equity financing or a combination of additional debt and equity financing. If the Group is unable to identify suitable targets, the Group's growth prospects may suffer and the Group may not be able to realize sufficient scale advantages to compete effectively. In addition, in pursuing acquisitions, the Group may face competition from other companies to acquire new businesses or assets. The Group's ability to acquire targets may also be limited by applicable antitrust laws and other regulations. To the extent that the Group is successful in making acquisitions, it may have to spend substantial amounts of cash, incur debt, assume loss-making business units and incur other types of expenses in order to acquire and integrate the acquired businesses, and such integration may not be successful. In addition, the Group may be required to increase costs, reduce anticipated synergies and reduce return of investments. If any of these risks materialise, it could have a material adverse effect on the Group's business, financial position and profits.

#### 1.2 Risks related to the Shares and the admission to trading on Euronext Growth Oslo

**The Company will incur increased costs as a result of being listed on Euronext Growth Oslo** As a company with its Shares admitted to trading on Euronext Growth Oslo, the Company will be required to comply with the Euronext Growth Markets Rule Book and related Notices issued by Oslo Børs (the "**Euronext Growth Rule Book**") including, but not limited to, specific reporting and disclosure requirements. The Company will incur additional legal, accounting and other expenses in order to ensure compliance with the Euronext Growth Rule Book and other application rules and regulations. The Company anticipates that its incremental general and administrative expenses as a company with its Shares admitted to trading on Euronext Growth Oslo will include, among other things, costs associated with annual and interim reports, general meetings, investor relations, incremental director and officer liability insurance costs and officer and director compensation. In addition, the Company's board of directors (the "**Board of Directors**") and executive management (the "**Management**") may be required to devote significant time and effort to ensure compliance with the Euronext Growth Rule Book and other applicable rules and regulations for companies with its shares admitted to trading on Euronext Growth Oslo, which may entail that less time and effort can be devoted to other aspects of the business. Any such increased costs, individually or in the aggregate, could have an adverse effect on the Group's business, financial position and profits.

### An active trading market on Euronext Growth Oslo may not develop and the Shares may be difficult to sell in the secondary market

Although the Shares in the Company are freely transferable and will be admitted to trading on Euronext Growth Oslo, investors must expect that it may be difficult to sell the Shares in the secondary market. Prior to the expected admission to trading on Euronext Growth Oslo, the Shares have not been traded on any stock exchange, other regulated marketplaces or multilateral trading facilities, and there has, accordingly, been no public market for the Shares. If an active public market does not develop or is not maintained, shareholders may have difficulty in selling their Shares. There can be no assurance that an active trading market will develop or, if developed, that such a market will be sustained at a certain price level. The Company cannot predict at what price the Shares will trade upon following the admission to trading on Euronext Growth Oslo, and the market value of the Shares can be substantially affected by the extent to which a secondary market develops for the Shares following the admission to trading on Euronext Growth Oslo.

#### Potential volatility of share prices

An investment in the Shares involves risk of loss of capital, and securities markets in general have been volatile in the past. The trading volume and price of the Shares may fluctuate significantly in response to a number of factors, many of which are beyond the Company's control, including the following: (i) changes to commodity prices, in particular iron ore prices and currency exchange rates, in particular USD/NOK, (ii) actual or anticipated fluctuations in the Company's quarterly results of operations, (iii) recommendations by securities research analysts, (iv) changes in the economic performance or market valuations of other issuers that investors deem comparable to the Company, (v) addition or departure of the Company's executive officers, directors and other key personnel, (vi) release or expiration of lock-up or other transfer restrictions on outstanding Shares or securities convertible into Shares, (vii) sales or perceived sales of additional Shares or securities convertible into Shares, (viii) significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving the Company or its competitors, and (ix) news reports relating to trends, concerns, technological or competitive developments, regulatory changes and other related issues in the Company's industry or target markets.

Another factor that may influence the market price of the Shares is the annual yield on the Shares. An increase in market interest rates may lead purchasers of shares to demand a higher annual yield, which accordingly could materially adversely affect the market price of the Shares.

Financial markets have recently experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of public entities and that have, in many cases, been unrelated to the operating performance, underlying asset values or prospects of such entities. Accordingly, the market price of the Shares may decline even if the Company's operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. As well, certain institutional investors may base their investment decisions on consideration of the Company's environmental and governance and social practices and performance against such institutions' respective investment guidelines and criteria, and failure to meet such criteria may result in limited or no investment in the Shares by those institutions, which could materially adversely affect the trading price of the Shares. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue for a protracted period of time, the Company's operations could be materially adversely impacted and the trading price of the Shares may be materially adversely affected.

#### Financial reporting and other public company requirements

As a result of the admission to trading on Euronext Growth Oslo, the Company will become subject to reporting and other obligations under applicable law, including the Norwegian Securities Trading Act and the Euronext Growth Rule Book. These reporting and other obligations will place significant demands on the Company's Management, administrative, operational and accounting resources. Any failure of the Company to maintain effective internal controls could cause the inability of the Company to meet its reporting obligations or result in material misstatements in its financial statements. If the Company

cannot provide reliable financial reports or prevent fraud, its reputation and operating results could be materially harmed which could also cause investors to lose confidence in the Company's reported financial information, which could result in a reduction in the trading price of the Shares.

The Management does not expect that the Company's disclosure controls and procedures and internal controls over financial reporting will prevent all error and all fraud. A control system, no matter how well-designed and implemented, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in any control systems, no evaluation of these controls can provide absolute assurance that all control issues within an organization are detected. The inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of simple errors or mistakes. Controls can also be circumvented by individual acts of certain persons, by collusion of two or more people or by management override of the controls. Due to the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected in a timely manner or at all.

### Shareholders may not be able to exercise their voting rights for Shares registered on a nominee account

Beneficial owners of the Shares that are registered on a nominee account or otherwise through a nominee arrangement (such as brokers, dealers or other third parties) may not be able to exercise voting rights and other shareholders rights as readily as shareholders whose Shares are registered in their own names with the VPS prior to the Company's general meetings. The Company cannot guarantee that beneficial owners of the Shares will receive the notice for the Company's general meeting in time to instruct their nominees to either effect a re-registration of their Shares in the manner described by such beneficial owners.

### The transfer of Shares is subject to restrictions under the securities laws of the United States and other jurisdictions

None of the Shares have been registered under the U.S. Securities Act of 1933 (as amended) (the "**U.S. Securities Act**") or any U.S. state securities laws or any other jurisdiction outside of Norway, and are not expected to be registered in the future. As such, the Shares may not be offered or sold except pursuant to an exemption from, or in transactions not subject to, the registration requirements of the U.S. Securities Act and other applicable securities laws. In addition, there is no assurance that shareholders residing or domiciled in the United States will be able to participate in future capital increases or right offerings.

#### 2. STATEMENT OF RESPONSIBILITY

The Board of Directors of Rana Gruber declare that, to the best of our knowledge, the information provided in the Information Document is fair and accurate and that, to the best of our knowledge, the Information Document is not subject to any material omissions, and that all relevant information is included in the Information Document.

25 February 2021

#### The Board of Directors of Rana Gruber AS

Morten Støver Chairman

Kristian Adolfsen Board member

Frode Nilsen Board member Børge Nilsen Board member

Andreas Haugen Board member

Johan Hovind Board member Lasse Strøm Board member

Thomas Hammer Board member

#### 3. GENERAL INFORMATION

#### 3.1 Other important investor information

The Company has furnished the information in this Information Document. No representation or warranty, express or implied, is made by the Euronext Growth Advisors as to the accuracy, completeness or verification of the information set forth herein, and nothing contained in this Information Document is, or shall be relied upon as a promise or representation in this respect, whether as to the past or the future. The Euronext Growth Advisors assume no responsibility for the accuracy or completeness or the verification of this Information Document and accordingly disclaim, to the fullest extent permitted by applicable law, any and all liability whether arising in tort, contract or otherwise which they might otherwise be found to have in respect of this Information Document or any such statement.

Neither the Company nor the Euronext Growth Advisors, or any of their respective affiliates, representatives, advisors or selling agents, is making any representation to any purchaser of the Shares regarding the legality of an investment in the Shares. Each investor should consult with his or her own advisors as to the legal, tax, business, financial and related aspects of a purchase of the Shares.

#### 3.2 Presentation of financial and other information

#### 3.2.1 Financial information

The Group's audited consolidated financial statements for the financial year ended 31 December 2019 (with comparable financial information for 2018) and the Company's audited financial statements for the financial year ended 31 December 2018, referred to as the "**Financial Statements**", have been prepared in accordance with the Norwegian Generally Accepted Accounting Principles ("**NGAAP**"). The Financial Statements have been audited by the Company's auditor, Ernst & Young AS.

In addition, the Company has prepared consolidated interim financial statements for the nine months ended 30 September 2020 (the "**Interim Financial Statements**" and together with the Financial Statements, the "**Financial Information**"). The Interim Financial Statements have not been audited.

The Company presents the Financial Information in NOK (presentation currency). Reference is made to Section 6 "Selected Financial Information" for further information.

Following the admission to trading on Euronext Growth Oslo, the Group will report consolidated financial statements in accordance with NGAAP, with the Company as the parent company, including quarterly financial statements.

The Financial Statements are attached to this Information Document as Appendix B and C, respectively. The Interim Financial Statements are attached to this Information Document as Appendix D.

#### 3.2.2 Industry and market data

In this Information Document, the Company has used industry and market data obtained from independent industry publications, market research and other publicly available information. Although the industry and market data is inherently imprecise, the Company confirms that where information has been sourced from a third party, such information has been accurately reproduced and that as far as the Company is aware and is able to ascertain from information published by that third party, no facts have been omitted that would render the reproduced information inaccurate or misleading. Where information sourced from third parties has been presented, the source of such information has been identified.

Industry publications or reports generally state that the information they contain has been obtained from sources believed to be reliable, but the accuracy and completeness of such information is not guaranteed. The Company has not independently verified and cannot give any assurances as to the accuracy of market data contained in this Information Document that was extracted from industry publications or reports and reproduced herein.

Market data and statistics are inherently predictive and subject to uncertainty and not necessarily reflective of actual market conditions. Such data and statistics are based on market research, which itself is based on sampling and subjective judgments by both the researchers and the respondents, including judgments about what types of products and transactions should be included in the relevant market.

As a result, prospective investors should be aware that statistics, data, statements and other information relating to markets, market sizes, market shares, market positions and other industry data in this Information Document (and projections, assumptions and estimates based on such information) may not be reliable indicators of the Company's future performance and the future performance of the

industry in which it operates. Such indicators are necessarily subject to a high degree of uncertainty and risk due to the limitations described above and to a variety of other factors, including those described in Section 1 "Risk factors" and elsewhere in this Information Document.

Unless otherwise indicated in the Information Document, the basis for any statements regarding the Company's competitive position is based on the Company's own assessment and knowledge of the market in which it operates.

#### 3.3 Cautionary note regarding forward-looking statements

This Information Document includes forward-looking statements that reflect the Company's current views with respect to future events and financial and operational performance. These forward-looking statements may be identified by the use of forward-looking terminology, such as the terms "anticipates", "assumes", "believes", "can", "could", "estimates", "expects", "forecasts", "intends", "may", "might", "plans", "projects", "should", "will", "would" or, in each case, their negative, or other variations or comparable terminology. These forward-looking statements are not historic facts. Prospective investors in the Shares are cautioned that forward-looking statements are not guarantees of future performance and that the Company's actual financial position, operating results and liquidity, and the development of the industry in which the Company operates, may differ materially from those made in, or suggested, by the forward-looking statements contained in this Information Document. The Company cannot guarantee that the intentions, beliefs or current expectations upon which its forward-looking statements are based will occur. By their nature, forward-looking statements involve, and are subject to, known and unknown risks, uncertainties and assumptions as they relate to events and depend on circumstances that may or may not occur in the future. Because of these known and unknown risks, uncertainties and assumptions, the outcome may differ materially from those set out in the forward-looking statements. For a non-exhaustive overview of important factors that could cause those differences, please refer to Section 1 "Risk factors". These forward-looking statements speak only as at the date on which they are made. The Company undertakes no obligation to publicly update or publicly revise any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to the Company or to persons acting on the Company's behalf are expressly qualified in their entirety by the cautionary statements referred to above and contained elsewhere in this Information Document.

#### 4. BUSINESS OVERVIEW

#### 4.1 Introduction

Rana Gruber is a world-class sustainable iron ore producer in Norway, with products based on own natural mineral resources which are upgraded and tailored for applications, and exported to its customers worldwide. The Company produces and sells iron ore concentrate, and primarily serves steel producers and participants in the chemical industry.

The Company was founded in 1964 and has since grown to be a leading Norwegian iron ore producer with a world-class asset focused on sustainable mineral production.

Rana Gruber operates own mines with iron ore deposits. The mines are located approximately 35 kilometers north east from the city Mo i Rana in Norway, in Storforshei and Ørtfjell, located in the area called the Dunderland Valley. The iron ore production takes place at the Group's iron ore deposits at Ørtfjell as open pit production and underground operation. The Company's processing plant is also located near Mo i Rana, more precisely in Gullsmedvik, with direct access to the Group's own port and railway connection.

The Company has one wholly-owned subsidiary, Rana Gruber Mineral AS, which produces and sells micronized iron oxides and other dissemination of iron ore, and primarily serves paint manufactures and participants in the building- and automotive industries.

As of the date of this Information Document, the Group has 276 employees, and the Group's headquarter is located in Mo i Rana, Norway.

#### 4.2 History and important events

As stated above, the Group's iron mining activities are carried out in the Dunderland Valley in the municipality of Rana, Norway.

The iron ore deposits in the Dunderland Valley have a long history, dating back to the early 1800s. Since then, a number of different investors and companies have controlled and exploited the iron ore reserves in the Dunderland Valley.

Year	Event
	Iron ore deposits in the Dunderland Valley has been well known since before the 1800s.
1800-1901	Swedish industrialist Mr. Pehrsson initiated mining operations.
	Thomas Alva Edisson raised GBP 200,000 on the London Stock Exchange and established Dunderland Iron Ore Company (DIOC).
	DIOC produced iron during 1902-1908.
1902-1963	DIOC taken over by AS Sydvaranger who established Rana Gruber in 1937, but was expropriated in 1945.
	Rana Gruber became a state-owned company and later a part of Norsk Jernverk in 1951.
	Rana Gruber established as a unit under Norsk Jernverk.
1964-1990	New processing plant finished in 1964 and signalled the initiation of modern production.
1904-1990	Processing plant was further modernised in 1981.
	New main crusher at Ørtfjell together with the opening of a new open-pit mine in 1983.
	Rana Gruber privatised in 1991 after a management and employee buy-out.
1991-2009	Leonhard Nilsen & Sønner AS – Eiendom AS became majority owner of Rana Gruber in 2008.
2010-2020	A.H. Holding, Roger Adolfsen, Kristian Adolfsen, Even Carlsen and Benn Eidissen became shareholders.

Below is a brief overview of the history of the Group.

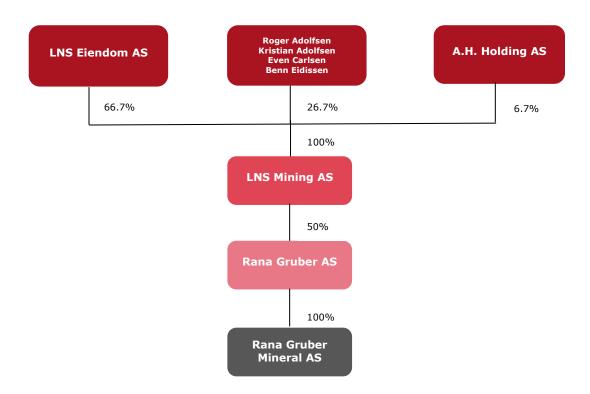
# Year Event Major upgrade programme introduced in 2010 with new mining plan until 2025. Dedicated Research & Development department established to further improve operations.

Business optimisation system Lean Mining was introduced in 2017.

Completion of a private placement through a sale of existing Shares in Rana Gruber held by LNS Mining (the "**Private Placement**").

#### 4.3 Group structure

Below is an organizational chart of the legal structure of the Group and its direct and indirect shareholders.



Rana Gruber owns 100% of the shares in its subsidiary Rana Gruber Mineral AS.

As of the date of this Information Document, LNS Mining owns 18,696,000 of Rana Gruber's Shares, corresponding to 50% of the Company's Shares. In addition LNS Mining has lent 1,869,600 Shares to DNB Markets as stabilisation manager (on behalf of the Managers) which shall be redelivered to LNS Mining (fully or partly) if the Greenshoe Option (see Section 8.4.1) is not exercised, and in such case will involve that LNS Mining upon such redelivery will own between 18,696,000 and 20,565,600 Shares in the Company, corresponding to an ownership level of between 50% and 55%.

The ownership structure in LNS Mining is shown in the group chart above. The majority shareholder of LNS Mining is Leonhard Nilsen & Sønner AS – Eiendom AS ("**LNS Eiendom**").

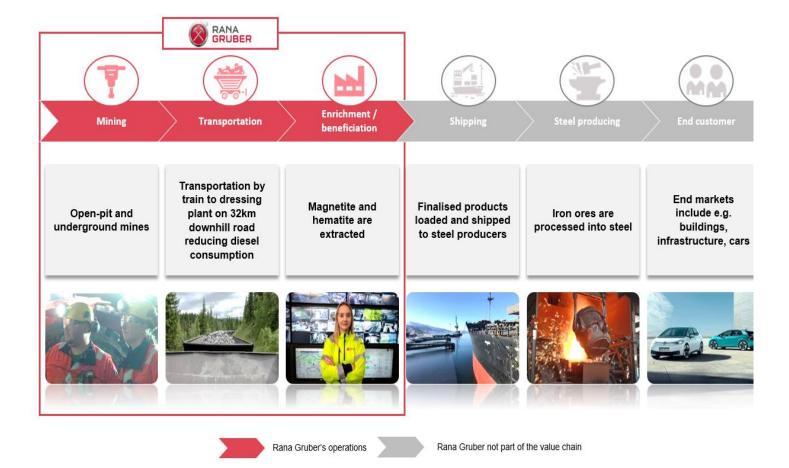
LNS Eiendom owns all the shares in Leonhard Nilsen & Sønner AS (LNS). LNS is one of the Group's suppliers, as further described below in Section 4.12.2.

#### 4.4 Overview of principal activities

Rana Gruber's operations involve iron ore mining and mineral processing to yield iron ore concentrates and special products. The operation involves several complex steps, that starts with mining and ore transport logistics, through advanced mineral processing in several product lines. A strong emphasis on Research and Development has resulted in high process yield without the use of chemicals, and products that goes into different markets tiers, e.g.:

- Hematite concentrated for steel production
- Magnetite for water purification systems
- Nano-scale iron ore minerals for pigments and other special products

Rana Gruber operates in the beginning of a long value chain, as illustrated below:



The mining of ore from the iron ore deposits is done in both open-pit and underground operations. After primary crushing in the mine, the ore is transported by train to the processing plant, situated in the city of Mo i Rana. Hematite iron ore concentrate is then shipped by sea transport primarily to European steel mills, and to a smaller extent to Chines steel mills. The magnetite-based products are shipped in smaller vessels to specialist companies, mainly in Europe.

The Company is considered a preferred supplier for European steel mills, as the short distance from the port in Mo i Rana to its customers allows efficient inventory management (smaller and more frequent shipments). In addition, the Company's iron ore represents a significant share of some of the European steel mills total demand and their mills are therefore tuned to the iron ore supplied by the Company. The Company also benefits from reduced transportation costs for deliveries to European steel mills.

Rana Gruber currently delivers its entire annual production of hematite iron ore for steel making applications pursuant to the off-take agreement with Cargill. See Section 4.12 about the Cargill Agreement.

In addition to iron ore, the Company, through its wholly owned subsidiary Rana Gruber Mineral AS, manufactures and markets special products. These products are marketed under the flagship brand COLORANA. The primary application of COLORANA is as pigment for building materials and paint products. Other applications are within industrial and technical use, including heat management products (functional oxides) and products with magnetic properties. The COLORANA process, established in 1990, is still the only plant in the world for ultrafine milling of natural magnetite.

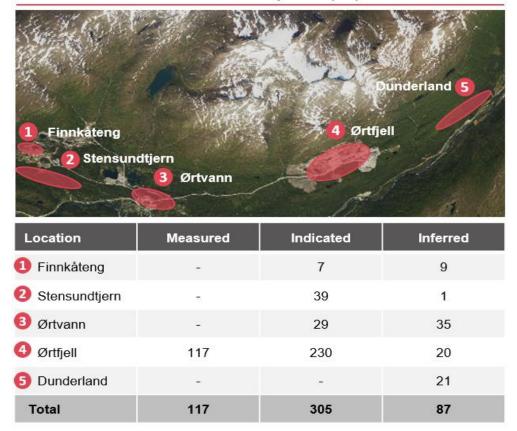
See Section 4.5 to 4.10 below for a further description of the Company's business operations.

#### 4.5 Mineral resources

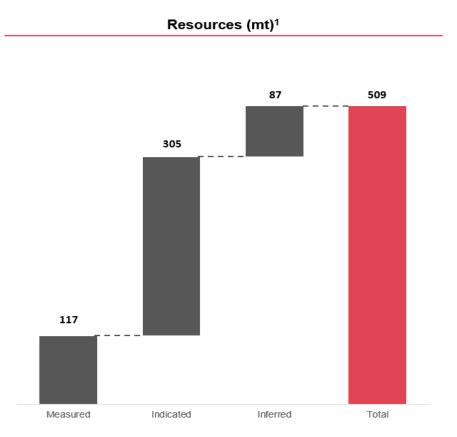
Rana Gruber controls five iron ore deposits. All deposits are located in Storforshei and Ørtfjell in the Dunderland Valley in Norway. In total, Rana Gruber operates 5,700 acre with mineral rights and forest.

The Company has a vast resource base exceeding  $\sim$ 509mt, as shown in the table and graph below, which is expected to ensure production for the Company for several decades.

The table and graph below summarize the existing iron ore resources broken down into inferred, indicated and measured resources. This categorization has been done based on the amount of information available, the spacing of available drill core information, assays, geological mapping and status of geostatistical work, and has been signed off by a 3. Party Competent Person in accordance with the standard NI 43-101.



Overview of deposits (mt)

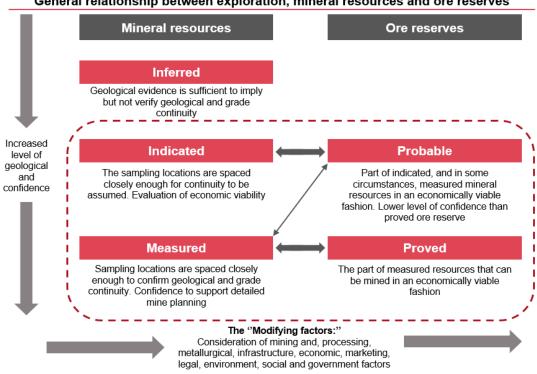


1) Definitions are based on the Mineral Resources reported in accordance with the Canadian CIM code (NI 43-101) by Baker Geological Services – (Howard Baker)

Mineral resources are potentially valuable, and for which reasonable prospects exists for eventual economic extraction. Ore reserves are valuable, and legally, economically and technically feasible to extract. Rana Gruber's current resource estimates are based on extensive exploration work in more recent time. Estimates are based on geological mapping combined with ground geophysics sampling, diamond drilling and airborne geophysical investigation.

Rana Gruber uses international standards for reporting and displaying information related to mineral projects such as the Canadian National Instrument 43-101 and the Australian JORC Code signed off by competent persons. Rana Gruber's recent resource statement was updated in 2020, and its reserve statement is in progress for first sign off in late 2021.

Below is an illustration of the general relationship between exploration, mineral resources and ore reserves.



#### General relationship between exploration, mineral resources and ore reserves

#### Further to the above, below is a full overview of Rana Gruber's resources.

Deposit	Classification	Million Tonnes	Density	Fe Tot %	Fe Mag %
Ørtfjell	Measured	116.7	3.5	33.6	4.5
Sub-Total - Measured		116.7	3.5	33.6	4.5
Ørtfjell	Indicated	230.1	3.5	33.4	4.5
Stensundtjern	Indicated	39.4	3.5	34.3	8.3
Finnkåteng	Indicated	6.8	3.5	36.2	4.8
Ørtvann	Indicated	29.0	3.4	32.8	20.4
Sub-Total - Indicated		305.3	3.5	33.5	6.5
Ørtfjell	Inferred	20.1	3.4	30.1	4.8
Stensundtjern	Inferred	1.4	3.5	35.1	4.3
Finnkåteng	Inferred	8.8	3.6	38.2	4.7
Ørtvann	Inferred	35.1	3.5	33.3	15.6
Nord Dunderland	Inferred	21.3	3.6	37.1	4.2
Sub-Total - Inferred		86.7	3.5	34.1	9.0

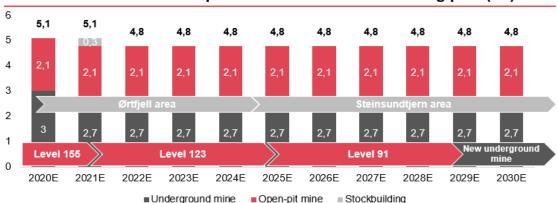
The Company has obtained an independent resource report prepared under the guidelines of the Canadian National Instrument 43-101 standard. The resource report was prepared in June 2019 by Baker Geological Services Ltd. The report does not constitute a statement of reserves pursuant to Section 133 of the ESMA update of the CESR recommendations on prospectuses. The independent resource report is attached to this Information Document as Appendix E.

#### 4.6 Mining

All mining plans relating to Rana Gruber's mining operations are prepared and continuously monitored by the Company's planning department. The operations of the open-pit mine are outsourced to LNS, while the underground mine is operated by the Company. The primary equipment used in both the openpit and the underground mine includes drilling rigs, loaders/excavators, and trucks.

Rana Gruber's current mining plan ensures production volumes through mid-2025 with limited requirement for infrastructure investments.

Below is an overview of Rana Gruber's annual ore production under the current mining plan (mt).



#### Annual wet crude ore production under current mining plan (mt)

Rana Gruber has a fully invested mining plan with open-pit mining and underground mining from deposits around the Ørtfjell area, with total accessible reserves of 20.9mt.

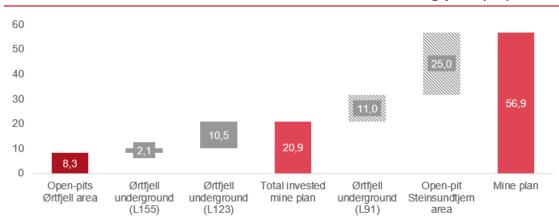
The current invested mining plan also includes the development of a new underground level (L123) that is nearly completed, and came into production during the fourth quarter of 2020. The total investment in relation to the new underground level has and will be approximately NOK 200 million during 2019-2020.

Rana Gruber's next underground level (L91) is expected to be in production from 2025 and has an estimated capital expenditure of NOK 175 million. The next open pit will be established in the "Steinsundstjern" area.

Based on an annual mine production of ~4.8mt, Rana Gruber will be able to maintain its current annual iron ore concentrate production of ~1.7mt (corresponding to a mining factor of ~2.8x.<sup>1</sup>)

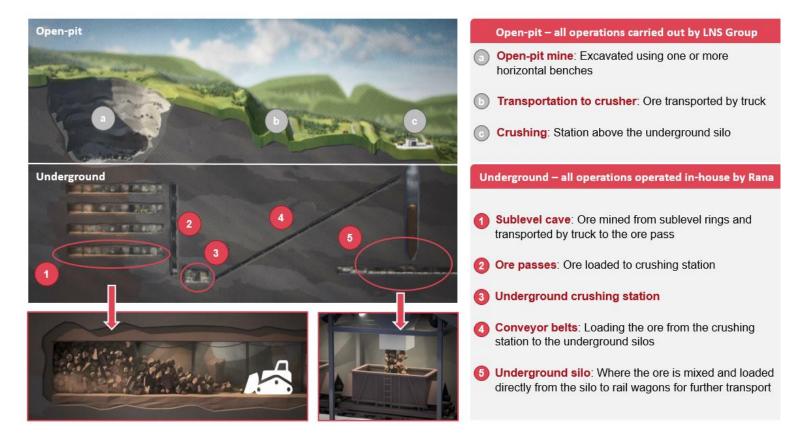
Below is an overview of Rana Gruber's total reserves accessible under the current mining plan (mt).

<sup>&</sup>lt;sup>1</sup> Mining factor is a measure of process plant efficiency, calculated as the ore consumed divided by the total production of iron ore concentrates, annually and on dry basis.



#### Total reserves accessible under the current mining plan (mt)

Below is an illustration of Rana Gruber's process for open-pit mining and underground mining.



#### Open-pit mining

Rana Gruber is responsible for planning, survey and supervision of the open-pit mining, but all blasting and mass transport operations are outsourced to LNS on a fixed cost per ton basis. See Section 4.12 for a description of the agreement with LNS concerning the open-pit operations.

Open-pit mining is the process of mining a near surface deposit by means of a surface pit that is excavated using one or more horizontal benches (i.e. levels beneath the ground in which ore is mined). Open-pit mining requires that both the ore and any overburden/waste are removed in benches with a height ranging from 9 meters to 30 meters. The height of each bench depends on a number of factors, including the mining equipment used in the mine, the thickness of the orebody, deposit character and

geology, production strategy, ore/waste ratios, blending requirements, number of working faces, operating/capital costs and slope stability considerations.

The number of benches required depends on the thickness of the deposit (i.e. a thin deposit requires one or a few benches while thicker deposits require a higher number of benches). For thicker deposits, the pit in its production stage resembles an inverted cone. Open-pit mines are typically operated until the depth reaches a break-even point beyond which it is not economic to continue production, as the costs of widening the pit and removing the overburden that is required to access the ore becomes too large.

#### Underground mining

Rana Gruber operates all underground operations of the Group. Underground mining is the process of mining a deposit that cannot be accessed directly from the surface and therefore requires sub-surface operations. There are several different methods that can be applied in underground mining depending on, among other things, the characteristics of the source rock.

Underground mining based on sub-level caving involves dividing the ore body into separate horizontal layers. The mining is initiated at the horizontal level intersecting the top of the ore body before further horizontal levels are established at lower levels. The development and mining of each horizontal level is divided into four different stages, including drilling of development drifts, long-hole drilling, production and blasting and loading.

The benefit of the sub-level caving method is that the method enables work to be carried out at different sub-levels simultaneously, as excavation work can be carried out at one level without interfering with excavation work at another level.

#### 4.7 Logistics

Rana Gruber has an automated and highly efficient logistics system from mining until the end product is delivered to customers or shipped at the port in Mo i Rana.

Crude ore, mined from either the underground mine or the open-pit mine, is stored in an underground silo before being loaded directly onto railway wagons for transportation to Rana Gruber's processing plant in Gullsmedvik in Mo i Rana. After processing, the final products are shipped out either by sea from Rana Gruber's own terminal or by truck. Rana Gruber's integrated processing plant, with several production lines for different products, is located in close vicinity to the port shipping facility, resulting in highly cost-efficient operations.

The distance from the mine to the processing plant is approximately 32 kilometers along the public railway, and it takes approximately 40 minutes from the underground silo until the ore is delivered at the processing plant.

Railway Stensundtjern Storforshei Ørtfjel Train Mo i Rana

The illustration below shows Rana Gruber's logistics system.

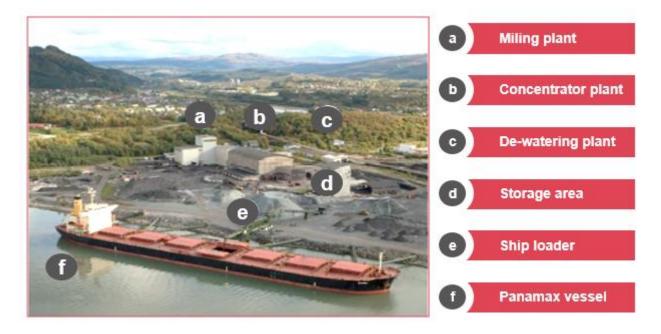
The Company's railway is connected to BaneNor/Nordlandsbanen. The railway wagons used to transport the iron ore are owned by the Company (leased through a company in Switzerland, Wascosa) while the operation is performed by Cargonet, which owns the locomotives. The Company currently has one wagon set, of which the newest ones are from 2014. Each wagon set consists of approximately 38-39 wagons (depends on maintenance status), each with a capacity of 97 ton carrying around 68 ton of crude ore. The maximum number of wagons that can be run is 40, due to limitations in the length of the loading-tunnel beneath the silo. On average, the Company runs 6 wagon sets per day and transports approximately 100,000+mt of ore to the process plant per week. The Company's maximum annual transport capacity from the storage silo to the process plant is approximately 5.5mt, which gives sufficient headroom for the production volumes under the current mining plan of 4.8mt per year. Maintenance of the railway is carried out by BaneNor.

The Company controls its own port which functions as an iron ore terminal and is located by the processing plant in Gullsmedvik directly at the Rana fjord in Norway. The port can accommodate from 1500 dwat up to Panamax sized vessels. The ice free harbour of Mo i Rana is one of Norway's busiest trading points in terms of frequency of calls and loaded/discharged cargo volume. Approximately 1.6-1.8 million tons of iron ore oxides is loaded annually at the Rana Gruber terminal.

After the iron ore has been processed through a beneficiation process, see Section 4.8 "Processing" below, the end products are stored at the dock next to the processing plant before being loaded on vessels that transport the respective products to the end customer. On average, two to three Panamax sized vessels, as well as a variety of other smaller vessels, are loaded every month. Loading a Panmax vessel typically takes around 70 hours. The loading facility at the harbour is owned and operated by the Group, and the loading operation from the dock onto the vessels is done by the Group, using large loaders.

The iron oxide pigments from COLORANA are packed into bags and put on pallets for dispatch via truck or a combination of truck and railway transport to the final customer. A reliable network and close cooperation with selected logistic providers secure on-time delivery on the market.

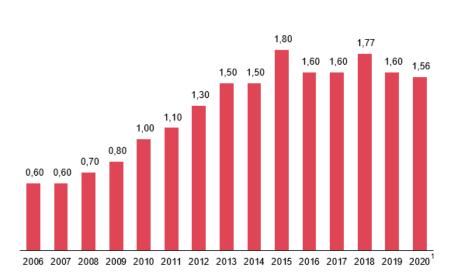
Below is an illustration of Rana Gruber's processing plant in Gullsmedvik.



#### 4.8 Processing

After being delivered at the processing plant, the iron ore is processed to derive the refined iron ore products based on the specifications of Rana Gruber's customers. See below for further information about the processing operations.

As of the date of this Information Document, Rana Gruber has an annual production capacity of iron ore concentrate of 1.8mt. Rana Gruber's historical production of iron ore concentrate (mt) is shown in the graph below.



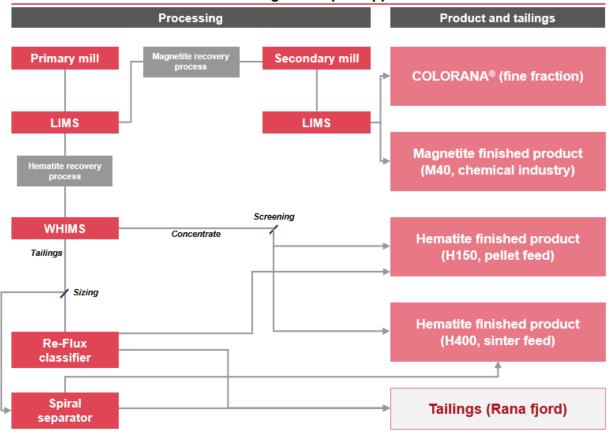
#### Historical production of iron ore concentrate (mt)

#### 1) Numbers as of 2020 are actuals and unaudited

The mission for the processing is to liberate and enrich the iron ore minerals hematite and magnetite to produce products suitable for the intended industrial applications. The greatest challenge is to obtain a high recovery of the ore minerals magnetite and hematite, while minimizing the extraction of gangue minerals with similar physical and magnetic properties. The Company has considerable experience and knowledge of the processing required for the iron ore produced from its mines, and utilizes highly efficient processing techniques without the use of flotation or other chemical processes. Thus, both products and the surplus gangue minerals in the tailings are free of chemicals which is a prerequisite for the special products and a safe storage of tailings.

Depending on the mineralogy and the textural conditions of the ore, various processing techniques are applied to reach the desired result. Rana Gruber's processing techniques involves primary autogenous milling, LIMS (Low intensity magnetic separation) extraction of magnetite, WHIMS (Wet high-intensity magnetic separation/Jones-process) recovery and upgrading of hematite in combination with advanced gravimetric methods (Re-flux Classifiers), screening, dewatering and storage of the final products.

Below is an overview of the processing techniques applied by Rana Gruber.



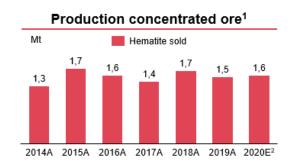
#### Processing techniques applied

Rana Gruber predominantly produces hematite and magnetite concentrate.

#### <u>Hematite</u>

Hematite concentrates are used for metallurgical applications, mostly as a part of blast furnace burdens. The end markets are processed steel for buildings, infrastructure and the automotive industry. As further described above and in Section 4.12 below, Rana Gruber delivers its entire annual production of hematite iron ore for steel making applications to Cargill.

Below is an overview of hematite sold by Rana Gruber.

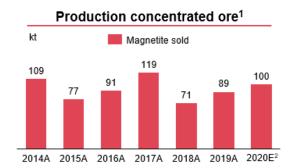


- 1) The concentrated ore is the output after the crude ore has gone through the beneficiation process to ensure a product with the desired grade
- 2) Numbers as of 2020 are actuals and unaudited

#### Magnetite:

Chemical-free magnetite iron oxide concentrates are used in a variety of products, such as water purification systems and the production of natural sourced iron chemicals. The key customers are the chemical industry yielding premium prices compared to the steel industry. In the Company's view, there is a potential increase in production of magnetite.

Below is an overview of magnetite sold by Rana Gruber.

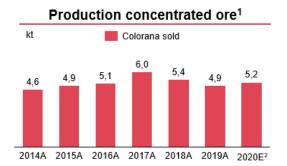


- 1) The concentrated ore is the output after the crude ore has gone through the beneficiation process to ensure a product with the desired grade
- 2) Numbers as of 2020 are actuals and unaudited

#### COLORANA:

The products within the COLORANA brand are based on two types of magnetite concentrate. The products are used for both colorants and highly advanced products such as brake linings, magnetic stripes and chemical processes. The primary application of COLORANA is as pigment for building materials and paint products, other uses are within industrial and technical applications, including heat management products (functional oxides) and products with magnetic properties. The COLORANA process, established in 1990, is still the only plant in the world for ultrafine milling of natural magnetite.

Below is an overview of COLORANA products sold by Rana Gruber.



- 1) The concentrated ore is the output after the crude ore has gone through the beneficiation process to ensure a product with the desired grade
- 2) Numbers as of 2020 are actuals and unaudited

As opposed to industry standards, Rana Gruber has a total chemical free mineral extraction process for all its products. Further, all electricity used in mineral processing plant is from CO2 free hydroelectric power stations.

Rana Gruber has made considerable investments in the processing plant at Gullsmedvik to ensure an efficient processing with limited risk of breakdowns. The first major investment was an upgrade program that was introduced in 2010 to enable increased production volumes in the new mining plan. The program included investments in two new WHIMS-machines in 2013, as well as several smaller investments, such as new pumps, upgrades of automation systems and new screens and cyclones, to remove bottlenecks from the production line. In 2017, Rana Gruber carried out an upgrade program,

based on innovative and new technology for even more efficient processing. The project included replacement of equipment such as screens, cyclones, pumps, piping and constructions, as well as the new Re-Flux Classifier technology. The project also includes a massive rebuild of the existing mass-flow in the processing plant, rendering a more energy efficient process.

There are several key investments that will increase production grade, volume and reduce production costs, summarized below:

#### • Hematite Fe65

Scope: Increase the Hematite product mix Iron content from current average 63 % to 65 %. The product will be in in the Fe65 market tier, and hence a premium price of expected USD 16/t

Key elements are:

- Further R&D and full-scale test works
- Re-flux classifiers already invested is at the core of the enhanced process set up
- Re-milling and enhanced screening systems
- o De-bottlenecking and enhanced process monitoring systems

#### • Increased magnetite production

Scope: Increase the volume of magnetite product M40. This product is sold at a premium in markets detached from metallurgical iron ore.

Key elements are:

- $\circ$  Expansion of existing magnetite processing capacity to handle higher magnetite ore blends
- Fine tuning milling system and the M40 de-watering plant

#### • Electrification of mining equipment

Scope: Electrification of mining equipment. Will reduce CO2 footprint and cost of diesel and underground mine ventilation. Cost reduction estimated in the amount of 20-25 MNok per year

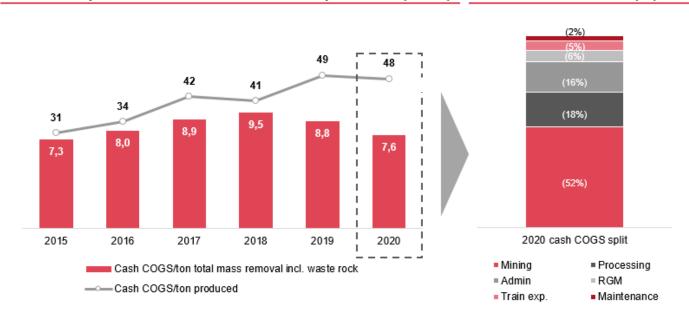
Key elements are:

- Substitution of conventional diesel-powered mining equipment with new and more ecofriendly electrical alternatives
- Close collaboration with world class mining equipment manufacturers Epiroc and Sandvik already started
- o Data network and control-room systems in the mine
- Evaluation potential for government support schemes, including grants from Enova

Rana Gruber has always had a strong focus on cost-efficient solutions. During the weak markets in 2014-2015, the Company postponed mass removal initiatives to reduce overall operating expenses. This, amongst other cost reducing initiatives, resulted in a relatively low cost per produced ton in the period. The last few years have been characterized by relatively higher mass removal including waste rock for Rana Gruber, in order to be in line with its current mining plan. This has resulted in lower cost per ton total mass removal (including waste rock). Overall, the Company has a strong and continuous focus on applying advanced processing procedures and efficient logistics solutions to ensure and maintain cost efficiency.

As mentioned under Section 4.2, Rana Gruber introduced the new business optimisation system Lean Mining in 2017. Through the Lean Mining system, the Company ensures that the entire organization is focused on continuous improvement. As part of the initiative, the full organization is trained on the "5s method" (Sort, Set in Order, Shine, Standardise, Sustain), and has a strong focus on preventive maintenance to reduce risk of unexpected equipment failure.

As illustrated in the graph below, Rana Gruber expects that costs will remain stable going forward as a result of the extensive historical investments into the operation. Cash cost in recent years has been around USD 40/t.



#### Cash cost per ton of iron ore concentrate produced (USD<sup>1</sup>)

OPEX breakdown (%)

1) Based on average FX for the time period: USD / NOK 8.5123

#### 4.9 Sales and marketing

Rana Gruber's annual concentrate production of  $\sim$ 1.8mt makes it a small player in the worldwide iron ore commodity market. While selling a commodity, Rana Gruber has several characteristics that makes it a preferred partner:

- Firstly, Rana Gruber is located in proximity to its core end users, European steel mills, with a maximum sailing time of 3.5 days from berth in Mo i Rana to the end customers. This is a key competitive advantage, as the cost of transportation is a considerable share of the overall cost of iron ore in the global trade. By comparison, the sailing time from Brazil, one of the Company's biggest competitive countries, is approximately 14 days.
- Secondly, Rana Gruber has long-standing relationships with its core end users, which has enabled it to develop products to enable efficient sinter and pellet production.
- Thirdly, Rana Gruber benefits from the Cargill Agreement which provides for off-take of its entire annual production of hematite iron ore for steel making applications. Historically, the end users in Europe has had Rana Gruber as their main supplier of iron ore and Rana Gruber has been of strategic importance for their operations, as a switch of supplier would cause production halts for these customers as the steel mill would have to be adjusted to the quality of the iron ore from the new supplier. Rana Gruber is therefore confident with respect to the short- and long-term demand of its iron ore.
- Fourthly, certainty of delivery, low political risk, limited reputational risk, long history of operating in compliance with regulations/permits.
- Finally, with the increasing focus on environment, Rana Gruber's use of hydroelectric power and short haulage distances between the mine and the processing plant/the port, as well as from the port to the end client, ensures a very limited environmental footprint.

#### 4.10 Suppliers and contractors

Rana Gruber aims to establish, and maintain, long-term relationship with its suppliers. The Company currently has a number of international suppliers, of which a majority have local offices in Norway.

The majority of the operations in the underground mine is carried out by Rana Gruber internally, while LNS provides services related to the open-pit mine. In addition, LNS provides smaller entrepreneur services to the underground mine as well as general maintenance services. LNS is also the entrepreneur that is establishing the new Mine level 123. See Section 4.12 for a description of the agreement with LNS.

It is in the interest of Rana Gruber to establish consignment inventories in cooperation with its suppliers. This is particularly of interest for parts and equipment which is critical to the Company and has a long lead time. The Company has identified its most important suppliers, which is reviewed at least annually, to assess if the cooperation shall continue or if new suppliers should be considered for critical deliveries.

#### 4.11 Sustainable mining operations is key priority for the Group

It is a key priority for the Group to conduct sustainable mining operations. Below is a description of the Group's sustainable focus and operations:

#### **Environmental**

The Group is deeply committed to extract iron ore with diligent emphasis on avoiding emissions leaving minimal environmental impact:

- The Group's operations are located close to the city of Mo i Rana, Norway, which implies stricter compliance of environmental requirements
- The Group's target eliminating fossil fuel transportation used in its operations
- 100% of all electricity is derived from renewable power
- High utilization of ore yields more environmentally friendly products
- Residual mineral sand with eco-friendly composition is disposed into the Rana fjord, in a monitored sea deposit
- There are no heavy metals in the iron ore and no chemicals are used in the beneficiation process
- Sustainable mining certification is currently in progress liaising with Norsk Bergindustri
- The Group has a 40% lower carbon footprint per ton than the average of the largest iron ore producers in the world  $^{\!\!\!\!^2}$

#### <u>Social</u>

The Group has a long heritage of safe operations with minimal harm, leaks or injuries occurred:

- Emphasis on accident-free work environment based on proper and thorough training modules
- Established efforts and procedures to identify workplace hazards
- Best-in-class protective clothing and equipment
- Culture of reporting abnormal situations or incidents
- Company handbook delivered to all employees detailing safety routines
- Annual job environment survey and appraisal interviews
- Lunched and supported initiatives such as science centre in cooperation with NTNU, Sintef, etc.
- The Group has had no serious injuries for the last 10 years
- The Group has low turnover of employees
- The Group supports sports, culture and local community

#### <u>Governance</u>

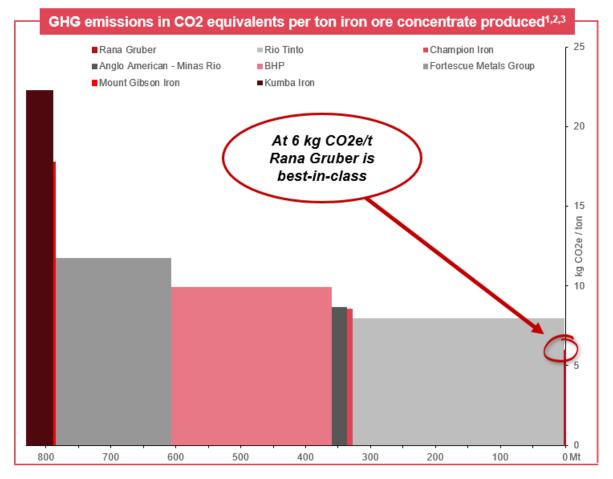
The Group has a strong focus on operating in the interest of all shareholders associated with Rana Gruber:

• Part of an industrial cluster with a strong emphasis on sustainability and future-proof solutions

<sup>&</sup>lt;sup>2</sup> Data from Michael Tost et al

- High standards of governance and business conduct
- Focus on ethics and anti-corruption. The Group has clearly defined anti-corruption policies for the Company and its subsidiaries
- Strong cooperation with unions, neighbors and local industry to preserve stakeholder incentives
- Several certifications granted with regards to quality management
- Close cooperation with Dirmin and Mildir. The Group has annual reporting to Dirmin and Mildir
- ISO9001 compliant with ISO 14001 reporting standard in progress

Below is an overview of GHG (greenhouse gas) emissions in Co2 equivalents per ton iron ore concentrate produced.



1) Only miners that report in a mineral/metal specific basis have been included

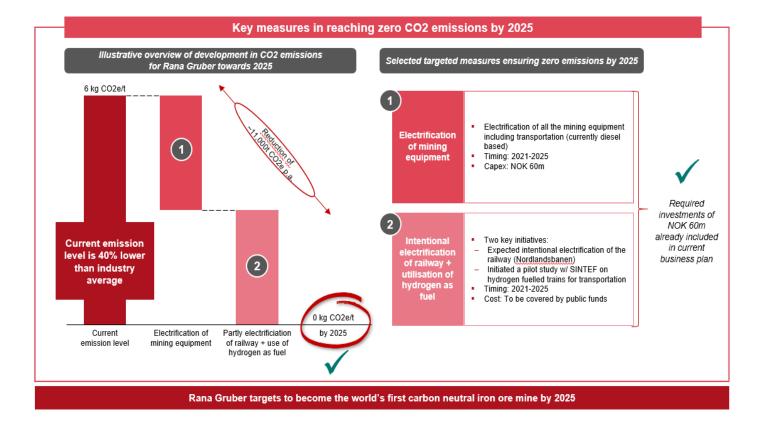
2) The number assessed are for FY 2019/2020 dependent on what was most recently reported

3) Includes both scope 1 and 2

Rana Gruber is positioned with best-in-class Co2 footprint, due to the combination of hydroelectric power, short transport distance and highly efficient and optimized processing facility. This results in a carbon intensity that is much lower than comparable operations.

The Rio Tinto operations are the closest to Rana Gruber, however, these operations are still one third above Rana Gruber, as shown in the illustration above These operations are due to economy of scale advantage that increases efficiency and reduces energy consumption and mines ores that require less energy to extract.

Below is an overview of the key measures for the Company in reaching zero Co2 emissions by 2025.



#### 4.12 Material contracts, business-critical patents or licenses and related party agreements

The Group has not entered into any material contracts outside of its ordinary course of business.

The Group's material contracts, i.e. with Cargill and LNS, are described below.

#### 4.12.1 The Cargill Agreement

On 24 April 2020, the Company entered into a cooperation agreement with Cargill relating to the marketing and sales of Company's entire annual production of hematite iron ore for steel making applications to Cargill (the Cargill Agreement). The Cargill Agreement, stipulates that the Company shall ensure that the shipments of hematite iron ore to Cargill are evenly spread out during the term of the agreement, whilst Cargill shall use reasonable endeavors to ensure that the stock position of hematite iron ore at the Company's will not exceed 150 kiloton (kt). The pricing mechanism for the sale of hematite iron ore is linked to iron ore spot prices in USD. Cargill shall towards its own customers and for marketing purposes use the trade name "Mo i Rana Concentrate" for hematite iron ore purchased from the Company under the Cargill Agreement.

In addition to the sale of hematite iron, the Cargill Agreement stipulates that Cargill shall provide the Company consultancy services relating to financial services, freight Services, risk management services, sales and marketing services and technical services.

The term of the Cargill Agreement is five years, ending on 24 April 2025. Each party may terminate and sue for breach of agreement if the other party commits a material breach, if an insolvency event occurs, or in the event of a deadlock. The Cargill Agreement is governed by English law.

#### 4.12.2 The LNS agreements

On 10 December 2018, the Company entered into an operating agreement with the contracting firm Leonhard Nilsen & Sønner AS (LNS) relating to the operation of the Company's open pit mine in the Ørtfjell area in Mo i Rana. The agreement is a cooperation agreement where the parties jointly strive to optimize the operational efficiency and quality in the open pit mine. LNS's obligations under the agreement include providing machinery and resources and performing all activities necessary for

operating the open pit mine, including, but not limited to i.a. drilling, blasting, transportation and loading of iron ore and waste rock. Rana Gruber is responsible for i.a. providing LNS with the open pit mine plans (Nw: dagbruddsplaner), ensuring that licenses necessary for operating the mine are in place, and that the physical working conditions are in accordance with LNS' reasonable expectations. The contract is based on a price per metric ton, and a yearly outtake of 6 million metric tons. Save for certain types of work, the pricing mechanism is based on account sales (Nw: regningsarbeid).

The term of the agreement is five years, ending on 1 October 2023. If the open pit mine is not empty after the initial term, the Company has an option of prolonging the agreement after negotiations with LNS. Each party may terminate the agreement upon 9 months' notice. If the Company terminates the agreement prior to 1 October 2023, Rana Gruber is obligated to buy or lease LNS' primary machinery.

Furthermore, on 15 July 2019, the Company entered into an operating agreement with LNS relating to the new mining level 123 in Rana Gruber's current underground mine. The new level will provide access to approximately 10.5 million tons of extra ore, and is expected to extend the life of the mine by 4-5 years. Under the agreement, the development of the new mine will be a joint collaborative project between Rana Gruber and LNS. LNS' obligations include, but are not limited to, tunneling and securing the new mining level, as well as some ventilation tunnels and other smaller infrastructural areas in Kvannevann mine. In addition to the overall responsibility for the project, Rana Gruber shall perform some of the excavation and transportation tasks itself, hereunder transportation of the ore and waste rock. The pricing mechanism is based on account sales (Nw: regningsarbeid).

All agreements with LNS are done on an arms-length principles. All operations and responsibilities are well coordinated between the two companies, and well defines in the agreements. The cooperation is evaluated on a steady basis, and all settlements are done on a monthly basis.

#### 4.12.3 Permits and licenses

As of the date of this Information Document, the Group holds all necessary concession, exploitation and environmental permits and licenses required for its operations, including operational and exploitation licenses for its mining operations and a special environmental permit enabling the Group to dispose of waste material associated with the extraction and beneficiation process. See Section 4.14 below regarding regulatory matters concerning the Company.

#### 4.12.4 Business-critical patents

The Company's wholly-owned subsidiary, Rana Gruber Mineral AS, has registered its trademark Colorana in several European countries. However, the Group does not have any patents that are considered as business-critical.

#### 4.12.5 Service agreement with LNS Greenland A/S

On 6 May 2016, the Company entered into a service agreement with LNS Greenland A/S. Each party may terminate the agreement by giving the other party three months written notice. Under the agreement, the Company shall provide LSN Greenland A/S expertise services related to geology, exploration, short and long term mine planning and surface surveying. Rana Gruber invoices LSN Greenland DKK 100,000 on a monthly basis for the services provided and normal use of equipment. In addition, the Company shall invoice LNS Greenland A/S on a cost basis for expenses including travelling and lodging expenses.

#### 4.12.6 Agreement between LNS Mining and its shareholders

On 10 February 2021, LNS Mining and its shareholders entered into an amendment to the current shareholders' agreement for LNS Mining. The agreement sets forth how LNS Mining, as the selling shareholder in the Private Placement (as further described in Section 8.4), shall distribute the net proceeds from the Private Placement and its shares in the Company to LNS Mining's ultimate owners (the "**Distribution**"). The Distribution is conditional upon i.a. the completion of the Private Placement, LNS Mining receiving the net proceeds from the Private Placement and the admission to trading of the Shares on Euronext Growth Oslo. Shares being distributed to LNS Mining's ultimate owners through the amendment agreement shall be subject to customary lock-up undertakings which will restrict, subject to certain conditions, their ability to, without the prior written consent of the Managers, issue, sell or dispose of any Shares, as applicable, during a period of 12 months from the first day of admission to trading of the Shares on Euronext Growth Oslo.

# 4.13 Legal and regulatory proceedings

From time to time, the Group may become involved in litigation, disputes and other legal proceedings arising in the course of its business. Neither the Company nor its subsidiary, are, nor have been, during the course of the preceding 12 months involved in any legal, governmental or arbitration proceedings which may have, or have had in the recent past, significant effects on the Company's and/or the Group's financial position or profitability, and neither the Company nor its subsidiary are aware of any such proceedings which are pending or threatened.

# 4.14 Regulatory matters

## 4.14.1 Overview

The Group's operations in Norway are subject to a variety of general and industry-specific regulations and permits concerning the environment, the health and safety of employees, land access, infrastructure creation and access, royalties, taxation, accounting policies and other matters. The description below does not purport to give an exhaustive overview of the regulations and permits which applies for the Group's operations.

As of the date of this Information Document, Rana Gruber and its subsidiary hold all necessary concession, exploitation and environmental permits required for its operations.

## 4.14.2 Licenses and permits

#### Mining operations

Rana Gruber's mining operations are subject to the Norwegian Minerals Act (No: *Mineralloven*), which replaced the former Norwegian Mine Act (No: *Bergverksloven*). Pursuant to the Minerals Act, different licenses and permits are required for the various mining operations, including licenses for exploration (No: *undersøkelsesrett*), exploitation (No: *utvinningsrett*)<sup>3</sup> and operation (No: *driftskonsesjon*).

Rana Gruber, and formerly Norsk Jernverk AS, were first granted operation licences for their mining operations in the 1960s. Rana Gruber's current operation license, which includes its current operations, both mines above and below ground, was granted on 8 November 2019.

In connection with the granting of its current operation license in 2019, Rana Gruber submitted a 20year general long-term plan (No: *overordnet langtidsplan*) until 2050 and a detailed 5-year operation plan (No: *detaljert driftsplan*) for the period 2019-2023 for all relevant mining sites to the Directorate of Mining. These plans have been approved and Rana Gruber's operations are carried out in compliance with these plans. Rana Gruber owns the properties where its current operations are carried out.

As described above, Rana Gruber carries out its mining operations at Storforshei and Ørtfjell. Thus, the operation licence encompasses all of Rana Gruber's planned operations for the period ending 2023. The Directorate of Mining can revise the operation license after a period of 10 years as per the Norwegian Minerals Act.

Name	Licence ID	Valid from	
Stensundtj. 1	0031/1986-NB	2015-06-26	
Stensundtj. 2	0032/1986-NB	1986-09-08	
Stensundtj. 3	0033/1986-NB	1986-09-08	
Stensundtj. 4	0034/1986-NB	2015-06-26	
Ørtvann Sør 1	0020-1/2015	2015-12-18	
Ørtvann Sør 2	0021-1/2015	2015-12-18	
Nord-Dunderland 1	0017-1/2015	2015-10-26	

In addition, Rana Gruber has exploitation licences for the following areas:

<sup>3</sup> Exploitation licenses granted pursuant to the Mine Act was named (*Norwegian Utmålsbrev*).

Nord-Dunderland 2	0018-1/2015	2015-10-26	

All licences described in the table above are held by Rana Gruber, except from the exploitation licences for Stensundtj. 1 and 4, which were rented from the Norwegian Government. The agreement expired on 26 June 2020 as the government was not interested in extending this lease. To secure mining rights in these areas Rana Gruber applied for exploration rights in a first instance. The application for exploitation rights is currently being prepared at Rana Gruber expects to submit all necessary documents by the end of November.

The exploitation licences expire after 10 years unless they are covered by/included in an operating licenses or such licences has been applied for, cf. section 33 of the Mineral Act. An exploitation licence may be renewed for another 10 years at the time, cf. section 33 of the Mineral Act.

Rana Gruber owns the properties which encompassed the exploitation licences for Ørtvann Sør 1 and Ørtvann Sør 2, while the properties which encompassed the exploitation licences for Nord-Dunderland 1 and Nord-Dunderland 2 are held by private persons and Statskog. If Rana Gruber in the future is to start operations at private properties, Rana Gruber must compensate the landowners a standardized annual fee of 0.5% of the market value of the extracted minerals in accordance with section 57 of the Mineral Act. Rana Gruber also has the opportunity to apply for expropriation of the private properties pursuant to section 38 of the Mineral Act. Compensation for such expropriation is governed by the Mineral Act.

The Stensundtjern areas are potential open-pit mining areas for the period after 2025, and Rana Gruber is in a process with the municipality of Rana regarding regulations for these areas.

#### <u>Environment</u>

Rana Gruber has a special environmental permit enabling Rana Gruber to dispose of waste material associated with the extraction and beneficiation process pursuant to section 11 (Special permit for any activity that may cause pollution) of the Norwegian Pollution Control Act. The permission has been given on certain terms, and applies to production, landfilling and the use of flotation chemicals, cf. section 16 (Conditions laid down in a permit) of the Norwegian Pollution Control Act.

# 4.14.3 Ethics, Health, Environment, Security and Quality Performance

Rana Gruber operates in accordance to its business principles which also are communicated to cooperation partners, customers and suppliers.

Rana Gruber has implemented routines to secure good standards for health, security and environment ("**HSE**"). Based on the type of business Rana Gruber operates, there may accrue deviations regarding health, environment and / or safety, even though good routines have been incorporated.

Rana Gruber imposes, as far as possible, that suppliers and co-contractors comply with Rana Gruber's HSE routines. Rana Gruber's suppliers and co-contractors are informed of the HSE routines, and are required to follow these. Before signing an agreement, Rana Gruber's suppliers and co-contractors are made familiar with the HSE routines and receive a copy of the routines. Deviations from the HSE routines by the Rana Gruber' suppliers and co-contractors are reported in the same way as internally in Rana Gruber and are followed up.

Rana Gruber received its renewed environmental permit on 26 June 2015. The permit sets various emission standards based on a production of 4.5mt crude ore per year. The most important emission standard applies to the depositing of tailings in the Rana fjord, which may not exceed 3mt per year. In addition, the permit governs dust emission, noise, use of energy (ENØK) and handling of waste generated from Rana Gruber's operation. The permit requires that Rana Gruber monitors the effect its operations has on the environment, which in particular is sewage water from the mine and disposal of tailings from the ore dressing process. Rana Gruber has established settling ponds in the underground Kvannevann mine and a new tailings pipeline for the processing plant at Mo i Rana.

Although Rana Gruber's production exceeds 4.5mt per year, it operates in compliance with the emissions standards in the permit, including the depositing of tailings, which are the most important emission standard in the permit. The Norwegian Environmental Agency (the "**Agency**"), which granted the permit and carries out periodical audits of Rana Gruber's operations, is aware of Rana Gruber's current production quantities and Rana Gruber are in dialogue with the Agency regarding increasing the production quantity.

In recent years, Rana Gruber has implemented a number of measures which, to ensure that suspended substances in the river are in accordance with, and preferably below, the limits set by the Agency. There is an ongoing dialogue with the Agency about these measures, and although this dialogue is challenging,

Rana Gruber is confident that this dialogue and the mentioned measures will result in a regime that all is for the best of the environment. Rana Gruber will do its utmost to reduce the negative impact on the environment, whether its air, ground or water.

Rana Gruber's environmental systems also follow the principles of ISO 14001. Rana Gruber has an environmental stewardship in place, and the goal is to minimize the environmental impact of Rana Gruber's activities and to maximize the restoration of the ecosystems. Environmental data are reported on a regular basis from the QHES manager of Rana Gruber to the CEO. Environmental issues are also reported and discussed in board meetings of the board of directors of Rana Gruber.

Rana Gruber has procedures for non-conformance management. Deviation systems are available to all employees on Rana Gruber's intranet. Registered non-compliance is followed-up by the management together with the employees.

Rana Gruber is ISO-9001 certified. This system is based on process-oriented management with the customer in focus and where continuous improvement is ongoing. The system is built up with close involvement of the employees.

Rana Gruber has an overall goal of being a sustainable company where development of resources and products is ongoing through collaboration with customers, suppliers and other stakeholders. Rana Gruber is committed to be a safe business where employees have good and safe working conditions and can work without danger to themselves or others, as well as low environmental impact. Rana Gruber is socially aware and has great confidence in its surroundings. The safety of Rana Gruber's employees is highly prioritised in the planning and carrying out of all work at Rana Gruber. It is important for Rana Gruber that its employees have good and safe working conditions without danger to themselves or others. Rana Gruber is prepared for occupational accidents, fire and environmental emissions. Rana Gruber has its own industrial organizations and has safety representatives in the various departments that reports and follow up on unwanted events.

4.14.4 Withholding tax – iron ore in Norway

There is no withholding tax for iron ore in Norway.

## 4.14.5 Insurance

Rana Gruber has engaged Willies Towers Watson as insurance agent. Equipment, real estate and coverage of production loss is insured through Gjensidige Forsikring ASA. The insured amount for production loss is NOK 370 million after a quarantine periode of 14 days. For ore wagons, there is an additional liabilityinsurance Moderna Försäkringar AB, with an insured amount up to SEK 220 million.

# 4.15 Illustrative examples for the Group's financial performance in the years 2021 and onwards

#### 4.15.1 Introduction

The Group has prepared illustrative examples for its future financial performance based on the forward curves for USD/NOK, EUR/NOK and the Fe 62% China Platts Index as of date 9 February 2021, as further set out in Sections 4.15.2 to 4.15.8 below.

The illustrative examples on financial performance for 2021 and onwards reflect various material assumptions about future events, many of which are outside the Group's control, including but not limited to that future foreign exchange market rates and iron ore spot prices develop in accordance with the current market expectations for future prices as these are set out in the forward curves for USD/NOK, EUR/NOK and the Fe 62% China Platts Index as included in this Information Document in Section 4.15.2. Such assumptions may or may not prove to be correct for all or parts of the relevant period. Currency exchange rates and iron ore prices can be very volatile, and any deviations in actual development of such exchange rates and iron ore market prices will have potentially material impact on the actual financial performance of the Group for the years 2021 and onwards.

The Group's outlook, estimates and illustrative examples for future financial performance has been prepared by the Group. The Group's independent auditors have not audited, reviewed or produced the Group's financial projections, estimates or illustrative examples of future financial performance. Investors should not place undue reliance on such information.

The illustrative examples set out herein are forward looking statements and carry the risk associated therewith (see Section 3.3 "Cautionary note regarding forward-looking statements" and the risk factor included in Section 1.1 in "The Group's future results may differ materially from what is expressed or

implied by the illustrative examples of future financial performance included in this Information Document, and investors should not place undue reliance on such information").

It should generally be noted that the dynamic of a forward curve is that it starts off at the respective spot price and falls in the future as the cost of carry on the trade increases. Two important aspects of this cost includes interest rates, insurance and storage cost, where storage will be the most substantial part of the cost. Accordingly the forward curve has low predictive power. The market demand for the contracts at a point in time vs the supply in the financial market will also have an effect. This may lead to some variance in the fall of the curve from period to period, but can be more liquidity driven than fundamentally related. Steel mills have on average 22 days of ore in stock and are active players in this market.

The chart below illustrates the iron ore spot price and the forward curve in a historic perspective. A forward curve in backwardation is the natural situation and will be the case in both a falling and a rising iron ore market.

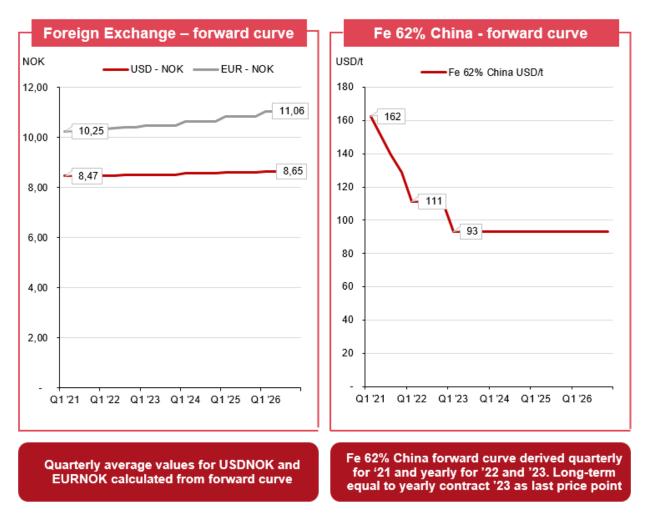


Source: Bloomberg SGX TSI Iron Ore CFR China (62% Fines) Index Futures

All financial information included in this Section 4.15 must be read on the basis of the introduction set out in this Section 4.15.1.

#### 4.15.2 Underlying assumptions for illustrative examples of future financial performance

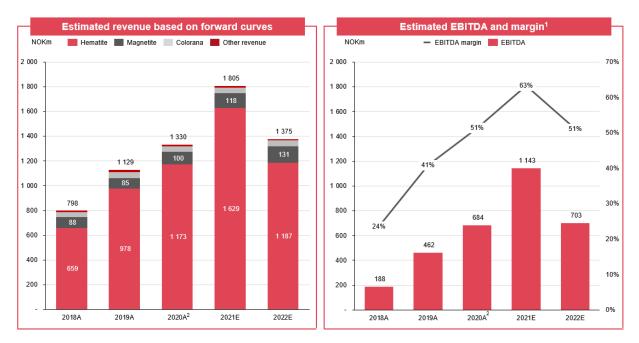
The illustrative examples for future financial performance for the period 2021 and later as set out in Sections 4.15.3 to 4.15.8 reflect various material assumptions about future events, many of which are outside the Group's control, including but not limited to that the future foreign exchange market rates and iron ore spot prices develop in accordance with the current expectations for future market prices as these are set out in the forward curves for USD/NOK, EUR/NOK and the Fe 62% China Platts Index as set out below. Investors should take duly note of this when assessing the information set out herein.



Source: Bloomberg 9 February 2021

4.15.3 Illustrative examples of revenue and EBITDA for 2021 and onwards based on the forward curves for USD/NOK, USD/EUR and the Fe 62% China Platts Index

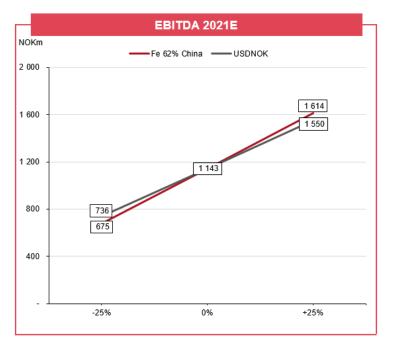
Based on the forward curves set out in Section 4.15.2 and the assumptions set out In Section 4.15.1, the Group has prepared the following illustrative examples for revenue, EBITDA and EBITDA margin for the period 2021 and onwards.



1) EBITDA adjusted for changes in inventory. EBITDA defined as EBIT + depreciation + amortisation of operational development.

2) 2020 number are actuals and unaudited

As set out in Section 4.15.1, actual development in future foreign exchange market rates and iron ore spot prices deviating from the current expectations for future market prices as these are set out in the forward curves for USD/NOK, EUR/NOK and the Fe 62% China Platts Index as included in this Information Document in Section 4.15.2 may materially impact the illustrative examples of revenue and EBITDA development for the years 2021 and onwards. The table below illustrates the sensitivity of the EBITDA illustrative examples with a variation in +/- 25% for the forward curves for the USD/NOK exchange rate or Fe 62% China Platts Index for the year 2021. The table should not be read to determine exact net EBITDA levels, but for illustration of the sensitivity exposure.

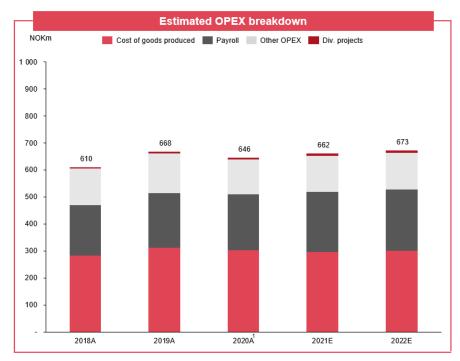


Accumulated EBITDA 2021 for a -25%, unchanged and +25% scenario for Fe62% China and USDNOK It should be noted that the sensitivity illustration for the forward curve for the USD/NOK exchange rate assumes that actual iron ore prices develop in accordance with the Fe 62% China Platts Index forward curve, while the sensitivity illustration for the Fe 62% China Platts Index curve forward assumes that actual USD/NOK exchange rates develop in accordance with the USD/NOK exchange rate forward curve. Accordingly if both forward curves were to have a negative variation at the same time, this would have a potentially much higher EBITDA impact than the numbers set out above illustrates.

## 4.15.4 Target level of operational expenditures

For the years 2021 and onwards the Group targets cash operational expenditure levels as set out below. There are numerous factors that may impact the actual operational expenditure level for the years 2021 and beyond, including but not limited to any decline in customer demand, disruption in delivery from suppliers, further impact on the global markets resulting from Covid-19, accidents related to the operations and numerous other factors. The actual operational expenditures of the Group may deviate materially from the target levels.

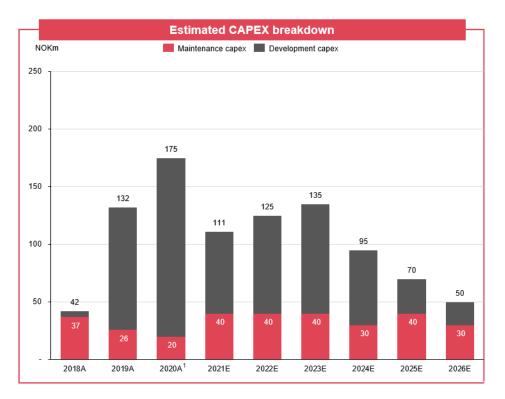
Cost of goods produced contains the costs directly linked to the production of iron ore. Payroll consist of personnel cost to mine and the processing plant, as well as other support functions and administration. Other OPEX contains mainly maintenance and service costs, equipment rental costs and other fixed administration costs. There are planed development CAPEX for transition to electricity and improvement at the mine and plant to increase the quality of the mineral output, resulting in lower cost per ton sold in the future.

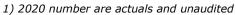


1) 2020 number are actuals and unaudited

# 4.15.5 Target level of capital expenditures

For the years 2021 and onwards the Group targets capital expenditure levels as set out below. There are numerous factors that may impact the actual capital expenditure level for the years 2021 and beyond, including but not limited to any decline in customer demand, disruption in delivery from suppliers, further impact on the global markets resulting from Covid-19, accidents related to the operations and numerous other factors. The actual capital expenditures of the Group may deviate materially from the target levels.





Development capital expenditures going forward is expected to mainly consist of the following items:

- Increased magnetite production
- Fe62% to Fe65% conversion
- Electrification of fleet
- New mining level 91
- New trucks and dumpers
- The capital invested in development will ensure a higher revenue and profit margin going forward

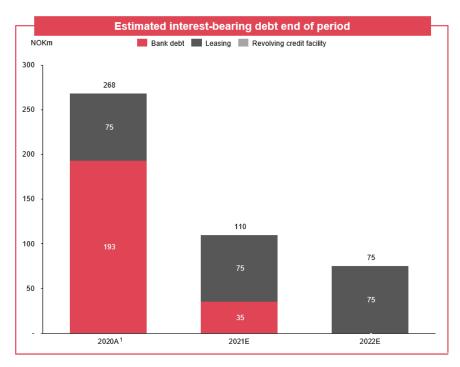
Maintenance capital expenditures consist of the necessary capital requirements enabling a sustaining operation.

Overview of target capex related to level 91:.

Year	NOKm capex level 91
2021	25
2022	50
2023	50
2024	50

4.15.6 Illustrative examples of Interest bearing debt for 2021 and onwards based on the forward curves for USD/NOK, USD/EUR and the Fe 62% China Platts Index

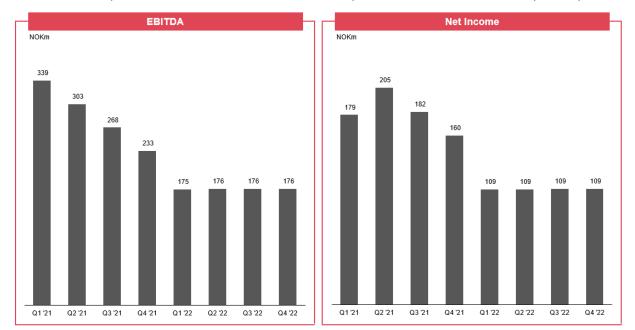
Based on the forward curves set out in Section 4.15.2 and the assumptions set out in Section 4.15.1 as well as the target cost level set out in Section 4.15.4 and 4.15.5, the Group has prepared the following illustrative examples for interest bearing debt levels at end of period.



<sup>1) 2020</sup> number are actuals and unaudited

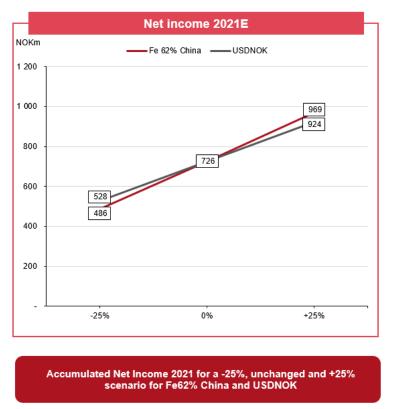
4.15.7 Illustrative examples for EBITDA and net income for 2021 and onwards on per quarter based on the forward curves for USD/NOK, USD/EUR and the Fe 62% China Platts Index

Based on the forward curves set out in Section 4.15.2 and the assumptions set out in Section 4.15.1, as well as the target cost level set out in Sections 4.15.4 and 4.15.5 the Group has prepared the following illustrative examples for EBITDA and net income for the period 2021 and onwards on quarterly basis.



As set out in Section 4.15.1 actual development in future foreign exchange market rates and iron ore spot prices deviating from the current expectations for future market prices as these are set out in the forward curves for USD/NOK, EUR/NOK and Fe 62% China Platts Index as included in this Information Document in Section 4.15.2 may materially impact the illustrative examples of EBITDA and net income development for the years 2021 and onwards. The table below illustrates the sensitivity of the net income illustrative examples with a variation in +/- 25% for USD/NOK or Fe 62% China Platts Index for

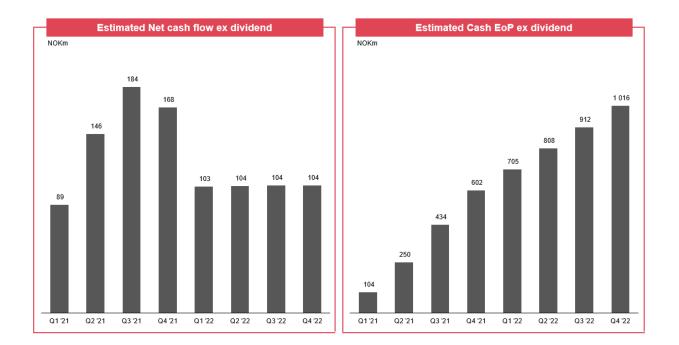
year 2021. The table should not be read to determine exact net income levels, but for illustration of the sensitivity exposure.



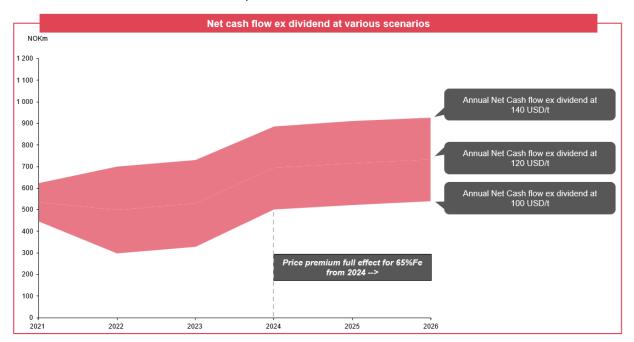
It should be noted that the sensitivity illustration for the forward curve for the USD/NOK exchange rate assumes that actual iron ore prices develop in accordance with the Fe 62% China Platt Index forward curve, while the sensitivity illustration for the Fe 62% China Platt Index curve forward assumes that actual USD/NOK exchange rates develop in accordance with the USD/NOK exchange rate forward curve. Accordingly if both curves were to have a negative variation at the same time, this would have a potentially much higher net income impact than the numbers set out above illustrates.

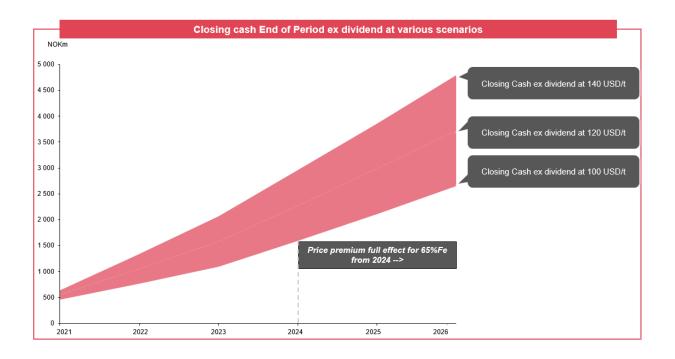
# 4.15.8 Illustrative examples of dividend potential for 2021 and onwards per quarter based on the forward curves for USD/NOK, USD/EUR and the Fe 62% China Platts Index

Based on the forward curves set out in Section 4.15.2 and the assumptions set out in Section 4.15.1, as well as the target cost level set out in Sections 4.15.4 and 4.15.5, the Group has prepared the following illustrative examples for estimated net cash flow ex dividend and estimated cash EoP ex dividend for the period Q1 2021 – Q4 2022 on quarterly basis.



The graphs below provides illustrative examples of estimated net cash flow ex dividend and estimated cash End of Period ex dividend assuming certain price levels and assuming full effect of 65% Fe from 2024 and current forward curve for USD/NOK as set out in this Information Document in Section 4.15.2.





## 4.16 Hedging

Rana Gruber has entered into the off-take agreement with Cargill in which the Company delivers its entire annual production of hematite iron ore for steel making applications to Cargill with payment in USD. See Section 4.12 for further information about the agreement.

The Company's earnings are accordingly exposed to the development in commodity prices, and in particular iron ore spot prices (Fe 62% China Platts Index) as well as by the USD/NOK exchange rate, and to some extend also EUR/NOK exchange rate.

The Company has a hedging strategy which provides for flexibility to secure iron ore prices and/or currency exposure for volumes up to 50% of 12 month's production volume for a period of up to 24 months.

The Company has currently carried certain short-term hedging transactions and/or secured pricing on short term basis by way of fixed forward prices, for the purpose of reducing the exposure to the iron ore spot price and USD/NOK fluctuations as further set out below.

As of the date of this Information Document, Rana Gruber has hedged/secured pricing for approximately 35% of its expected iron ore sales with settlement in June, shipments in March, at an average iron ore price per ton of USD 118.4.

This hedging does only concern a very limited volume of the Company's future production and applies for a relatively short time period. Such hedging and price securing transactions may also be imperfect. Accordingly, despite of such transactions, the Group remains heavily exposed to the iron ore spot price fluctuations in the future.

In the future the Company expects to from time to time enter into certain similar hedging transactions to secure prices of iron ore and the USD/NOK rate, but only for relatively low volumes and on short term and within the hedging strategy set out above.

## 5. PRINCIPAL MARKETS

The third most common element making up the earth is iron ore. Besides being an abundant metal, it is an essential component for the global iron and steel industries as approximately 98% is used in steelmaking. The iron ore almost always consist of iron oxides, of which the primary forms are magnetite ( $Fe_3O_4$ ) and hematite ( $Fe_2O_3$ ). As iron ore is not strong enough for construction or other purposes alone, it is alloyed with other elements such as tungsten, manganese, nickel, vanadium and chromium to make steel with a selection of qualities such as strength, oxidization or brittleness. The steel made from iron ore is used for construction, automobile manufacturing and other industrial applications.<sup>4</sup>

Australia was the largest exporter of iron ore in 2018, with a total export equivalent of USD 48bn of iron ore, second was Brazil with USD20bn and third was South Africa with USD 4.7bn. The world trade of iron ore was USD 95.1bn in 2018. China is the world's largest importer and in 2018 imported iron ore equivalent to USD59bn, approximately 62% of all world trade.<sup>5</sup>

World Mine Production (kt)	2019	2020
United States	29,800	24,000
Australia	569,000	560,000
Brazil	258,000	252,000
Canada	35,200	34,000
Chile	8,430	8,000
China	219,000	210,000
India	148,000	140,000
Iran	21,700	21,000
Kazakhstan	6,150	5,900
Peru	10,100	10,000
Russia	64,300	63,000
South Africa	41,200	40,000
Sweden	22,100	22,000
Turkey	9,110	8,900
Ukraine	39,500	39,000
Other countries	39,000	43,000
World total (rounded)	1,520,000	1,500,000

Source: https://pubs.usgs.gov/periodicals/mcs2021/mcs2021-iron-ore.pdf

Australia was the largest producer of iron ore in 2020 with a production of 560 million metric tons of iron ore content. Brazil was the second largest with a production of 2502million metric tons, closely followed by China with 210 million metric tons.

<sup>&</sup>lt;sup>4</sup> https://mineralseducationcoalition.org/minerals-database/iron/

<sup>&</sup>lt;sup>5</sup> https://oec.world/en/profile/hs92/52601/



Source: International Monetary Fund, Global price of Iron Ore, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PIORECRUSDM, February 10, 2020

The average price of iron ore from January 2005 until January 2021 is USD/t 86.3. During 2014 the price of iron ore fell from 138 USD/t in January 2014 to USD/t 65 in January 2015. The price collapse was largely attributed to a drop in steel demand from China. The country purchases nearly two thirds of the seaborne iron ore supply. Since iron ore is used as a raw material in the production of steel, Chinese steel production is the most significant driver of global demand for iron ore. Due to a slowing Chinese economy, domestic demand for steel in China declined 3.3% in 2014 and another 0.5% in 2015. Despite the decrease of demand, the global iron ore producers had boosted heavily in production capacity of the past years. These capacity expansions boosted the global supply, resulting in an oversupply situation which kept prices subdued during 2015 and 2016.<sup> $\circ$ </sup>

<sup>&</sup>lt;sup>6</sup>https://www.forbes.com/sites/greatspeculations/2015/12/08/iron-ore-prices-how-much-further-to-the-bottom/?sh=25502f5f6967#35ff49f36967

## 6. SELECTED FINANCIAL INFORMATION

#### 6.1 Introduction and basis for preparation

The Financial Statements have been prepared in accordance with NGAAP, and are included herein as Appendix B (2019) and Appendix C (2018). The Financial Statements have been audited by Ernst & Young AS, as set forth in the auditor's report, which is included in the Financial Statements.

The Interim Financial Statements have been prepared in accordance with the accounting principles in the Financial Statements as set out above, and have not been audited. The Interim Financial Statements are included herein as Appendix D.

The selected financial information presented in Section 6.3 to Section 6.6 has been derived from the Group's consolidated financial statements for the year ended 31 December 2019 (with comparable financial information for 2018) and the Interim Financial Statement. The selected financial information should be read in connection with, and is qualified in its entirety by reference to, the Financial Statements and the Interim Financial Statements. The Financial Statements are originally prepared in the Norwegian language, and, as such, the financial information and line items included in this Section 6 in the English language is only an office translation carried out for the sole purpose of this Information Document.

## 6.2 Summary of accounting policies and principles

For information regarding accounting policies and the use of estimates and judgements, please refer to the accounting principles section of the Financial Statements.

## 6.3 Statement of income

The table below sets out selected data from the Group's unaudited consolidated income statement for the nine months ended 30 September 2020 with comparable figures for 30 September 2019, and the Group's audited consolidated statement of income for the year ended 31 December 2019 with comparable figures for 31 December 2018.

	Nine months ended	Nine months ended		
	30 September	30 September	31 December	31 December
	2020	2019	2019	2018
All amounts in NOK 1000	(unaudited)	(unaudited)	(audited)	(audited)
OPERATING REVENUES				
Sales revenue	861 564	843 147	1 110 855	795 191
Other operating revenues	2 242	2 240	9 936	5 786
Total operating revenues	863 806	845 386	1 120 791	800 977
OPERATING EXPENSES				
Cost of goods	251 845	250 285	345 586	320 486
Change in stocks of produced goods	-25 026	18 020	38 997	574
Personnel expenses	152 095	143 961	200 616	187 477
Depreciation	78 646	76 881	101 502	91 889
Other operating expenses	104 672	103 736	147 437	131 887
Total operating expenses	562 231	592 883	834 137	732 313
Operating profit/loss	301 575	252 503	286 654	68 665
FINANCIAL ITEMS				
Share of profit of subsidiaries (group contribution)	-	-	-	-
Other financial revenues	6 586	6 219	8 475	10 157
Financial expenses	-140 717	-180 146	-222 628	-74 547
Net financial items	-134 132	-173 927	-214 153	-64 390
Profit/loss before tax	167 443	78 576	72 501	4 275
Tax expense	36 982	17 310	15 536	5 722
Net profit/loss for the period	130 461	61 266	56 965	-1 447
Allocation of the period's net profit/loss:				
Dividend	-	-	18 000	-
Transferred to/from other equity	130 461	61 266	38 965	-1 447
TOTAL ALLOCATION	130 461	61 266	56 965	-1 447

# 6.4 Statement of financial position

The table below sets out selected data from the Group's unaudited consolidated statement of financial position for the nine months ended 30 September 2020, and the Group's audited consolidated statement of financial position for the year ended 31 December 2019 with comparable figures for 31 December 2018.

	Nine months ended		
	30 September	31 December	31 December
ASSETS	2020	2019	2018
All amounts in NOK 1000	(unaudited)	(audited)	(audited)
Non-current assets			
Deferred tax assets	-	-	4 692
Mining plant	305 319	264 408	257 588
Land, buildings and other real estate	11 371	12 527	11 546
Machinery and equipment	182 018	192 410	171 225
Movables and equipment	3 095	4 274	4 485
Total tangible assets	501 803	473 619	444 844
Investments in subsidiaries			
Other equities and investments	2 021	1 678	1 140
Loan to group companies	133 165	224 464	342 776
Subordinated Ioan	1 500	1 500	1 500
Other long-term receivables	14 456	11 475	10 381
Total non-current financial assets	151 143	239 117	355 797
Total non-current assets	652 946	712 736	805 333
Current assets			
Inventories	161 548	123 523	179 018
Account receivables	43 102	187 438	167 285
Other short-term receivables	35 904	25 646	23 196
Intra-group receivables	-	-	-
Total receivables	79 006	213 084	190 481
Bank deposits, cash & cash equivalents	6 545	9 648	7 075
Total current assets	247 099	346 255	376 574
TOTAL ASSETS	900 045	1 058 992	1 181 907

# EQUITY AND LIABILITIES

Equity			
All amounts	in l	NOK	1000

Total liabilities TOTAL EQUITY AND LIABILITIES	521 357 900 045	714 764 1 058 992	804 732 1 181 907
Total current liabilities	187 239	353 007	405 887
Reserved dividend	-	18 000	-
Current debt to group companies	-	22 178	-
Accrued tax on annual profit	36 982	-	-
Other current liabilities	21 680	26 241	36 235
Value added taxes	7 179	10 755	9 501
Trade payables	115 954	100 352	139 170
Debt to credit institutions	7 051	177 089	225 696
Tax payable	-1 608	-1 608	-4 715
Total non-current debt	334 118	361 757	398 845
Other non-current liabilities	6 258	6 258	7 290
Debt to credit institutions	249 103	281 146	331 847
Financial leasing debt	67 914	63 510	59 708
Deferred tax liabilities	10 843	10 843	-
Liabilities			
Total equity	378 689	344 228	377 175
Total retained earnings	276 558	242 097	275 044
Other equity	276 558	242 097	275 044
Total paid-in equity	102 131	102 131	102 131
Share premium	92 783	92 783	92 783
Share capital	9 348	9 348	9 348

# 6.5 Statement of cash flows

The table below sets out selected data from the Group's unaudited consolidated statement of cash flows for the nine months ended 30 September 2020, and the Group's audited consolidated statement of cash flows for the year ended 31 December 2019 with comparable figures for 31 December 2018.

	Nine months ended 30		
	September		31 December
	2020	2019	2018
All amounts in NOK 1000	(unaudited)	(audited)	(audited)
Operating activities			
Profit/loss before tax	167 443	72 501	4 275
Goverment grant (skattefunn)	-	4 683	3 472
Gain on sale of non-current asset	-2 627	-141	-1 072
Depreciation	78 646	101 501	91 888
Impairment equities	-	-	3 999
Exchange rate adjustment long-term liabilities	-	2 232	10 488
Change in inventories	-38 025	55 495	31 347
Change in trade receivables and trade payables	159 938	-59 551	-20 007
Change in other operating items	-18 395	-11 883	5 456
Net cash flows from operating activities	346 980	164 837	129 846
Investing activities			
Sale of property, plant and equipment	2 627	2 471	1 786
Investments in property, plant and equipement	-106 830	-132 608	-42 410
Sale of shares	-	1	-
Investments in associates and other equities	-344	444	-67 621
Change in other investments	-2 981	-1 094	-2 355
Net cash flows from investing activities	-107 528	-130 786	-110 600
Financing activities			
Payment long-term liabilities and financial lease	-40 324	-61 238	-58 614
New long-term liabilities and financial lease	12 685	14 480	-
Change in short-term liabilities	-170 037	-48 607	30 266
Change in liabilities and liabilities to group companies	69 121	66 261	-22 236
Dividend	-114 000	-	-
Paid-in-equity	-	-	31 559
Net cash flows from financing activities	-242 555	-31 477	-19 025
Total cash flow	-3 103	2 574	221
Cash and cash equivalents at the beginning of the period	9 648	7 075	6 854
Cash and cash equivalents at the end of the period	6 545	9 648	7 075
Ordinary limit overdraft	156 000	205 000	205 000
Unused overdraft facilities and deposits	155 494	37 559	21 378

# 6.6 Statement of changes in equity

The table below sets out selected data from the Group's audited consolidated statement of changes in equity for the year ended 31 December 2019 and the unaudited interim period ended 30 September 2020.

	Paid-in	equity	Retained earnings	
All amounts in NOK 1000	Share capital	Share premium	Other equity	Total equity
Equity as at 31 December 2018	9 348	92 783	275 044	377 175
Net profit/loss for the year			56 965	56 965
Dividend			- 18 000	- 18 000
Extraordinary dividend			- 71 912	- 71 912
Equity as at 31 December 2019	9 348	92 783	242 097	344 228

	Paid-in	equity	Retained earnings	
All amounts in NOK 4000	Share conited	Share	Otherewite	Total annitu
All amounts in NOK 1000	Share capital	premium	Other equity	Total equity
Equity as at 31 December 2019	9 348	92 783	242 097	344 228
Net profit/loss for the period			130 461	130 461
Extraordinary dividend			-96 000	-96 000
Equity as at 30 September 2020 (unaudited)	9 348	92 783	276 558	378 689

# 6.7 Significant changes in the Group's financial or trading position

The Group expects to report revenues for 2020 at MNOK 1,330 of which MNOK 1,173 from Hematite, MNOK 100 from Magnetite and the residual form Colorana and other revenue. The Group expects an adjusted EBITDA for of 2020 at MNOK 684, with EBITDA being adjusted for changes in inventory and EBITDA defined as EBIT + depreciation + amortisation of operational development. OPEX for 2020 is expected at MNOK 646. Capex for 2020 is expected at MNOK 175 of which MNOK 155 being development capex and MNOK 20 being maintenance capex.

Except for the above, there have been no significant changes in the Company's financial or trading positions after the unaudited interim period ended 30 September 2020.

# 6.8 Working capital statement

The Company is of the opinion that the working capital available to the Group is sufficient for the Group's present requirements, for the period covering at least 12 months from the date of this Information Document.

# 6.9 Borrowings

The Company has entered into a multi-currency credit agreement with DNB Bank ASA for a total amount of USD 7,600,000 to be used for operation financing and refinancing of the Company's existing loans. Amounts under the credit agreement can be drawn up in either USD or NOK. Instalments under the multi-currency credit agreement shall be paid on a quarterly basis of USD 950,000 over a period of two years. The first instalment falls due three months following the disbursement of credit under the agreement. Interest on loans drawn under the agreement shall be paid at an interest rate corresponding to the sum of the reference rate (for NOK/NIBOR and for USD/LIBOR) added to the margin in arrears at the end of each interest period (three months interest period).

The Company has also entered into a multi-currency group account credit agreement with DNB Bank ASA for a total amount of NOK 100 million. Amounts under the credit agreement can be drawn up in either NOK, USD, GBP and Euro, and interest on loans drawn under the agreement shall be paid at a nominal interest rate based on one month NIBOR. For amounts drawn up in USD, GBP and Euro, the reference rate is LIBOR GBP, EURIBOR and LIBOR US, respectively.

As of this date, the Company is not in breach of any covenants in the credit agreements. The following covenants apply to the credit agreements:

- The Company shall have a gearing (Nibd/EBITDA) which does not exceed 1.5. This is measured on a quarterly basis.
- The Company shall have an equity ratio of 30%, which shall be measured on a quarterly basis. From and including 31 December 2021, the equity ratio must be at least 35%.
- The Company shall have a debt-servicing capacity of at least 3.50, which shall be measured on a quarterly basis.
- Amounts drawn shall not exceed 60% of the book value of inventories and current account receivables (<90 days). Receivables financed by Cargill are not included in this calculation.
- The Company shall have a board-approved hedging strategy for USD and iron ore. See Section 4.16 for the Company's hedging strategy.

# 7. THE BOARD OF DIRECTORS, MANAGEMENT AND EMPLOYEES

#### 7.1 Overview

The overall management of the Company is vested in the Board of Directors and the Management. In accordance with Norwegian law, the Board of Directors is responsible for, among other things, supervising the general and day-to-day management of the Company's business, ensuring proper organization, preparing plans and budgets for its activities, ensuring that the Company's activities, accounts and asset management are subject to adequate controls and undertaking investigations necessary to perform its duties.

The Management is responsible for the day-to-day management of the Group's operations in accordance with Norwegian law and instructions set out by the Board of Directors. Among other responsibilities, the Company's Chief Executive Officer is responsible for keeping the Company's accounts in accordance with prevailing Norwegian legislation and regulations and for managing the Group's assets in a responsible manner. In addition, the Company's Chief Executive Officer must, according to Norwegian law, brief the Board of Directors about the Company's activities, financial position and operating results at least once a month.

# 7.2 The Board of Directors

#### 7.2.1 Overview

The names and positions of the members of the Board of Directors as at the date of this Information Document are set out in the table below.

Name	Position	Served since	Term expires
Morten Støver	Chairman	2020	2022
Kristian Adolfsen	Board member	2016	2022
Børge Nilsen	Board member	2013	2021
Frode Nilsen	Board member	2008	2021
Andreas Haugen	Board member	2019	2021
Johan Hovind	Board member, employee- elected	2020	2022
Lasse Strøm	Board member, employee- elected	2020	2022
Thomas Hammer	Board member, employee- elected	2020	2022

The Company's registered office in Mjølanveien 29, 8622 Mo i Rana, Norway serves as the business address for the members of the Board of Directors in relation to their directorships in the Company. As of this date, Morten Støver owns 6,000 Shares, Frode Nilsen owns 20,250 Shares, and Lasse Strøm and Thomas Hammer each owns 606 Shares in the Company. No other member of the Board of Directors owns any Shares.

# 7.2.2 Brief biographies of the members of the Board of Directors

Set out below are brief biographies of the members of the Board of Directors, including their relevant expertise and experience and an indication of any significant principal activities performed by them outside the Company.

#### Morten Støver, Chairman

Morten Støver has served as chairman of the Company's Board of Directors since January 2020. He also serves as chairman of the board of directors of Eksportkreditt/GIEK, LNS Mining, Løvold Solutions AS, Elektro AS, Nofir AS and Linkpro AS. Morten Støver held the position as Chief Executive Officer of Nordlandsbanken from 2003-2012, and was a Division Director in DNB Bank ASA from 2009-2018.

## Kristian Adolfsen, Board member

Kristian Adolfsen has served as a member of the Company's Board of Directors since 2016. He is the coowner of the Adolfsen group, which invests in companies across a wide range of sectors. Kristian Adolfsen has extensive experience from the hospitality and care service industry, having founded and managed several companies within the sector over the past decades. He has broad experience from various board of directors, and currently holds numerous board positions, including as board member of LNS Mining.

#### Børge Nilsen, Board member

Børge Nilsen has served as a member of the Company's Board of Directors since 2013, and has over 11 years of experience from the mining industry. He currently holds the positions as Purchase Manager and Project Manager in Leonhard Nilsen & Sønner AS (LNS), which is wholly owned by Leonhard Nilsen & Sønner – Eiendom AS (LNS Eiendom) in which as of this date owns 66% of LNS Mining. Børge Nilsen is also a member of the board of directors of LNS, LNS Eiendom and LNS Mining. In addition, he is a member of the board of directors of LNS Spitsbergen AS, Greenland Ruby ApS and Hålogaland Element AS. Prior to these directorships, he served as member of the board of directors of Skaland Graphite AS, Hålogaland Grus og Betong AS and Narvik Betonstasjon.

#### Frode Nilsen, Board member

Frode Nilsen has served as a member of the Company's Board of Directors since 2008. Frode Nilsen is the Chief Executive Officer of Leonhard Nilsen & Sønner – Eiendom AS (LNS Eiendom) and the chairman of the board of directors of Leonhard Nilsen & Sønner AS (LNS). In addition, he serves as chairman of the board of directors of Hålogaland Element AS and LNS Spitsbergen AS, and as board member of LNS Mining and Greenland Ruby ApS. Prior to these positions and directorships, he has held several executive management positions within the LNS group, including as Chief Executive Officer of LNS and Chief Executive Officer of LNS Spitsbergen AS, and has served as the chairman of the board of directors of LNS Eiendom, Skaland Graphite AS and Hålogaland Grus og Betong AS.

#### Andreas Haugen, Board member

Andreas Haugen has served as a member of the Company's Board of Directors since October 2019. He holds the position as Chief Executive Officer of A.H. Holding AS, which as of this date owns 26.7% of LNS Mining. In addition, Andreas Haugen is the chairman of the board of directors of A.H. Holding AS, and also holds several other management and directorships in the A.H. group.

#### Johan Hovind, Board member

Johan Hovind has served as an employee-elected member of the Board of Directors since June 2020. He joined Rana Gruber in 2010 and held the position as production worker until April 2020. Since then, Johan Hovind has held the position as club leader in Rana Gruber. He served as an employee-elected member of the Board of Directors from 2013-2015 and was a deputy member of the Board of Directors from 2013-2015 and was a deputy member of the Board of Directors from 2015-2020.

#### Lasse Strøm, Board member

Lasse Strøm has served as an employee-elected member of the Board of Directors since June 2020. He joined Rana Gruber in 2013 and currently holds the position as specialty worker at the Company's processing plant. Lasse Strøm has also been personnel safety representative in the Company since 2016.

#### Thomas Hammer, Board member

Thomas Hammer has served as an employee-elected member of the Board of Directors since June 2020. He has over 20 years of experience from positions within the Rana Gruber group. He joined the Company in 2011 and currently holds the position as supply manager. In addition, Thomas Hammer is the representative in Rana Gruber for the Norwegian Engineer and Managers Association (FLT).

#### 7.3 Management

#### 7.3.1 Overview

The names and positions of the members of the Management as at the date of this Information Document are set out in the table below.

Name	Position	Position held since
Gunnar Moe	Chief Executive Officer	2010-2015, 2017
Erlend Høyen	Chief Financial Officer	2020
Stein-Tore Bogen	Chief Operating Officer	2016
Alexander Kühn	Chief Geologist	2017
Anita Mikalsen	HR & EHS Manager	2012
Ingrid Stanova	Chief Commercial Officer	2020

The Company's registered office in Mjølanveien 29, 8622 Mo i Rana, Norway serves as the business address for the members of the Management in relation to their employment in the Company. As of this date, Gunnar Moe owns 13,233 Shares, Erlend Høyen owns 8,182 Shares, Stein-Tore Bogen owns 9,192

Shares and Anita Mikalsen owns 606 Shares. Due to the process to carry out and complete the Private Placement and the Listing, the Board of Directors resolved that Gunnar Moe, Erlend Høyen and Stein-Tore Bogen each are entitled to a transaction bonus equal to a six month's salary in which half of the transaction bonus amount after tax must be used to purchase Shares in the Company on the same terms and conditions as in the employee offering in the Company. See Section 8.4.1 for further information about the employee offering.

# 7.3.2 Brief biographies of the members of the Management

Set out below are brief biographies of the members of the Management, including their relevant management expertise and experience and an indication of any significant principal activities performed by them outside the Company.

# Gunnar Moe, Chief Executive Officer

Gunnar Moe has been Chief Executive Officer of the Company since 2017, a position which he also held from 2010-2015. Gunnar Moe has extensive experience from various management positions, including as Director of Development and thereafter Chief Executive Officer in Momek Group, Director of Development in Leonhard Nilsen & Sønner AS (LNS), and HR and administrative manager in Rana Gruber. He currently serves as chairman of the board of directors of Strand Shipping AS and as member of the board of directors of NHO Nordland. Prior to this, he has held several directorships, including in LNS Mining, Bilalliansen AS and Skaland Graphite AS.

## Erlend Høyen, Chief Financial Officer

Erlend Høyen was appointed Chief Financial Officer of the Company in 2020 and has extensive experience from the mining industry. Erlend Høyen joined Rana Gruber in 2013 as Controller/field Economist and was thereafter appointed Purchasing Manager. Prior to joining the Company, he held the position as Senior Associate in PricewaterhouseCoopers AS, and Controller and Controller Manager in TDC AS (Telia Norge AS).

## Stein-Tore Bogen, Chief Operating Officer

Stein-Tore Bogen has been Chief Operating Officer in the Company since 2016 and has extensive experience from various management positions. He was Department Manager in Molab AS for several years before joining Rana Gruber in 2006 as Plant Manager. Prior to being appointed as Chief Operating Officer in the Company, he held the position as Chief Executive Officer in Glør AS. Stein-Tore Bogen is currently chairman of the board of directors of Nd-Yag Invest AS and a member of the board of directors of PSupply AS. He holds a Ph.D. in Physical Chemistry from Umeå University, Sweden.

#### Alexander Kühn, Chief Geologist

Alexander Kühn worked as Senior Geologist in the Company from 2010 until he was appointed Chief Geologist in 2017. He has extensive experience from various positions within the field of geology and has previously held positions as Exploration Geologist in Gexco Norge AS and Geologist at Brønnøy Kalk AS. Alexander Kühn holds a Ph.D. from the University of Oslo, and worked several years as a Research Associate at the University of Graz, Austria and the University of Mainz, Germany after obtaining his degree.

#### Anita Mikalsen, HR & EHS Manager

Anita Mikalsen was appointed HR Manager in the Company in 2012 and HR & EHS Manager in 2018. Prior to joining Rana Gruber, she worked at Helgeland Police District and has also been a union leader at the Regional Norwegian Police Association.

# Ingrid Stanova, Chief Commercial Officer

Ingrid Stanova was appointed Chief Commercial Officer in the Company in July 2020. She joined Rana Gruber in 2009 as a member of the marketing and sales team, and has since held several management positions, including the position as Commercial Officer, Manager Sales and Marketing Speciality Products, and Chief Marketing Officer prior to being appointed Chief Commercial Officer.

# 7.4 Employees

As of the date of this Information Document, the Group has 276 employees. In addition, there are 88 employees in LNS working in the open-pit mine.

There are no arrangements for involving the employees in the capital of the Company.

#### 7.5 Corporate governance requirements

The Board of Directors has a responsibility to ensure that the Company has sound corporate governance mechanisms. The Company is not listed on a regulated market and thus not subject to mandatory

corporate governance codes. Trading in the Shares on Euronext Growth Oslo does not require implementation of a specific corporate governance code, such as the Norwegian Code of Practice for Corporate Governance (the "**Code**"). Nonetheless, the Company intends to maintain a high level of corporate governance standard and will consider the implications of the Code going forward.

# 7.6 Conflicts of interests, etc.

The member of the Board of Directors, Frode Nilsen, was previously a member of the board of directors of True North Gems Greenland (TNGG) as a representative for the minority shareholder in the company LNS Greenland (LNSG). LNSG owned 17% of the shares in TNGG. TNGG filed for bankruptcy in 2016 due to lack of funding for investment needs. The mining operations and assets were later acquired by Greenland Ruby DK ApS from the bankruptcy estate. Today, LNS Mining owns 88% of the shares in Greenland Ruby DK ApS.

Except for the above, no member of the Board of Directors or Management has, or have had, as applicable, during the last five years preceding the date of the Information Document:

- i) any convictions in relation to fraudulent offences;
- ii) received any official public incrimination and/or sanctions by any statutory or regulatory authorities (including designated professional bodies) or was disqualified by a court from acting as a member of the administrative, management or supervisory bodies of a company or from acting in the management or conduct of the affairs of any company; or
- iii) been declared bankrupt or been associated with any bankruptcy, receivership or liquidation in his or her capacity as a founder, member of the administrative body or supervisory body, director or senior manager of a company.

The members of the Board of Directors, Frode Nilsen and Børge Nilsen, are the chairman and a board member, respectively, of the board of directors of Leonhard Nilsen & Sønner AS (LNS). As mentioned above, LNS is one of the Group's suppliers. See Section 4.12.2 about the agreements between LNS and the Company.

Furthermore, as mentioned above in Section 4.3, LNS is wholly owned by LNS Eiendom which as of this date owns 66% of the shares in LNS Mining. Frode Nilsen is the Chief Executive Officer of LNS Eiendom and Børge Nilsen is a member of the board of directors of LNS Eiendom. Furthermore, Andreas Haugen, which is currently a member of the Board of Directors is the Chief Executive Officer and chairman of the board of directors of A.H. Holding, which currently owns 6.7% of the shares in LNS Mining.

Except for this, the Company is not aware of any actual or potential conflicts of interests between the Company and the private interests or other duties of any of the members of the Board of Directors and the members of the Management.

Frode Nilsen and Børge Nilsen are also cousins. Except for this, there are no family relationships between the members of the Board of Directors and/or the members of the Management.

# 8. CORPORATE INFORMATION AND DESCRIPTION OF SHARE CAPITAL

# 8.1 General corporate information

The Company's legal name is Rana Gruber AS and the Company's commercial name is Rana Gruber. The Company is a private limited liability company, validly incorporated and existing under the laws of Norway and in accordance with the Norwegian Private Limited Liability Companies Act.

The Company is registered in the Norwegian Register of Business Enterprises with company registration number 953 049 724, and the Company was incorporated on 28 August 1989. The Company's registered business address is Mjølanveien 29, 8622 Mo i Rana, Norway, and its principal place of business is at the same address. The telephone number to the Company's principal offices is +47 75 13 73 00 and its website is www.ranagruber.no.

The Shares are registered in book-entry form with VPS under ISIN NO 001 0907389. The Company's register of shareholders in VPS is administrated by the VPS Registrar, DNB Issuer Services, a part of DNB Bank ASA, Dronning Eufemias gate 30, 0191 Oslo, Norway. The Company's LEI-code is 5493003MBTQHX9VNKN13.

# 8.2 Share capital

As of the date of this Information Document, the Company's registered share capital is NOK 9,348,000 divided into 37,392,000 Shares, each with a par value of NOK 0.25. All Shares have been created under the Norwegian Private Limited Liability Companies Act, and are validly issued and fully paid.

The Company has one class of Shares, and accordingly there are no differences in the voting rights among the Shares. The Company's Shares are freely transferable, meaning that a transfer of Shares is not subject to the consent of the Board of Directors or rights of first refusal. Pursuant to the Articles of Association, the Company's Shares shall be registered in a central securities depository.

# 8.3 Ownership structure

As of the date of this Information Document, no shareholder other than LNS Mining holds more than 5% of the issued Shares. There are no specific measures in place regulating the exercise of the influence which follows from holding a majority of the Shares in the Company.

As of the date of this Information Document, LNS Mining owns 18,696,000 of Rana Gruber's shares, corresponding to 50% of the Company's shares. In addition LNS Mining has lent 1,869,600 shares to DNB Markets as stabilisation manager (on behalf of the Managers) which shall be redelivered to LNS Mining (fully or partly) if the Greenshoe Option (see Section 8.4.1) is not exercised, and in such case will involve that LNS Mining upon such redelivery will own between 18,696,000 and 20,565,600 shares in the Company, corresponding to an ownership level of between 50% and 55%.

As of the date of this Information Document, the Company holds 56,787 treasury shares.

There are no arrangements known to the Company that may lead to a change of control in the Company.

# 8.4 Information on the Private Placement

#### 8.4.1 Details of the Private Placement

On 15 February 2021, the Company announced the completion of the Private Placement with a total transaction size of NOK 925 million through the allocation of 18,696,000 shares at a subscription price of NOK 49.50 per share. Clarksons Securities AS, DNB Markets and SpareBank1 Markets AS, the Euronext Growth Advisors, acted as managers for the Private Placement (the "**Managers**"). The Private Placement consisted of a sale of 18,696,000 existing Shares in the Company by LNS Mining.

In addition, the Managers have over-allotted a total of 1,869,600 existing Shares to the applicants in the Private Placement, equaling approximately 15% of the number of Shares allocated in the Private Placement (the "Additional Shares"). In order to permit delivery in respect of such over-allotments made, LNS Mining has lent to DNB Markets as stabilisation manager (the "Stabilisation Manager"), on behalf of the Managers, a number of existing Shares in the Company equal to the number of Additional Shares. Further, LNS Mining has granted to the Stabilisation Manager, on behalf of the Managers, an option, through which the Stabilisation Manager is given a right, but not an obligation, to purchase from LNS Mining a number of existing Shares in the Company up to the number of Additional Shares at a price per Share equal to the Offer Price (the "Greenshoe Option"). This Greenshoe Option is exercisable, in whole or in part, by the Stabilisation Manager, on behalf of the Managers, until two business days after a 30 day period commencing at the time trading of the Shares on Euronext Growth Oslo (the "Stabilisation Period"). The Stabilisation Manager may close out the short position created

by over-allotting shares in the Offering by buying Shares in the open market through stabilisation activities and/or by exercising the Greenshoe Option.

In the Private Placement, the Company acquired existing Shares for NOK 9.9 million, with the intention to re-sell all or parts of such Shares to employees of the Company. The existing Shares were acquired by the Company from LNS Mining pursuant to a board authority to acquire own shares resolved by an extraordinary general meeting in the Company on 10 February 2021. The employee offering consisted of up to 200,000 Shares with a maximum allocation of Shares to each employees of NOK 1 million. The offer price in the employee offering was NOK 49.50 per Share with a discount of 25%, limited to NOK 7,500 per employee. A total of 143,213 Shares were allocated to employees of the Company.

The application period for the Private Placement took place on 11 February 2021 from 09:00 CET to 12 February 2021 at 16:30 CET. Notifications of allocation were distributed on 15 February 2021, and settlement took place on 17 February 2021.

The Company did not issue any new Shares in connection with the Private Placement.

DNB Markets, one of the Company's Euronext Growth Advisors, as Stabilisation Manager, may on behalf of the Euronext Growth Advisors effect transactions with a view to supporting the market price of the Shares at a level higher than what might otherwise prevail, through buying shares in the Company in the open market at prices equal to or lower than (but not above) the Offer Price. There is no obligation on the Stabilisation Manager to conduct stabilisation activities and there can be no assurance that stabilisation activities will be undertaken. If stabilisation activities are undertaken, they may be discontinued at any time, and must be brought to an end upon or before expiry of the Stabilisation Period. Within one week following the expiry of the Stabilisation Period, the Stabilisation Manager will publish an announcement under the Company's ticker on https://newsweb.oslobors.no/, with information as to whether or not it has undertaken any stabilisation activities, including the total number of purchased and sold, the date at which the stabilisation activities commenced, the date at which stabilisation activities last occurred and the price range within which stabilisation was carried out for each of the dates where stabilisation transactions were made. Any stabilisation activities will be conducted in accordance with the principles set out in Section 3-12 of the Norwegian Securities Trading Act and the EC Commission Regulation 2273/2003 regarding buy-back programmes and stabilization of financial instruments, as well as, to the extent applicable, article 5(4) of the EU Market Abuse Regulation and chapter III of the supplemental rules set out in the Commission Delegated (EU) 2016/1052 of 8 March 2016 with regard to regulatory technical standards for the conditions applicable to buy-back programmes and stabilization measures, in order to support the market price of the Shares.

LNS Mining, as the selling shareholder in the Private Placement, received the gross proceeds from the Private Placement, which amounts to NOK 925 million. See Section 4.12.6 about how the proceeds may be distributed to LNS Mining's ultimate owners pursuant to the agreement between LNS Mining and its shareholders.

# 8.4.2 Resolution to carry of the Private Placement

The sale of existing Shares was resolved by the board of directors of LNS Mining on 10 February 2021.

#### 8.4.3 Lock-up

In connection with the Private Placement, customary lock-up undertakings were given by LNS Mining, the Company and the members of the Company's Management which will restrict, subject to certain conditions, their ability to, without the prior written consent of the Managers, issue, sell or dispose of any Shares, as applicable, during the period from the entering of the lock-up agreements on 11 February 2021 and until (and including) the date falling 12 months after the first day of admission to trading on Euronext Growth Oslo with certain customary exceptions. Further, LNS Mining may distribute shares in the Company to its ultimate shareholders conditional upon similar lock-up arrangements being undertaken by such recipients. The lock-up undertaking for the Company did not restrict the sale of the existing Shares in the employee offering in the Company carried out in connection with the Private Placement, as referred to in Section 8.4.1 above, nor will restrict any sale or transfer of Shares in the Company to employees in the Company in connection with any future employee offerings or share incentive programs share option programs in the Company.

#### 8.4.4 Dilution

The Private Placement resulted in a dilution for LNS Mining, the Company's sole shareholder prior to the Private Placement, of 50% (excluding any exercise of the Greenshoe Option) since LNS Mining did not purchase any Shares in the Private Placement.

# 8.5 Reasons for the Admission

The Company believes the Admission will:

- enhance the Company's profile with investors, business partners, suppliers and customers;
- allow for a trading platform and more liquid market for the Shares;
- facilitate for a more diversified shareholder base and enable additional investors to take part in the Company's future growth and value creation;
- provide better access to capital markets; and
- further improve the ability of the Company to attract and retain key management and employees.

## 8.6 Lock-up

Except for the lock-up agreements described above in Section 8.4.3, the Company is not aware of any other lock-up arrangements relating to the Company's Shares in connection with the admission to trading on Euronext Growth Oslo.

## 8.7 Financial instruments

The Company has not issued any options, warrants, convertible loans or other instruments that would entitle a holder of any such instrument to subscribe for any Shares.

## 8.8 Shareholder rights

The Company has one class of Shares in issue and all Shares provide equal rights in the Company, including the rights to any dividends. Each of the Company's Shares carries one vote. The rights attached to the Shares are further described in Section 8.9 "The Articles of Association".

## 8.9 Articles of Association

The Articles of Association as they read at the date of the Information Document are enclosed as Appendix A to the Information Document. Below is a summary of provisions of the Articles of Association as of the date of this Information Document.

Section	Description
Objective of the Company	The Company's objective is to conduct production and sales of mining products and related activities, and through economically sound business operations create lasting and safe jobs in the company. The company shall seek to develop new products and businesses, and the company may participate in other companies as owner or otherwise to fulfil the above objectives.
Registered office	The Company's registered office is in Rana, Norway.
Share capital and nominal value	The share capital of the Company is NOK 9,348,000 divided on 37,392,000 Shares, each with a nominal value of NOK 0.25. The Company's Shares shall be registered in a central securities depository.
Transfer of Shares	Acquisitions of Shares in the Company shall not require the consent of the Company. The shareholders do not have pre-emption rights upon any change of ownership of Shares in the Company.
Board of Directors	The Board of Directors of the Company shall consist of at least three, but no more than eight members. The authority to sign on behalf of the Company is held by the chairman of the Board of Directors and one board member, or by three board members jointly.
General meeting	The annual general meeting of the Company shall discuss and decide upon the following:
	<ol> <li>Approval of the annual accounts and annual report, including distribution of dividend.</li> </ol>

2.	Other matters that according to law or the
	articles of association are to be decided upon
	by the general meeting.

# 8.10 Dividend policy

Pursuant to the Norwegian Private Limited Liability Companies Act, dividends may only be declared to the extent that the Company has distributable funds and the Board of Directors finds such a declaration to be prudent in consideration of the size, nature, scope and risks associated with the Company's operations and the need to strengthen its liquidity and financial position. Apart from this, there are no formal restrictions on the distribution of dividends. However, as the Company's ability to pay dividends is dependent on the availability of distributable reserves, it is, among other things, dependent upon receipt of dividends and other distributions of value from its subsidiary and companies in which the Company may invest.

The Company will strive to follow a dividend policy favorable to its shareholders. The amount of any dividend to be distributed will be dependent on, inter alia, the Company's investment requirements and rate of growth.

The Company will target a dividend distribution of 70% of the Company's net income with a policy range of 50-70%. The Company aims to have dividends paid quarterly. The Company expects to distribute the first dividend in the second quarter of 2021.

There can be no assurance that in any given year a dividend will be proposed or declared, or if proposed or declared, that the dividend will be as contemplated by the policy. In deciding whether to propose a dividend and in determining the dividend amount, the Board of Directors will take into account legal restrictions as well as capital expenditure plans, financing requirements and maintaining the appropriate strategic flexibility. The Company has not distributed any dividends since the date of its incorporation.

# 8.11 Near term financial reporting and general meeting

The Company expects to hold its first annual general meeting following the submission of this Information Document on 18 March 2021 and expects to release its annual report for the financial reporting year of 2020 on 11 March 2021. The Company's first quarterly report will be produced as of 31 March 2021.

# 8.12 Takeover bids and forced transfer of shares

The Company is not subject to the takeover regulations set out in the Norwegian Securities Trading Act, or otherwise. The Shares are, however, subject to the provisions on compulsory transfer of shares as set out in the Private Limited Liability Companies Act. If a private limited liability company alone, or through subsidiaries, owns 9/10 or more of the shares in the subsidiary, and may exercise a corresponding part of the votes that may be cast in the general meeting, the board of directors of the parent company may resolve that the parent company shall take over the remaining shares in the company. Each of the other shareholders in the subsidiary have the right to require the parent company to take over the shares. The parent company shall give the shareholders a redemption offer pursuant to the provisions of the Private Limited Liability Companies Act. The redemption amount will in the absence of agreement or acceptance of the offer be fixed by a discretionary valuation.

# 8.13 Insider trading

In accordance with the Norwegian Securities Trading Act, subscription for, purchase, sale or exchange of financial instruments that are admitted to trading, or subject to an application for admission to trading on a Norwegian regulated market or a Norwegian multilateral trading facility, or incitement to such dispositions, must not be undertaken by anyone who has inside information. The same applies in the case of financial instruments that are admitted to trading on a Norwegian multilateral trading facility. "Inside information" refers in accordance with Section 3-2 of the Norwegian Securities Trading Act to precise information about financial instruments issued by the company admitted to trading, about the company admitted trading itself or about other circumstances, which are likely to have a noticeable effect on the price of financial instruments issued by the company admitted to trading or related to financial instruments issued by the company admitted to trading, and which is not publicly available or commonly known in the market. Information that is likely to have a noticeable effect on the price shall be understood to mean information that a rational investor would probably make use of as part of the basis for his or her investment decision. The same applies to the entry into, purchase, sale or exchange of options or futures/forward contracts or equivalent rights whose value is connected to such financial instruments or incitement to such dispositions. Breach of insider trading obligations may be sanctioned and lead to criminal charges.

## 8.14 Certain aspects of Norwegian corporate law

#### 8.14.1 General meetings

Through the general meeting, shareholders exercise supreme authority in a Norwegian company. In accordance with Norwegian law, the annual general meeting of shareholders is required to be held each year on or prior to 30 June. Norwegian law requires that a written notice of annual general meetings setting forth the time of, the venue for and the agenda of the meeting is sent to all shareholders with a known address no later than seven days before the annual general meeting of a Norwegian private limited liability company shall be held, unless the articles of association stipulate a longer deadline, which is not currently the case for the Company.

A shareholder may vote at the general meeting either in person or by proxy (the proxy holder is appointed at their own discretion). All of the Company's shareholders who are registered in the shareholders' register kept and maintained with VPS as of the date of the general meeting, or who otherwise have reported and documented ownership of Shares in the Company, are entitled to participate at general meetings, without any requirement of pre-registration.

Apart from the annual general meeting, extraordinary general meetings of shareholders may be held if the board of directors considers it necessary. An extraordinary general meeting of shareholders shall also be convened if, in order to discuss a specified matter, the auditor or shareholders representing at least 10% of the share capital demands such in writing. The requirements for notice and admission to the annual general meeting also apply to extraordinary general meetings.

#### 8.14.2 Voting rights

Each Share carries one vote. In general, decisions shareholders are entitled to make under Norwegian law or the articles of association may be made by a simple majority of the votes cast. In the case of elections or appointments (e.g. to the board of directors), the person(s) who receive(s) the greatest number of votes cast is elected. However, as required under Norwegian law, certain decisions, including resolutions to waive preferential rights to subscribe for shares in connection with any share issue in the Company, to approve a merger or demerger of the Company, to amend the articles of association, to authorize an increase or reduction of the share capital, to authorize an issuance of convertible loans or warrants by the Company or to authorize the board of directors to purchase Shares and hold them as treasury shares or to dissolve the Company, must receive the approval of at least two-thirds of the aggregate number of votes cast as well as at least two-thirds of the share capital represented at the general meeting in question. Moreover, Norwegian law requires that certain decisions, i.e. decisions that have the effect of substantially altering the rights and preferences of any shares or class of shares, receive the approval by the holders of such shares or class of shares as well as the majority required for amending the articles of association.

Decisions that (i) would reduce the rights of some or all of the Company's shareholders in respect of dividend payments or other rights to assets or (ii) restrict the transferability of the Shares, require that at least 90% of the share capital represented at the general meeting in question vote in favor of the resolution, as well as the majority required for amending the articles of association.

In general, only a shareholder registered in VPS is entitled to vote for such Shares. Beneficial owners of the Shares that are registered in the name of a nominee are generally not entitled to vote under Norwegian law, nor is any person who is designated in the VPS register as the holder of such Shares as nominees.

There are no quorum requirements that apply to the general meetings.

#### 8.14.3 Additional issuances and preferential rights

If the Company issues any new shares, including bonus share issues, the Company's Articles of Association must be amended, which requires the same vote as other amendments to the articles of association. In addition, under Norwegian law, the Company's shareholders have a preferential right to subscribe for new shares issued by the Company. The preferential rights may be deviated from by a resolution in the general meeting passed with the same vote required to amend the articles of association. A deviation of the shareholders' preferential rights in respect of bonus issues requires the approval of all outstanding Shares.

The general meeting may, by the same vote as is required for amending the articles of association, authorize the board of directors to issue new shares, and to deviate from the preferential rights of shareholders in connection with such issuances. Such authorisation may be effective for a maximum of two years, and the nominal value of the Shares to be issued may not exceed 50% of the registered par share capital when the authorisation is registered with the Norwegian Register of Business Enterprises.

Under Norwegian law, the Company may increase its share capital by a bonus share issue, subject to approval by the Company's shareholders, by transfer from the Company's distributable equity or from the Company's share premium reserve and thus the share capital increase does not require any payment of a subscription price by the shareholders. Any bonus issues may be affected either by issuing new shares to the Company's existing shareholders or by increasing the nominal value of the Company's outstanding Shares.

Issuance of new shares to shareholders who are citizens or residents of the United States and other jurisdictions upon the exercise of preferential rights may require the Company to file a registration statement or prospectus in the United States under United States securities laws or in such other jurisdictions under the laws of such jurisdictions. Should the Company in such a situation decide not to file a registration statement or prospectus, the Company's U.S. shareholders and shareholders in such other jurisdictions may not be able to exercise their preferential rights. To the extent that shareholders are not able to exercise their rights to subscribe for new shares, the value of their subscription rights will be lost and such shareholders' proportional ownership interests in the Company will be reduced.

## 8.14.4 Minority rights

Norwegian law sets forth a number of protections for minority shareholders of the Company, including, but not limited to, those described in this paragraph and the description of general meetings as set out above. Any of the Company's shareholders may petition Norwegian courts to have a decision of the board of directors or the Company's shareholders made at the general meeting declared invalid on the grounds that it unreasonably favors certain shareholders or third parties to the detriment of other shareholders or the Company itself. The Company's shareholders may also petition the courts to dissolve the Company as a result of such decisions to the extent particularly strong reasons are considered by the court to make necessary dissolution of the Company.

Minority shareholders holding 10% or more of the Company's share capital have a right to demand in writing that the Board of Directors convenes an extraordinary general meeting to discuss or resolve specific matters. In addition, any of the Company's shareholders may in writing demand that the Company place an item on the agenda for any general meeting as long as the Company is notified in time for such item to be included in the notice of the meeting. If the notice has been issued when such a written demand is presented, a renewed notice must be issued if the deadline for issuing notice of the general meeting has not expired.

# 8.14.5 Rights of redemption and repurchase of shares

The share capital of the Company may be reduced by reducing the nominal value of the Shares or by cancelling Shares. Such a decision requires the approval of at least two-thirds of the aggregate number of votes cast and at least two-thirds of the share capital represented at a general meeting. Redemption of individual Shares requires the consent of the holders of the Shares to be redeemed.

The Company may purchase its own Shares provided that the Board of Directors has been granted an authorization to do so by a general meeting with the approval of at least two-thirds of the aggregate number of votes cast and at least two-thirds of the share capital represented at the meeting. The aggregate nominal value of treasury shares so acquired, and held by the Company must not lead to the share capital with deduction of the aggregate nominal of the holding of own shares is less than the minimum allowed share capital of NOK 30,000, and treasury shares may only be acquired if the Company's distributable equity, according to the latest adopted balance sheet, exceeds the consideration to be paid for the shares. The authorization by the general meeting of the Company's shareholders cannot be granted for a period exceeding two years.

# 8.14.6 Shareholder vote on certain reorganizations

A decision of the Company's shareholders to merge with another company or to demerge requires a resolution by the general meeting passed by at least two-thirds of the aggregate votes cast and at least two-thirds of the share capital represented at the general meeting. A merger plan, or demerger plan signed by the Board of Directors along with certain other required documentation, would have to be sent to all the Company's shareholders, or if the articles of association stipulate that, made available to the shareholders on the Company's website, at least one month prior to the general meeting to pass upon the matter.

#### 8.14.7 Distribution of assets on liquidation

Under Norwegian law, the Company may be wound-up by a resolution of the Company's shareholders at the general meeting passed by at least two-thirds of the aggregate votes cast and at least two-thirds of the share capital represented at the meeting. In the event of liquidation, the Shares rank equally in the event of a return on capital.

## 9. NORWEGIAN TAXATION

## 9.1 Introduction

The following is a summary of certain Norwegian tax considerations relevant to the acquisition, ownership and disposition of shares by holders that are residents of Norway for purposes of Norwegian taxation ("**Norwegian Shareholders**") and holders that are not residents of Norway for such purposes ("**Non-Norwegian Shareholders**").

The summary is based on applicable Norwegian laws, rules and regulations as they exist in force as of the date of this Information Document. Such laws, rules and regulations may be subject to changes after this date, possibly on a retroactive basis. The summary is of a general nature and does not purport to be a comprehensive description of all the tax considerations that may be relevant to the shareholders and does not address foreign tax laws.

As will be evident from the description, the taxation will differ depending on whether the investor is a limited liability company or a natural person.

Please note that special rules apply for shareholders that cease to be tax resident in Norway or that for some reason are no longer considered taxable to Norway in relation to their shareholding.

Each shareholder should consult with and rely upon their own tax advisor to determine the particular tax consequences for him or her and the applicability and effect of any Norwegian or foreign tax laws and possible changes in such laws.

For the purpose of the summary below, a reference to a Norwegian or Non-Norwegian shareholder or company refers to tax residency rather than nationality.

## 9.2 Norwegian shareholders

#### 9.2.1 Taxation of dividends – Norwegian shareholders who are natural persons

Norwegian Shareholders who are natural persons are in general tax liable to Norway for their worldwide income. Dividends distributed to Norwegian Shareholders who are natural persons are taxed at a rate of 22%, then the tax base is adjusted upwards by a factor of 1.44, thus implying an effective tax rate of 31.68% (as of 2021).

However, only dividends exceeding a statutory tax-free allowance (Norwegian: "skjermingsfradrag") are taxable. The allowance is calculated on a share-by-share basis, and the allowance for each share is equal to the cost price of the share multiplied by a determined risk-free interest rate based on the effective rate after tax of interest on treasury bills (Norwegian: "statskasseveksler") with three months maturity. The Directorate of Taxes announces the risk free-interest rate in January the year after the income year. The risk-free interest rate for 2019 was 1.3%. The risk free interest rate for 2020 was 0.6%.

The allowance is allocated to the Norwegian Shareholder owning the share on 31 December in the relevant income year. Norwegian Shareholders who are natural persons and who transfer shares during an income year will thus not be entitled to deduct any calculated allowance related to the year of transfer. Any part of the calculated allowance one year exceeding dividend distributed on the same share ("excess allowance") can be carried forward and set off against future dividends received or capital gains upon realization of the same share. Furthermore, excess allowance can be added to the cost price of the share and included in the basis for calculating the allowance on the same share the following year.

The repayment of paid-in share capital and paid-in share premium of each share is not regarded as dividend for tax purposes and thus not subject to tax (if properly documented). Such repayment will lead to a reduction of the shareholder's deemed cost price for the shares corresponding to the repayment amount, meaning that any gains subsequently realised on the shares will increase.

#### 9.2.2 Taxation of dividends – Norwegian corporate shareholders

Norwegian Shareholders who are corporations (i.e. limited liability companies, mutual funds, savings banks, mutual insurance companies or similar entities resident in Norway for tax purposes) are generally exempt from tax on dividends received on shares in Norwegian limited liability companies, pursuant to the Norwegian participation exemption method (Norwegian: "fritaksmetoden"). However, 3% of dividend income is generally deemed taxable as general income at a flat rate of 22% (2021), implying that dividends distributed from the Company to Norwegian Shareholders who are corporations are effectively taxed at a rate of 0.66% (2021).

The repayment of paid-in share capital and paid-in share premium of each share is not regarded as dividend for tax purposes and thus not subject to tax (if properly documented). Such repayment will

lead to a reduction of the deemed cost price for the shares corresponding to the repayment amount, meaning that any calculated gains subsequently realised on the shares will increase.

## 9.2.3 Taxation of capital gains – Norwegian shareholders who are natural persons

Sale, redemption or other disposal of shares is considered a realization for Norwegian tax purposes. A Norwegian Shareholder being a natural person with a capital gain or loss generated through a disposal of shares in the Company is taxable or tax deductible in Norway. Such capital gain or loss is included in or deducted from the shareholder's ordinary income in the year of disposal. Ordinary income is taxed at a rate of 22%, then the tax base is adjusted upwards by a factor of 1.44, thus implying an effective tax rate of 31.68% (2021). The gain is subject to tax and the loss is tax-deductible irrespective of the duration of the ownership and the number of shares disposed of.

The taxable gain/deductible loss is calculated per share, as the difference between the consideration for the share and the Norwegian Shareholder's cost price of the share, including any costs incurred in relation to the acquisition or realization of the share. From this capital gain, Norwegian Shareholders who are natural persons are entitled to deduct a calculated allowance, provided that such allowance has not already been used to reduce taxable dividend income. The allowance may only be deducted in order to reduce a taxable gain, and cannot increase or produce a deductible loss, i.e. any unused allowance exceeding the capital gain upon the realization of a share will be annulled.

If the Norwegian Shareholder being a natural person owns shares acquired at different points in time, the shares that were acquired first will be regarded as the first to be disposed of, on a first-in, first-out basis.

# 9.2.4 Taxation of capital gains – Norwegian corporate shareholders

Capital gains, by Norwegian Shareholders who are corporations, derived from the realization of shares qualifying for participation exemption are exempt from taxation. Losses incurred upon realization of such shares are not deductible.

## 9.2.5 Net wealth tax

Norwegian Shareholders being limited liability companies and certain similar entities are exempt from Norwegian net wealth tax.

For other Norwegian Shareholders (i.e. Shareholders who are natural persons), the shares will form part of the basis for the calculation of net wealth tax. The current marginal net wealth tax rate is 0.85% of taxable values (subject to a basic allowance).

Shares traded on Euronext Growth Oslo are valued at 55% of their net wealth tax value on 1 January in the income year.

# 9.3 Non-Norwegian shareholders – Norwegian taxation

This Section summarizes certain Norwegian tax rules relevant to shareholders that are not tax resident in Norway for Norwegian tax purposes ("**Non-Norwegian Shareholders**"). The potential tax liabilities for Non-Norwegian Shareholders in the jurisdiction where they are resident for tax purposes or other jurisdictions will depend on tax rules applicable in the relevant jurisdictions and is not discussed here.

#### 9.3.1 Taxation of dividends – Non-Norwegian Shareholders who are natural persons

Dividends distributed to Non-Norwegian Shareholders who are natural persons are in general subject to withholding tax at a rate of 25%, unless otherwise provided for in an applicable tax treaty or the recipient is covered by the specific regulations for corporate shareholders tax-resident within the EEA (ref. the Section below for more information on the EEA exemption). The company distributing the dividend is normally responsible for the withholding. Norway has entered into tax treaties with more than 80 countries. In most tax treaties the withholding tax rate is reduced to 15%.

In accordance with the present administrative system in Norway, the Norwegian distributing company will normally withhold tax at the regular rate or reduced rate according to an applicable tax treaty, based on the information registered with the VPS with regard to the tax residence of the Non-Norwegian Shareholder. Shares registered on nominee-accounts may, subject to certain documentation requirements, qualify for reduced withholding tax rate.

Non-Norwegian Shareholders who are exempt from withholding tax and Shareholders who have been subject to a higher withholding tax than applicable in the relevant tax treaty, may apply to the Norwegian tax authorities for a refund of the excess withholding tax.

If a Non-Norwegian Shareholder is engaged in business activities in Norway, and the shares are effectively connected with such business activities, dividends distributed to such shareholder will generally be subject to the same taxation as that of a Norwegian Shareholders, cf. the description of tax issues related to Norwegian Shareholders above.

Non-Norwegian Shareholders should consult their own advisers regarding the availability of treaty benefits in respect of dividend payments, including the ability to effectively claim refunds of withholding tax.

## 9.3.2 Taxation of dividends – Non-Norwegian corporate shareholders

Dividends distributed to shareholders who are limited liability companies (and certain other entities) not resident in Norway for tax purposes ("**Non-Norwegian Corporate Shareholders**"), are as a general rule subject to withholding tax at a rate of 25%. The withholding tax rate of 25% is normally reduced through tax treaties between Norway and the country in which the shareholder is resident.

Dividends distributed to Non-Norwegian Corporate Shareholders resident within the EEA for tax purposes are exempt from Norwegian withholding tax provided that the shareholder is the beneficial owner of the shares and that the shareholder is genuinely established and performs genuine economic business activities within the relevant EEA jurisdiction.

Non-Norwegian Corporate Shareholders who have suffered a higher withholding tax than set out in an applicable tax treaty may apply to the Norwegian tax authorities for a refund of the excess withholding tax deducted.

# 9.3.3 Capital gains tax – Non-Norwegian shareholders

Capital gains generated by Non-Norwegian Shareholders are normally not taxable in Norway. This applies both for Non-Norwegian shareholders being corporations and natural persons.

If a Non-Norwegian Shareholder is engaged in business activities in Norway or has business activities managed from Norway, and the shares are effectively connected with such business activities, capital gains realized by such shareholder will generally be subject to the same taxation for the Norwegian taxable presence of the Non-Norwegian Shareholder as for resident Norwegian Shareholders.

#### 9.3.4 Net wealth tax

Shareholders not resident in Norway for tax purposes are not subject to Norwegian net wealth tax. Non-Norwegian Shareholders being natural persons can, however, become taxable to Norway if the shareholding is effectively connected to the conduct of trade or business in Norway.

# 9.4 Inheritance tax

Norway does not impose inheritance tax on assignment of shares by way of inheritance or gift. If any shares of the Company are assigned by way of inheritance or gift, the tax input value of such shares on the part of the originator of such inheritance or gift will be attributed to the recipient of said inheritance or gift (based on continuity). Thus, the heir will, upon realization of the shares, be taxable for any increase in value in the donor's ownership period. However, the principles of continuity only apply if the donor was taxable to Norway.

# 9.5 Stamp duty

There is currently no Norwegian stamp duty or transfer tax on the transfer or issuance of shares.

# 10. SELLING AND TRANSFER RESTRICTIONS

# 10.1 General

As a consequence of the following restrictions, prospective investors are advised to consult legal counsel prior to making any offer, resale, pledge or other transfer of the Shares admitted to trading on Euronext Growth Oslo.

The Company is not taking any action to permit a public offering of the Shares in any jurisdiction. Receipt of this Information Document does not constitute an offer and this Information Document is for information only and should not be copied or redistributed. If an investor receives a copy of this Information Document, the investor may not treat this Information Document as constituting an invitation or offer to it, nor should the investor in any event deal in the Shares, unless, in the relevant jurisdiction, the Shares could lawfully be dealt in without contravention of any unfulfilled registration or other legal requirements. Accordingly, if an investor receives a copy of this Information Document, the investor should not distribute or send the same, or transfer Shares, to any person or in or into any jurisdiction where to do so would or might contravene local securities laws or regulations.

## **10.2** Selling restrictions

## 10.2.1 United States

The Shares have not been and will not be registered under the U.S. Securities Act or with any securities regulatory authority of any state or other jurisdiction in the United States, and may not be offered or sold except: (i) within the United States to QIBs in reliance on Rule 144A or pursuant to another available exemption from the registration requirements of the U.S. Securities Act; or (ii) outside the United States to certain persons in offshore transactions in compliance with Regulation S under the U.S. Securities Act, and, in accordance with any applicable securities laws of any state or territory of the United States or any other jurisdiction. Transfer of the Shares is restricted and each purchaser of the Shares in the United States will be required to make certain acknowledgements, representations and agreements, as described under Section 10.3.1 "United States".

# 10.2.2 United Kingdom

In the United Kingdom, the issue or sale of any Shares will only be communicated or caused to be communicated in circumstances in which Section 21 (1) of the Financial Services and Markets Act 2000 ("**FSMA**") does not apply to the Company and in accordance with all applicable provisions of the FSMA with respect to the Shares in, from or otherwise involving the United Kingdom.

#### 10.2.3 European Economic Area

In no member state (each a "**Relevant Member State**") of the European Economic Area (the "**EEA**") have Shares been offered and in no Relevant Member State will Shares be offered to the public pursuant to an offering, except that Shares may be offered to the public in that Relevant Member State at any time in reliance on the following exemptions under the Prospectus Regulation:

- a) to persons who are "qualified investors" within the meaning of Article 2(e) in the Prospectus Regulation;
- b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation) per Relevant Member State; or
- c) in any other circumstances falling under the scope of Article 3(2) of the Prospectus Regulation; provided that no such offer of Shares shall result in a requirement for the Company or Euronext Growth Advisors to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplementary prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purpose of this provision, the expression an "offer to the public" in relation to any Shares in any Relevant Member State means a communication to persons in any form and by any means presenting sufficient information on the terms of the an offering and the Shares to be offered, so as to enable an investor to decide to acquire any Shares.

This EEA selling restriction is in addition to any other selling restrictions set out in this Information Document.

# 10.2.4 Other jurisdictions

The Shares may not be offered, sold, resold, transferred or delivered, directly or indirectly, in or into, Switzerland, Japan, Canada, Australia or any other jurisdiction in which it would not be permissible to offer the Shares.

In jurisdictions outside the United States and the EEA where an offering would be permissible, the Shares will only be offered pursuant to applicable exceptions from prospectus requirements in such jurisdictions.

## **10.3** Transfer restrictions

#### 10.3.1 United States

The Shares have not been, and will not be, registered under the U.S. Securities Act or with any securities regulatory authority of any state or other jurisdiction in the United States, and may not be offered or sold except: (i) within the United States only to QIBs in reliance on Rule 144A or pursuant to another exemption from the registration requirements of the U.S. Securities Act; and (ii) outside the United States in compliance with Regulation S, and in each case in accordance with any applicable securities laws of any state or territory of the United States or any other jurisdiction. Terms defined in Rule 144A or Regulation S shall have the same meaning when used in this Section.

Each purchaser of the Shares outside the United States pursuant to Regulation S will be deemed to have acknowledged, represented and agreed that it has received a copy of this Information Document and such other information as it deems necessary to make an informed investment decision and that:

- The purchaser is authorized to consummate the purchase of the Shares in compliance with all applicable laws and regulations.
- The purchaser acknowledges that the Shares have not been and will not be registered under the U.S. Securities Act, or with any securities regulatory authority or any state of the United States, subject to certain exceptions, may not be offered or sold within the United States.
- The purchaser is, and the person, if any, for whose account or benefit the purchaser is acquiring the Shares, was located outside the United States at the time the buy order for the Shares was originated and continues to be located outside the United States and has not purchased the Shares for the account or benefit of any person in the United States or entered into any arrangement for the transfer of the Shares or any economic interest therein to any person in the United States.
- The purchaser is not an affiliate of the Company or a person acting on behalf of such affiliate, and is not in the business of buying and selling securities or, if it is in such business, it did not acquire the Shares from the Company or an affiliate thereof in the initial distribution of such Shares.
- The purchaser is aware of the restrictions on the offer and sale of the Shares pursuant to Regulation S described in this Information Document.
- The Shares have not been offered to it by means of any "directed selling efforts" as defined in Regulation S.
- The Company shall not recognize any offer, sale, pledge or other transfer of the Shares made other than in compliance with the above restrictions.
- If the purchaser is acquiring any of the Shares as a fiduciary or agent for one or more accounts, the purchaser represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements in behalf of each such account.
- The purchaser acknowledges that the Company, the Euronext Growth Advisors and their respective advisers will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements.

Each purchaser of the Shares within the United States purchasing pursuant to Rule 144A or another available exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act will be deemed to have acknowledged, represented and agreed that it has received a copy of this Information Document and such other information as it deems necessary to make an informed investment decision and that:

- The purchaser is authorized to consummate the purchase of the Shares in compliance with all applicable laws and regulations.
- The purchaser acknowledges that the Shares have not been and will not be registered under the U.S. Securities Act or with any securities regulatory authority of any state of the United States and are subject to significant restrictions to transfer.
- The purchaser (i) is a QIB (as defined in Rule 144A), (ii) is aware that the sale to it is being made in reliance on Rule 144A and (iii) is acquiring such Shares for its own account or for the account of a QIB, in each case for investment and not with a view to any resale or distribution to the Shares, as the case may be.
- The purchaser is aware that the Shares are being offered in the United States in a transaction not involving any public offering in the United States within the meaning of the U.S. Securities Act.
- If, in the future, the purchaser decides to offer, resell, pledge or otherwise transfer such Shares, or any economic interest therein, as the case may be, such Shares or any economic interest therein may be offered, sold, pledged or otherwise transferred only (i) to a person whom the beneficial owner and/or any person acting on its behalf reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, (ii) outside the United States in a transaction meeting the requirements of Regulation S, (iii) in accordance with Rule 144 (if available), (iv) pursuant to any other exemption from the registration requirements of the U.S. Securities Act, subject to the receipt by the Company of an opinion of counsel or such other evidence that the Company may reasonably require that such sale or transfer is in compliance with the U.S. Securities Act, in each case in accordance with any applicable securities laws of any state or territory of the United States or any other jurisdiction.
- The purchaser is not an affiliate of the Company or a person acting on behalf of such affiliate, and is not in the business of buying and selling securities or, if it is in such business, it did not acquire the Shares from the Company or an affiliate thereof in the initial distribution of such Shares.
- The purchaser will not deposit or cause to be deposited such Shares into any depositary receipt facility established or maintained by a depository bank other than a Rule 144A restricted depository receipt facility, so long as such Shares are "restricted securities" within the meaning of Rule 144(a) (3) under the U.S. Securities Act.
- The purchaser acknowledges that the Shares are "restricted securities" within the meaning of Rule 144(a) (3) and no representation is made as to the availability of the exemption provided by Rule 144 for resales of any Shares, as the case may be.
- The purchaser acknowledges that the Company shall not recognize any offer, sale pledge or other transfer of the Shares made other than in compliance with the above-stated restrictions.
- If the purchaser is requiring any of the Shares as a fiduciary or agent for one or more accounts, the purchaser represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account.

• The purchaser acknowledges that the these representations and undertakings are required in connection with the securities laws of the United States and that Company, the Euronext Growth Advisors and their respective advisers will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements.

#### 10.3.2 European Economic Area

Each person in a Relevant Member State who receives any communication in respect of, or who acquires any Shares under, the offers contemplated in this Information Document will be deemed to have represented, warranted and agreed to and with the Euronext Growth Advisors and the Company that:

- a) it is a qualified investor within the meaning of Articles 2(e) of the Prospectus Regulation; and
- b) in the case of any Shares acquired by it as a financial intermediary, as that term is used in Article 1 of the Prospectus Regulation, (i) the Shares acquired by it in an offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than qualified investors, as that term is defined in the Prospectus Regulation; or (ii) where Shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those Shares to it is not treated under the Prospectus Regulation as having been made to such persons. For the purpose of this representation, the expression an "offer to the public" in relation to any Shares in any Relevant Member State means a communication to persons in any form and by any means presenting sufficient information on terms of an offering and the Shares to be offered, so as to enable an investor to decide to acquire any Shares.

#### 11. ADDITIONAL INFORMATION

#### 11.1 Admission to trading on Euronext Growth Oslo

On 11 February 2021, the Company applied for admission to trading of its Shares on Euronext Growth Oslo. The first day of trading in the Shares on Euronext Growth Oslo is expected to be on or about 26 February 2021.

Neither the Company nor any other entity of the Group have shares or other securities listed on any stock exchange or other regulated market place.

The Company intends to apply for a listing of its Shares on Oslo Børs within 12 months following the admission to trading of its Shares on Euronext Growth Oslo.

#### 11.2 Auditor

The Company's independent auditor is Ernst & Young AS with business registration number 976 389 387 and registered business address at Dronning Eufemias gate 6, 0191 Oslo, Norway. The partners of Ernst & Young AS are members of The Norwegian Institute of Public Accountants (Nw.: Den Norske Revisorforening). Ernst & Young AS has been the Company's independent auditor since 2008. Ernst & Young AS has audited the Financial Statements. Except for this, Ernst & Young AS has not audited, reviewed or produced any report on any other information in this Information Document.

#### 11.3 Advisors

Clarksons Platou Securities AS (business registration number 942 274 238, and registered business address at Munkedamsveien 62C, 0270 Oslo, Norway), DNB Markets, a part of DNB Bank ASA (business registration number 984 851 006, and registered business address at Dronning Eufemias gate 30, 0191 Oslo, Norway) and SpareBank1 Markets AS (business registration number 992 999 101, and registered business address at Olav Vs gate 5, 0161 Oslo, Norway) are acting as Euronext Growth Advisors.

Advokatfirmaet Wiersholm AS (business registration number 981 371 593, and registered business address at Dokkveien 1, 0250 Oslo, Norway) is acting as Norwegian legal counsel to the Company.

Wikborg Rein Advokatfirma AS (business registration number 916 782 195, and registered business address at Dronning Mauds gate 11, 0250 Oslo, Norway) is acting as Norwegian legal counsel to the Euronext Growth Advisors.

#### **11.4** Documents on display

Copies of the following documents will be available for inspection at the Company's registered office during normal business hours from Monday to Friday each week (except public holidays) for a period of 12 months from the date of this Information Document:

- the Articles of Association of the Company;
- the Financial Statements;
- the Interim Financial Statements; and
- this Information Document.

#### 11.5 Third-party information

In this Information Document, certain information has been sourced from third parties. The Company confirms that where information has been sourced from a third party, such information has been accurately reproduced and that as far as the Company is aware and is able to ascertain from information published by that third party, no facts have been omitted that would render the reproduced information inaccurate or misleading. Where information sourced from third parties has been presented, the source of such information has been identified. The Company confirms that no statement or report attributed to a person as an expert is included in this Information Document.

#### 12. DEFINITIONS AND GLOSSARY TERMS

Agency	The Norwegian Environmental Agency.
Articles of Association	The Company's articles of association.
Board of Directors	The board of directors of the Company.
Cargill	Cargill International Trading Pte Ltd.
Cargill Agreement	The off-take agreement between the Company and Cargill International Trading Pte Ltd in which the Company delivers its entire annual production of hematite iron ore for steel making applications to Cargill.
Code	The Norwegian Code of Practice for Corporate Governance.
Company	Rana Gruber AS.
EEA	The European Economic Area.
Euronext Growth Advisors	Clarksons Platou Securities AS, DNB Markets and SpareBank 1 Markets AS.
Financial Information	The Financial Statements together with the Interim Financial Statements.
Financial Statements	The Company's audited consolidated financial statements for the financial year ended 31 December 2019 with comparable figures for the financial year ended 31 December 2018.
FSMA	The Financial Services and Markets Act 2000.
Group	The Company together with its subsidiary.
HSE	Health, security and environment.
Information Document	This Information Document dated 25 February 2021.
Interim Financial Statements	The Company's unaudited interim financial statements for the nine months ended 30 September 2020.
ISIN	International Securities Identification Number.
LNS	Leonhard Nilsen & Sønner AS.
LNS Mining	LNS Mining AS.
Management	The executive management of the Company.
Euronext Growth Oslo	A multilateral trading facility operated by Oslo Børs ASA.
NGAAP	The Norwegian Generally Accepted Accounting Principles.
NOK	Norwegian Kroner, the lawful currency of Norway.
Non-Norwegian Corporate Shareholders	Holders of shares who are limited liability companies (and certain other entities) not resident in Norway for tax purposes.
Non-Norwegian Shareholders	Holders of shares that are not residents of Norwegian for purposes of Norwegian law.
Norwegian Securities Trading Act	The Norwegian Securities Trading Act of 28 June 2007, no. 75 (Norw.: verdipapirhandelloven).
Norwegian Securities Trading Regulation	The Norwegian Securities Trading Regulation of 29 June 2007 no. 876 (Norw.: verdipapirforskriften).
Norwegian Shareholders	Holders of shares that are residents of Norway for purposes of Norwegian taxation.
Private Placement	The private placement consisting of a sale of 18,696,000 existing Shares in the Company announced completed on 15 February 2021.

Prospectus Regulation	Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market.
Rana Gruber	Rana Gruber AS.
Relevant Member state	A member state of the European Economic Area.
Share(s)	The shares of the Company, consisting as of this date of 37,392,000 shares each with a nominal value of NOK 0.25.
U.S. Securities Act	U.S. Securities Act of 1933, as amended.
VPS	The Norwegian Central Securities Depository (Norw.: Verdipapirsentralen ASA).

Vedtatt på ekstraordinær generalforsamling 22/11-2020

#### VEDTEKTER

#### FOR

#### **RANA GRUBER AS**

#### Org. nr. 953 049 724

#### § 1

Selskapets navn er Rana Gruber AS

§ 2

Selskapets forretningskontor er i Rana.

#### § 3

Selskapets formål er å drive produksjon og omsetning av gruveprodukter og tilknyttet virksomhet, og gjennom bedriftsøkonomisk forsvarlig drift skape varige og trygge arbeidsplasser i selskapet. Selskapet skal søke å utvikle nye produkter og virksomheter, og selskapet kan delta i andre selskaper som eier eller på annen måte for å oppfylle ovennevnte formål.

Selskapets aksjekapital er NOK 9.348.000 fordelt på 37.392.000 aksjer, hver pålydende NOK 0,25. Selskapets aksjer skal være registrert i et verdipapirregister.

ξ4

#### § 5

Erverv av aksjer er ikke betinget av selskapets samtykke. Aksjelovens regler om forkjøpsrett, jfr. asl §4-19 - §4-23, finner ikke anvendelse for aksjer som skifter eier.

§ 6

Selskapets styre skal bestå av 3 - 8 medlemmer.

#### § 7

Selskapets firma tegnes av styrets leder samt et styremedlem i fellesskap eller av tre styremedlemmer. Styret kan gi særskilt fullmakt til styremedlem, daglig leder eller navngitte ansatte til å tegne selskapets firma. Styret kan meddele prokura.

#### § 8

Generalforsamlingen for selskapet skal holdes i Rana kommune. Styret kan beslutte at generalforsamling skal holdes i Oslo.

Den ordinære generalforsamling skal behandle og avgjøre:

- 1. Godkjennelse av årsregnskapet og årsberetningen, herunder utdeling av utbytte.
- 2. Andre saker som i henhold til loven eller vedtektene hører under generalforsamlingen.

Når dokumenter som gjelder saker som skal behandles på generalforsamlinger i selskapet er gjort tilgjengelige for aksjeeierne på selskapets internettsider, kan styret beslutte at dokumentene ikke skal sendes til aksjeeierne. Dette gjelder også dokumenter som etter lov skal inntas i eller vedlegges innkallinger til generalforsamlinger. En aksjeeier kan kreve å få tilsendt dokumenter som gjelder saker som skal behandles på generalforsamlingen. Selskapet kan ikke kreve noen form for godtgjøring for å sende dokumentene til aksjeeierne.

Aksjeeierne kan avgi skriftlig forhåndsstemme i saker som skal behandles på generalforsamlinger i selskapet. Slike stemmer kan også avgis ved elektronisk kommunikasjon. Adgangen til å avgi forhåndsstemme er betinget av at det foreligger en betryggende metode for autentisering av avsender. Styret avgjør om det foreligger en slik metode i forkant av den enkelte generalforsamling. Styret kan fastsette nærmere retningslinjer for skriftlige forhåndsstemmer. Det skal fremgå av generalforsamlingsinnkallingen om det er gitt adgang til forhåndsstemming og hvilke retningslinjer som eventuelt er fastsatt for slik stemmegivning.

# **ÅRSBERETNING 2019**

RANA GRUBER

#### Virksomhetens art

Rana Gruber-gruppen (konsernet) består av morselskapet Rana Gruber AS med datterselskapet Rana Gruber Mineral AS. Rana Gruber AS eies i sin helhet av LNS Mining AS.

Rana Gruber AS produserer og selger jernmalmkonsentrater til stålverk og en del andre anvendelsesområder. Mer enn 95% av produktmengden eksporteres; det meste til europeiske kjøpere. Malmproduksjonen skjer på Ørtfjell som dagbruddsproduksjon og underjordsdrift.

RG Mineral AS driver produksjon og salg av mikroniserte jernoksyder, og annen videreforedling av jernmalm. Også her er minst 95-97% eksportrettet, til de samme markedsområder. Enhetene har virksomheten lokalisert til Rana.

Fortsatt drift og hendelser etter balansedag: Forutsetningen for fortsatt drift i konsernet er til stede, og årsoppgjøret er avlagt under den forutsetningen. Det satses på langsiktig utvikling av gruvedriften og malmprosesseringen. Konsernet forventer en positiv resultatutvikling og en positiv kontantstrøm fra driften i 2020.

Utover egen gjeld har Rana Gruber avgitt en solidarisk selvskyldnerkausjon overfor Grønlandsbanken for Greenland Rubys lån i banken, som ved mislighold vil kunne påvirke selskapets finansielle stilling. Per utgangen av 2019 utgjør denne 63 MNOK, og nedbetales i henhold til fastsatt nedbetalingsplan. Det jobbes med å få på plass en ny finansieringsløsning for Greenland Ruby i løpet av 2020, med mål om å sikre driften og å løfte kausjonen bort.

I løpet av 2019 er fordringen mot LNS Mining, knyttet til investeringen i Greenland Ruby, nedbetalt med 50 MNOK, samt redusert med ekstraordinært tingsutbytte på 71,9 MNOK. Fordringen utgjør ved utgangen av året 224 MNOK.

Ved avleggelse av årsregnskapet har ikke koronautbruddet påvirket selskapet direkte.

Basert på dagens situasjon så vurderer styret at COVID-19 ikke vil påvirke selskapets evne til fortsatt drift.

Personale og arbeidsmiljø Konsernet hadde 261 faste ansatte og 11 lærlinger, tilsvarende 276,1 årsverk pr. 31.12.19. Midlertidig ansatte pr. 31.12 var 23.

I forbindelse med etablering og oppstart av nytt gruvenivå (nivå 123) er nøkkelpersonell i gruva omdisponert til prosjektledelse. Økt antall midlertidig ansatte skyldes operasjonelle prosjektstillinger knyttet til nytt nivå i gruva, og til økt bruk av vikarer for å dekke opp ferie og annet fravær.

Sykefraværet har økt noe siden 2018. Sykefraværet i selskapet var på totalt 6,5 % i 2019, mot 5,9 % i 2018. Langtidssyke over 16 dager utgjorde 3,1 %, mot 2,7 % i 2018.

Arbeidet med å forebygge sykefravær og skader er strategisk viktig for selskapet. Det gis tett oppfølging av de ansatte ved uønskede hendelser og man vil øke fokuset på evt. tilrettelegging for å nå konsernets målsetninger i tiden fremover. Det jobbes også målrettet for stadig å forbedre sikkerheten i konsernet i form av holdninger og opplæring.

Det ble rapportert tre arbeidsskader med fravær i løpet av året som gir et H1-tall på 9,8 ved utgangen av 2019. Skadene er interngransket og avviksbehandlet i henhold til våre rutiner og skade- og fraværsutviklingen har vært behandlet i Arbeidsmiljøutvalget. Skader har ikke vært alvorlige eller gitt langvarig fravær, men de bidrar dessverre til at målsetningen for H-tall ikke nås i 2019.

#### Likestilling mv.

Av totalt 261 fast ansatte i konsernet er 44 kvinner. Av seks ledere på nivå under administrerende direktør er to kvinner. Det er dessuten ytterligere 7 kvinnelige ledere i linjen (inkl. teamledere).

Konsernet har som policy at det ikke skal forekomme forskjellsbehandling grunnet

kjønn, etnisitet, religion, alder eller på annen måte.

Selskapets lønnssystemer skiller ikke mellom kjønnene, og arbeidstidsbestemmelsene er like for begge kjønn. Det er nulltoleranse mot mobbing og trakassering, og det oppfordres til varsling av alle kritikkverdige forhold.

Konsernet arbeider aktivt for å fremme likestilling, sikre like muligheter og rettigheter og hindre diskriminering. Prinsippet om tilrettelegging og tilpasset arbeid står sterkt.

#### Ytre miljø

Rana Gruber har en utslippstillatelse fra 2012 (rev. 06.2015). Med utgangspunkt i rammevilkårene gjelder utslippsbegrensningene vann, luft og grunn. Konsernet gjør alltid sitt ytterste for å overholde grenseverdier i utslipps-tillatelse og andre forskriftskrav. Det er gode rutiner for overvåking av utslipp for å sikre at negativ miljøpåvirkning til resipient og luft forhindres eller reduseres, og jobber hele tiden for å minimere konsernets fotavtrykk.

Bedriften samarbeider med annen bergindustri som har sjødeponi for i fellesskap å komme frem til de beste løsninger for deponering og kontroll av sjødeponi. Bedriften samarbeider tett med både Rana Kommune og øvrige industribedrifter i Rana om luftovervåking i Rana og tiltaksovervåking av Ranfjorden.

Forskning og utvikling (FoU) Konsernet har siste år hatt gående FoUprosjekter tilknyttet videreforedling av våre volumprodukter og bergsikring. Alle kostnader tilknyttet FoU kostnadsføres løpende. Selskapet har i perioden hatt tre skattefunnprosjekter pågående. Prosjektene er knyttet til «økt utvinning gjennom prosessoptimalisering», «Redusering av svovel i hematittprodukter», «utvikling av overvåkningsmodell og optimal sikringsmetodikk i underjordsgruve» og «Utvikling av ny flotasjonsprosess for høyren magnetitt fra SNIM-prosessen». Total kostnadsramme for disse fire prosjektene er 8,9 MNOK.

I 2019 er det opprettet en egen FoU-avdeling i Rana Gruber AS med 5 ansatte. Formålet er å bygge kompetanse rundt egen forekomst og forbedringer av oppredningsprosessen.

Resultat og finansiell stilling

Konsernet hadde en omsetning på 1 120,8 MNOK i 2019 mot 801 MNOK i 2018, en oppgang på 319,8 MNOK.

Konsernet hadde et årsresultat på 57 MNOK i 2019 mot -1,5 MNOK i 2018, en oppgang på 58,5 MNOK.

Prisene for hovedproduktet til Rana Gruber AS hadde en sterk vekst gjennom hele første halvdel av 2019, og hadde sin høyeste notering 3. juli med 126,35 USD. Fra august til og med desember snittet platts-indeksen tett på 90 USD. Dette kombinert med svak krone, har bidratt til høye realiserte priser.

Etterspørselen etter produktene er samtidig god, og vi selger tilnærmet alt vi produserer.

I 2019 produserte Rana Gruber AS 1,6 millioner tonn og solgte 1,66 millioner tonn jernkonsentrater. Dette er en nedgang fra 2018 hvor det ble produsert 1,75 millioner tonn.

Samlet malmproduksjon ble 4,86 millioner tonn i 2019. Produksjonen av malm har i 2019 skjedd fra nivå 187 og 155 i underjordsgruva samt Kvannevann Øst-, Eriksbruddet og Nordmalmen oppe i dagen. Totalt ble det produsert 2,2 millioner tonn i dagbruddene. Samlet bergfangst i dagbruddene gikk opp fra 4,6 millioner tonn i 2018 til 6,3 millioner tonn 2019.

Det er produsert 2,6 millioner tonn malm under jord i 2019. 0,04 millioner tonn fra N187, 2,5 millioner tonn fra N155 og 0,06 millioner tonn fra etableringen av N123. Investeringer i 2019 knyttet til N123 er foretatt over kontantstrømmen fra drift. Oppstarten har også i perioder påvirket produksjonen under jord negativt.

Økte driftskostnader på 102 MNOK skyldes i stor grad økte driftskostnader som følge av økte personalkostnader, økt bergfangst i dagbruddene, vannproblematikk i Kvannevann Øst og driftsutfordringer i oppredningen. Det har også vært en reduksjon i lagerbeholdningen av malm og ferdigprodukter i perioden, som også bidrar til økte driftskostnader sammenlignet med 2018.

Konsernet har i 2019 videreført innføringen av LEAN Mining for å redusere sløsing og bidra til økt effektivitet i produksjonen. Det forventes at dette vil bidra til vesentlige besparelser i årene som kommer.

Med de økonomiske utsiktene i bransjen mener styret at de balanseførte verdiene i konsernet er tilstede for å sikre en tilfredsstillende avkastning på kapitalen.

#### Investeringer

I 2019 er det investert totalt 132,6 MNOK i varige driftsmidler, herunder 64 MNOK knyttet til etableringen av nivå 123 i underjordsgruven.

#### Finansiering

Morselskapet LNS Mining har i 2019 redusert sin fordring mot Rana Gruber med 50 MNOK gjennom kontantinnskudd.

Netto gjeldsreduksjon av langsiktig gjeld og leasing gjeld er i 2019 på 37,7 MNOK, mot netto gjeldsreduksjon på 45 MNOK i 2018.

Rana Gruber har i løpet av året redusert belastningen på kassakreditten med 48,6 MNOK. Selskapet vil i 2020 jobbe mot å redusere kassakreditten og styrke selskapets likviditet ytterligere.

#### Finansiell risiko

Konsernet sin virksomhet innebærer risiko på mange områder. Risikostyring handler ikke om å fjerne risiko, men å ta riktig risiko utfra konsernets risikovilje og -evne, kompetanse, soliditet og utviklingsplaner. Hensikten med risikostyringen er å identifisere trusler og muligheter for konsernet, og å styre risiko mot et akseptabelt nivå slik at det gis rimelig sikkerhet for at konsernets målsetninger oppnås.

Styret har med bakgrunn i et helhetlig risikosyn fastsatt overordnede strategier for risikostyring og rammer for finansiell risiko for områdene valuta og råvarebinding.

Rana Gruber har avgitt en solidarisk selvskyldnerkausjon ovenfor Grønlandsbanken for Greenland Ruby selskapenes engasjement hos banken. Denne er avgitt sammen med LNS Mining.

Styret mener at årsregnskapet gir et riktig bilde av stillingen ved årsskiftet for Rana Gruber gruppens eiendeler og gjeld, finansielle situasjon og resultat.

#### Disponeringer

Av årets overskudd i Rana Gruber foreslås det et utbytte på 18 MNOK og resterende på 38,6 MNOK overføres til annen egenkapital. Tidligere i år ble det gitt et ekstraordinært tingsutbytte på 71,9 MNOK som ble overført fra annen egenkapital. Ved utgangen av 2019 har Rana Gruber gruppen en bokført egenkapital på MNOK 344. Dette utgjør 32,5% av Rana Gruber gruppen sin totale kapital.

#### Mo i Rana, 11. november 2020

DocuSigned by: DocuSigned by: DocuSigned by: DocuSigned by: Fordinh Windin A. Addyn Morten Stover Børge Mlsen E13AD2075930440... 42D6BAA3ADCC43C... F9FCDEDB2A884B1... 3DE9058A8A3A4 Morten Støver Kristian A Adolfsen Frode Nilsen Børge Nilsen Styreleder Styremedlem Styremedlem Styremedlem DocuSigned by: DocuSigned by: DocuSigned by: DocuSigned by: 07662CB55A0F469... Thomas Hammer Þ Pariya Johan Howind 440FDA416F2E4B4.. CFC7FB3BC9754A8... Andreas Haugen Johan Hovind Lasse O. Strøm Thomas Hammer Styremedlem Styremedlem Styremedlem Styremedlem DocuSigned by: 161 1 Th  $\sqrt{}$ A0D425CD8676481.. Gunnar Moe Adm. dir

### Erklæring fra styret og administrerende direktør i Rana Gruber AS

Vi bekrefter at konsernregnskapet for perioden 1. januar til 31.desember 2019, etter vår beste overbevisning, er utarbeidet i samsvar med regnskapslovens bestemmelser og god regnskapsskikk, og at opplysningene i regnskapet gir et rettvisende bilde av selskapets og konsernets eiendeler, gjeld, finansielle stilling og resultat som helhet.

Vi bekrefter at konsernregnskapet gir en rettvisende oversikt over utviklingen, resultatet og stillingen til foretaket og konsernet, sammen med en beskrivelse av de mest sentrale risiko- og usikkerhetsfaktorer foretaket står ovenfor.

#### Mo i Rana, 11. november 2020

DocuSigned by: DocuSianed by: DocuSigned by: DocuSigned by Morten Stower Food Wh Wintin A. Adda Borge Mlsen 42D6BAA3ADCC43C... F9FCDEDB2A884B1 3DE9058A8A3A426. -E13AD2075930440. Frode Nilsen Børge Nilsen Morten Støver Kristian A Adolfsen Styreleder Styremedlem Styremedlem Styremedlem DocuSigned by: DocuSigned by: DocuSigned by: DocuSigned by: Paring Hammer Mr (). Stiam /homas Johan Howind d CFC7FB3BC9754A8.. 07662CB55A0F469. -440FDA416F2E4B4 50AEABAEAA084 Andreas Haugen Johan Hovind Lasse O. Strøm Thomas Hammer Styremedlem Styremedlem Styremedlem Styremedlem DocuSigned by: A0D425CD8676481

Gunnar Moe Adm. dir

#### RANA GRUBER AS

		Rana Gruber kon	sern
(beløp i 1000 kr)	Noter	2019	2018
		(01.jan-31.des)	(01.jan-31.des)
DRIFTSINNTEKTER			
Salgsinntekter	11	1 110 855	795 19
Andre driftsinntekter	11	9 936	5 78
SUM DRIFTSINNTEKTER		1 120 791	800 97
DRIFTSKOSTNADER			
Varekostnad		345 586	320 48
Beholdningsendring produkter	5	38 997	57
Lønnskostnad Avskrivninger	9/12 2	200 616 101 502	187 47 91 88
Andre driftskostnader	Z	147 437	131 88
SUM DRIFTSKOSTNADER		834 137	732 31
DRIFTSRESULTAT		286 654	68 66
FINANSIELLE POSTER			
Inntekt på invest.i datterselskap (kons.bidrag)		-	-
Andre finansinntekter	13	8 475	10 15
Finanskostnader	13	-222 628	-74 54
Netto finansposter		-214 153	-64 39
RESULTAT FØR SKATT		72 501	4 27
Skattekostnad	10	15 536	5 72
ÅRSRESULTAT		<u> </u>	-1 44
Opplysning om disponering av resultat:			
Avgitt utbytte		18 000	-
Overført til/fra annen egenkapital		38 965	-1 44
SUM DISPONERING		<u>56 965</u>	-1 44

Balanseregnskap		Rana Gru	ber konsern
(beløp i 1000 kr)	Noter	31.12.19	31.12.18
EIENDELER			
Utsatt skattefordel			4 692
Gruveanlegg		264 408	257 588
Tomter, bygninger og annen fast eiendom		12 527	11 546
Maskiner og utstyr		192 410	171 225
Driftsløsøre og inventar		4 274	4 485
Sum varige driftsmidler	1/2	473 619	444 844
Investeringer i datterselskaper	3	-	-
Investeringer i andre aksjer og andeler	14	1 678	1 140
Lån til konsernselskaper	6	224 464	342 776
Annet ansvarlig lån	14	1 500	1 500
Andre langsiktige fordringer	9	11 475	10 381
Sum finansielle anleggsmidler		239 117	355 797
SUM ANLEGGSMIDLER		712 736	805 333
Varer	5	123 523	179 018
Kundefordringer	6/16	187 438	167 285
Andre kortsiktige fordringer		25 646	23 196
Fordring konsernbidrag	6/10	-	-
Sum kortsiktige fordringer		213 084	190 481
Bankinnskudd og andre likvider	15	9 648	7 075
SUM OMLØPSMIDLER		346 255	376 574
SUM EIENDELER		1 058 992	1 181 907
EGENKAPITAL OG GJELD			
Aksjekapital	8	9 348	9 348
Overkurs		92 783	92 783
Sum innskutt egenkapital		102 131	102 131
Annen egenkapital		242 097	275 044
Sum opptjent egenkapital		242 097	275 044
SUM EGENKAPITAL	7	344 228	377 175
Utsatt skatt	10	10 843	-
Finansiell leasing gjeld	4	63 510	59 708
Gjeld til kredittinstitusjoner	4/15	281 146	331 847
Annen langsiktig gjeld		6 258	7 290
Sum langsiktig gjeld		361 757	398 845
Betalbar skatt	10	-1 608	-4 715
Gjeld til kredittinstitusjoner	6b/15	177 089	225 696
Leverandørgjeld	6	100 352	139 170
Skyldig offentlige avgifter		10 755	9 501
Annen kortsiktig gjeld	6	26 241	36 235
Påløpt skatt av årets resultat	10	-	-
Kortsiktig gjeld konsernselskaper	6	22 178	-
Avsatt til utbytte	7	18 000	-
Sum kortsiktig gjeld		353 007	405 887
SUM GJELD		714 764	804 732
SUM EGENKAPITAL OG GJELD		1 058 992	1 181 907

Mo i Rana, 11.11.2020

DocuSigned by:

Morten Stæver Morten Støver

Styreleder

Andreas Haugen Styremedlem DocuSigned by:

Vidia 1. Adda F9FCDEDB2A884B1... Kristian A Adolfsen Styremedlem

Docusigned by: Jolian Hovind Johan Hovind

Styremedlem

Frode Wilsen Styremedlem

DocuSigned by: DocuSigned by: (). Stian Lasse O. Strom Styremedlem --- DocuSigned by:

Børge Mlsen Børge Nilsen Styremedlem

DocuSigned by: Thomas Thomas 945 APA APA APA APA Hammer Styremedlem

#### Kontantstrømsoppstilling

(beløp i 1000 kr)	Rana Gruber	konsern
	2019	2018
Kontantstrøm fra driften	(01.jan-31.des)	(01.jan-31.des)
Resultat før skatt	72 501	4 275
Innbetaling skattefunn	4 683	3 472
Gevinst ved salg varige driftsmidler	-141	-1 072
Avskrivninger	101 501	91 888
Nedskrivning aksjer	-	3 999
Valutakursregulering langs gjeld	2 232	10 488
Endring i varelagre	55 495	31 347
Endring i kundefordringer og lev. gjeld	-59 551	-20 007
Endring i andre tidsavgrensningsposter	-11 883	5 456
Netto kontantstrøm fra driften	164 837	129 846
Kontantstrøm fra investeringer		
Salg av varige driftsmidler	2 471	1 786
Investeringer i varige driftsmidler	-132 608	
Salg av aksjer	-132 008	-42 410
Investeringer i TS og andre aksjer	444	-67 621
Endring i andre investeringer	-1 094	
Netto kontantstrøm fra investeringer	-130 786	-110 600
Kontantstrøm fra finansiering		
·	(0.(11	
Nedbetaling langsiktig gjeld og finans.leasing	-63 611	-58 614
Opptak ny langsiktig gjeld og finans.leasing	14 480	-
Endring kortsiktig gjeld (KKreditt)	-48 607	
Endring i gjeld og mellomværende kons.selskaper	66 261	-22 236
Utbytte (utbetalt)	-	-
Innbetaling ny aksjekapital	-	31 559
Netto kontantstrøm fra finansiering	-31 477	-19 025
Sum kontantstrøm (endring i likvidbeholdning)	2 574	221
Bankinnskudd og kontanter pr 01.01	7 075	6 854
Bankinnskudd og kontanter pr 31.12.	9 648	7 075
+Ordinær limit kassekreditt	205 000	205 000
Ubenyttet kassekreditt og innskudd (likv.reserve)	37 559	21 378

#### Rana Gruber konsern - prinsipper og noter

#### Regnskapsprinsipper

Selskapsregnskapet og konsernregnskapet er satt opp i samsvar med regnskapslov og god regnskapsskikk.

#### Konsernregnskap

Konsernregnskapet inkluderer Rana Gruber AS og selskap som Rana Gruber AS har bestemmende innflytelse over. Bestemmende innflytelse oppnås normalt når konsernet eier mer enn 50 % av aksjene i selskapet, og konsernet er i stand til å utøve faktisk kontroll over selskapet. Transaksjoner og mellomværende mellom selskapene i konsernet er eliminert. Konsernregnskapet er utarbeidet etter ensartede prinsipper, ved at de konsoliderte selskapene følger de samme prinsippene som morselskapet.

Tilknyttede selskaper er enheter hvor konsernet har betydelig (men ikke bestemmende) innflytelse, over den finansielle og operasjonelle styringen (normalt ved eierandel på mellom 20 % og 50 %). Konsernregnskapet inkluderer konsernets andel av resultat fra tilknyttede selskaper regnskapsført etter egenkapitalmetoden fra det tidspunktet betydelig innflytelse oppnås og inntil slik innflytelse opphører.

Når konsernets tapsandel overstiger investeringen i et tilknyttet selskap, reduseres konsernets balanseførte verdi til null og ytterligere tap regnskapsføres ikke med mindre konsernet har en forpliktelse til å dekke dette tapet.

Konsernregnskapet består av Rana Gruber AS og RG Mineral AS.

#### Aksjer og andeler i datterselskaper

Datterselskaper er vurdert etter kostprismetoden i selskapsregnskapet. Aksjene balanseføres således til historisk kostpris i morselskapet. Ved varig verdifall foretas nedskrivning av aksjene.

Mottatt utbytte eller konsernbidrag resultatføres som finansinntekt hos morselskapet, og som resultatdisponering hos datterselskaper, og i samme regnskapsår hos mottaker og giver. Overstiger utbyttet/konsernbidraget andel av opptjent resultat etter anskaffelsestidspunktet, representerer den overskytende del tilbakebetaling av investert kapital, og fratrekkes investeringens verdi i morselskapets balanse.

#### Salgsinntekter

Inntekter fra salg av varer resultatføres når levering har funnet sted og det vesentligste av risiko og avkastning er overført.

#### Klassifisering og vurdering av balanseposter

Omløpsmidler og kortsiktig gjeld omfatter poster som forfaller til betaling innen ett år etter balansedagen, samt poster som knytter seg til varekretsløpet. Øvrige poster er klassifisert som anleggsmiddel/langsiktig gjeld.

Omløpsmidler vurderes til laveste av anskaffelseskost og virkelig verdi. Kortsiktig gjeld balanseføres til nominelt beløp på etableringstidspunktet.

Anleggsmidler vurderes til anskaffelseskost, fratrukket av- og nedskrivninger, men nedskrives til virkelig verdi dersom verdifallet ikke forventes å være forbigående.

Langsiktig gjeld balanseføres til nominelt beløp på etableringstidspunktet.

#### Fordringer

Kundefordringer og andre fordringer er oppført i balansen til pålydende etter fradrag for avsetning til forventet tap. Avsetning til tap gjøres på grunnlag av individuelle vurderinger av de enkelte fordringene. I tillegg gjøres det for øvrige kundefordringer en uspesifisert avsetning for å dekke antatt tap.

#### Varebeholdninger

Lager av forbruksmateriell er verdsatt til laveste av gjennomsnittlig anskaffelseskost og virkelig verdi. Egentilvirkede ferdigvarer og varer under tilvirkning er vurdert til laveste av full tilvirkningskost og salgsverdi. Netto salgsverdi er estimert salgspris ved ordinær drift fratrukket estimerte salgsomkostninger. Anskaffelseskost tilordnes ved bruk av FIFO-metoden, og inkluderer utgifter påløpt ved anskaffelse av varene og kostnader for å bringe varene til nåværende tilstand og plassering. Det foretas nedskrivning for påregnelig ukurans.

#### Valuta

Utvikling i valutakurser innebærer både direkte og indirekte en økonomisk risiko for selskapet. Pengeposter i utenlandsk valuta er vurdert etter kursen ved regnskapsårets slutt. Selskapet har ved inngangen av 2014 endret prinsipp for regnskapsføring av valutasikringer. Urealiserte gevinster/tap balanseføres ikke. Realiserte gevinster/tap føres direkte over resultatregnskapet.

#### Kortsiktige plasseringer

Kortsiktige plasseringer (aksjer og andeler vurdert som omløpsmidler) vurderes til laveste av kostpris og antatt virkelig verdi på balansedagen.

#### RANA GRUBER AS

#### Kontantstrømoppstilling

Kontantstrømoppstillingen er utarbeidet etter den indirekte metode. Kontanter og kontantekvivalenter omfatter kontanter, bankinnskudd og andre kortsiktige likvide plasseringer.

Varige driftsmidler

Varige driftsmidler balanseføres og avskrives over driftsmidlets levetid dersom de har levetid over 3 år og har en kostpris som overstiger kr 15.000. Direkte vedlikehold av driftsmidler kostnadsføres løpende under driftskostnader, mens påkostninger eller forbedringer tillegges driftsmidlets kostpris og avskrives i takt med driftsmidlet.

Pensjoner

Selskapet har en ytelsesbasert pensjonsordning som vurderes til nåverdien av de fremtidige pensjonsytelser som regnskapsmessig ansees opptjent på balansedagen. Pensjonsmidler vurderes til virkelig verdi

Ved regnskapsføringen er lineær opptjeningsprofil og forventet sluttlønn som opptjeningsgrunnlag lagt til grunn.

Planendringer amortiseres over forventet gjenværende opptjeningstid. Det samme gjelder estimatavvik i den grad de overstiger 10 % av den største av pensjonsforpliktelsene og pensjonsmidlene (korridor).

Skatt

Skatter kostnadsføres når de påløper, det vil si at skattekostnaden er knyttet til det regnskapsmessige resultat før skatt. Skattekostnaden i resultatregnskapet omfatter både periodens betalbare skatt (skatt på årets skattepliktige inntekt) og endring i utsatt skatt/skattefordel. Utsatt skatt/skattefordel er beregnet med 22 % på grunnlag av de midlertidige forskjeller mellom regnskapsmessige og skattemessige verdier, samt ligningsmessig underskudd til fremføring ved utgangen av regnskapsåret. Skatteøkende-/reduserende midlertidige forskjeller som reverserer eller kan reversere i samme periode er utlignet og nettoført. Utsatt skatt og utsatt skattefordel er presentert netto i balansen.

Offentlige tilskudd

I 2019 mottok konsernet 4.7 mill.kr i tilskudd fra skattefunnordningen. Konsernet har fått innvilget skattefunntilskudd på ca. 1.6 mill.kr som utbetales i 2020

#### RANA GRUBER AS

#### Note 1 - Hendelser etter balansedagen

....

Virkningen av hvilke effekter COVID-19 er ventet å medføre for selskapet er vurdert. Ved avleggelse av årsregnskapet har

ikke koronautbruddet påvirket selskapet direkte

Basert på dagens situasjon så vurderer styret at COVID-19 ikke vil påvirke selskapets evne til fortsatt drift. Rana Gruber AS har hatt en positiv kontantstrøm fra driften i 2020 og forventer dette framover.

Note 2 - Varige driftsmidler				(alle	e tall i 1.000 kr)
Rana Gruber konsern	Gruve	Bygninger og tomter	Maskiner og anlegg	Driftsløsøre og inventar	Sum
Anskaffelseskost pr 01.01.19	635 769	43 725	653 058	49 111	1 381 663
Tilgang driftsmidler	64 607	5 020	61 528	1 452	132 608
Avgang driftsmidler	-	2 330	-	-	2 330
Anskaffelseskost pr 31.12.19	700 376	46 415	714 586	50 563	1 511 940
Akkumulerte avskrivninger 01.01.19	378 181	32 179	481 833	44 625	936 818
Balanseført verdi pr. 01.01.19	257 588	11 546	171 225	4 485	444 844
Årets avskrivninger	57 787	1 708	40 343	1 664	101 502
Akkumulerte avskrivninger 31.12.19	435 968	33 887	522 176	46 289	1 038 321
Balanseført verdi pr. 31.12.19	264 408	12 527	192 410	4 274	473 619
Årets leasekostnader av ikke balanseførte driftsmidler			1 785	138	1 923
Årets leiekostnader av ikke balanseførte driftsmidler			11 137	147	11 284

I anskaffelseskost inngår 90,2 mill.kr i aktivert gråberg under posten Gruve som pr. 01.01.19 er

omklassifisert fra varelager til anleggsmidler, grunnet endret levetid av dagbruddet.

Både morselskapet og konsernet benytter lineære avskrivninger for alle anleggsmidler. Økonomisk levetid i

selskapet er beregnet til:	3-10 år	7-10 år	5-10 år	5 år
----------------------------	---------	---------	---------	------

Rana Gruber AS	Anskaffelses-	Forretnings-			Balanseført
Firma	tidspunkt (stiftet-dato)	kontor	Eierandel	Stemmeandel	verdi
Rana Gruber Mineral AS	28.12.98	Rana	100 %	100 %	2 900
Sum balanseført verdi					2 900

Selskapet RG Mineral AS er konsolidert inn sammen med Rana Gruber AS

Note 4 - Langsiktig gjeld til kredittinstitusjoner og finansiell lea	asing gjeld			(alle	e tall i 1.000 kr)
		Rana	n Gruber konsern	,	
	2019			2018	
	Langsiktig gjeld	Leasing gjeld	La	ngsiktig gjeld	Leasing gjeld
Rentebærende gjeld 1.1.	331 847	59 708		366 316	73 366
Nye lån og finansielle leasingavtaler	0	14 479		0	0
Kursregulering valutalån	2 232			10 488	0
Ordinære låne- og leasingavdrag	-52 933	-10 677		-44 957	-13 658
Rentebærende gjeld 30.09.	281 146	63 510		331 847	59 708
	2020	<u>2021</u>	<u>2022</u>	Etter 2022	
Avdragsprofil langsiktig gjeld	56 657	56 657	167 832	-	

Selskapet venter å ha på plass en refinansieringsavtale av langsiktig gjeld i løpet av 2020.

Avdragsprofil leasing gjeld: lease av jernbanevogner utgjør 55 mill.kr av leasesaldo ved årets utgang, denne nedbetales iflg plan med ca. 4,6 mill.kr over 11 år. Gruvemaskiner utgjør øvrig del av leasegjeld, her overtar direkte leie en større andel. På langsiktig gjeld løper en 10 års rentesikringsavtale på 100 mill.kr med utløp i 2021, til en fiksert rentesats av 3,86%.

#### RANA GRUBER AS

Note 5 - Varer		
	Rana Gr	uber konsern
	2019	2018
Ferdig egentilvirkede varer	15 085	56 786
Varer under tilvirkning (malmlager)	4 900	2 240
Forberedende tilvirkning (åpning borort)	75 883	93 015
Forberedende tilvirkn langhullsboring og aktivert gråberg	20 208	20 208
Halvfabrikata (innkjøpt råslig)	605	560
Driftsmateriell og reservedeler	6 842	6 208
Sum	123 523	179 017

Posten aktivert gråberg på 90.2 mill.kr er pr 01.01 2019 omklassifisert fra varelager til varige driftsmidler, se note 2.

Lager av forbruksmateriell er verdsatt til laveste av gjennomsnittlig anskaffelseskost og virkelig verdi. Egentilvirkede ferdigvarer og varer under tilvirkning er vurdert til laveste av gjennomsnittlig tilvirkningskost og netto salgsverdi fratrukket salgsomkostninger.

#### Note 6 - Mellomværende med selskaper i overordnet konsern

				Rana Grut	oer konsern	
			Leonh.Nilsen	& Sønner AS	LNS E	Eiendom AS
			2019	2018	2019	2018
Leverandørgjeld			33 871	92 043		-
Langsiktig gjeld (konv.k.bidrag)			-	-	-	10 892
			Leonh.Nilsen	& Sønner AS	LNS Spit	sbergen AS
			2019	2018	2019	2018
Kundefordringer			1 368	168	-	-
Andre korts. fordringer			-	2 243	-	2 243
Annen korts. gjeld			22 178	-	-	-
Fordring konsernbidrag			-	-	-	-
	Skala	nd Graphite	LNS Green	and/Gr.Ruby	LNS Mi	ning AS
	2019	2018	2019	2018	2019	2018
Kundefordringer	-	-	12 388	5 763	-	-
Langsiktig utlån	-	4 500	-	72 732	224 464	342 776
Andre kortsiktige fordringer	-	121	-	4 025	3 389	5 585
Annen kortsiktig gjeld (utbytte)	-	-	-	-	18 000	-

#### Note 6b - Kortsiktig gjeld kredittinstitusjoner

Kortsiktig gjeld til kredittinstitusjoner er ordinær kassekredittgjeld.

RANA GRUBER AS

Note 7 - Egenkapital			(alle t	all i 1.000 kr)
Rana Gruber AS konsern				
	Aksje-	Over-	Annen	
Endring i egenkapital 2019	kapital Emisjor	kurs	egenkapital	Sum
genkapital pr 31.12 2018	9 348	- 92 783	275 044	377 175
rets resultat			56 965	56 965
Avsatt utbytte			-18 000	-18 000
Ekstraord.tingsutbytte			-71 912	-71 912
Egenkapital pr 31.12 2019	9 348	- 92 783	242 097	344 228

Høsten 2019 ble det foretatt en ekstraordinær tingsutbyttedeling på 71,9 mill.kr til LNS Mining ved at Rana Grubers fordring på Greenland Ruby konverteres til aksjer, og overført til LNS Mining som tingsutbytte.

Note 8 - Aksjekapital og aksjonærinformasjon			(alle ta	all i 1.000 kr)
Rana Gruber AS	Antall	Pålydende	Balanseført	
Aksjekapitalen består av (A-aksjer):	9 348	1000	9 348	
Oversikt over aksjonærene pr 30.09.20:	Aksjer	Eierandel	Stemmeandel	
LNS Mining AS	9 348	100,0 %	6 100,0 %	
Sum	9 348	100,0 %	6 100,0 %	

#### RANA GRUBER AS

#### Note 9 - Pensjoner

(alle tall i 1.000 kr)

Konsernet (selskapet og konsern) har en kollektiv ytelsespensjonsordning som pr 31.12.2019 omfattet 379 personer, hvorav 261 yrkesaktive Ordningene gir rett til definerte fremtidige ytelser som i hovedsak er avhengig av antall opptjeningsår, lønnsnivå ved oppnådd pensjonsalder og størrelsen på ytelsene fra folketrygden. Pensjonsavtalen er finansiert ved oppbygging organisert i forsikringsselskap.

Konsernet (selskapet og konsern) har også en usikret pensjonsforpliktelse knyttet til medlemskap i AFP-ordningen som finansieres over selskapets drift. Netto pensjonsmidler knyttet til kollektiv ordning er bokført som eiendel i balansen. Premier til selskapets AFP-ordning kostnadsføres løpende. Morselskapet er kontoholder for pensjonsordningen.

Pensjonskostnader koll.ordning og AFP	UB 2019	UB 2018
Nåverdi av årets pensjonsopptjening	5 652	4 556
Rentekostnad av pensjonsforpliktelsen	1 784	1 558
Avkastning på pensjonsmidler	2 749	2 532
Resultatført estimatavvik	673	626
Netto pensjonskostnader	5 359	4 208
+arbeidsgiveravgift	273	215
Sum pensjonskostnader	5 632	4 422
+ kostnader ny AFP	3 174	3 036
- resultatført i datterselskap RG Mineral	-648	-612
Sum pensjonskostnad	8 158	6 846

Utover dette har morselskapet kostnader på 344 vedr pensjon over 12G (593 i 2018)

Balanseført pensjonsforpliktelse	UB 2019	UB 2018	
Opptjente koll.pensjonsforpliktelser pr 31.12.	-75 015	-73 211	
Pensjonsmidler (til markedsverdi) pr 31.12.	69 936	65 541	
Periodiseringer av estimatavvik, endr pensj.planer	17 571	18 629	
Netto pensjonsmidler (kollektiv ordning)	12 492	10 959	
Pensjon over 12G pr 31.12.	-1 017	-578	
Netto pensjonsforpliktelse (AFP)	-	-	
Sum pensjonsmidler/-forpliktelse	11 475	10 381	
Økonomiske forutsetninger:			
Diskonteringsrente	2,30 %	2,60 %	
Forventet avkastning på pensjonsmidler	3,80 %	4,30 %	
Forventet lønnsregulering	2,25 %	2,75 %	
Forventet årlig G-regulering	2,00 %	2,50 %	
Forventet vekst pensjoner u/utbetaling koll.	0,00 %	0,00 %	

Beregningen av pensjonsforpliktelsene foretatt av aktuar. De aktuarmessige forutsetningene

er basert på vanlig benyttede forutsetninger innen forsikring når det gjelder demografiske faktorer og avgang.

Note 10 - Skatt		
	Rana Gr	uber konsern
Årets skattekostnad fordeler seg på:	2019	2018
Betalbar skatt	-	-
Endring utsatt skatt	15 535	5 509
Virkning av endring i skattesats	-	213
Sum resultatført skattekostnad	15 535	5 722
Beregning av årets skattegrunnlag:	2019	2018
Resultat før skattekostnad	72 501	4 275
Permanente forskjeller	-1 829	19 675
Endring i grunnlag for utsatt skatt	45 515	35 658
Skattegrunnlag før rentebegrensning	116 187	59 609
Avskjæring rentefradrag nærstående i år	20 650	20 650
Anvendelse fremført rentefradrag tidligere år	-20 707	-20 707
Skattegrunnlag før anvendelse fremførbart underskudd	116 130	59 552
Anvendelse fremførbarbart underskudd	-116 130	-59 609
Årets overskudd/underskudd	-	-57
Avgitt konsernbidrag	-	-
Beregnet skatt av grunnlag	-	-
Virkning av skattefunn	-1 608	-4 716
Betalbar skatt i balansen	-1 608	-4 716
Oversikt over midlertidige forskjeller:	2 019	2018
Varige driftsmidler	58 454	67 066
Finansiell leasing	13 841	13 290
Forberedende tilvirkning (borort)	75 883	93 016
Varer	5 693	26 591
Fordringer	-180	-180
Gevinst- og tapskonto	2 074	2 592
Pensjonsmidler-/forpliktelser, nto	11 475	10 381
Netto midlertidige forskjeller	167 241	212 756
Underskudd til fremføring	-80 660	-196 790
Avskåret rentefradrag til fremføring	-37 295	-37 295
Sum m.t.forskjeller (grunnlag utsatt skatt)	49 285	-21 329
Anvendt sats utsatt skatt/skattefordel	22 %	22 %
Utsatt skatt(+)/skattefordel(-) i balansen	10 843	-4 692

RANA GRUBER AS

Note 11 - Driftsinntekter		
	Rana Gr	uber konsern
Salgsinntekter pr. virksomhetsområde	2019	2018
Jernmalmkonsentrater	1 105 508	790 933
Øvrige salgsinntekter	5 347	4 258
Sum salgsinntekter	1 110 855	795 191
herav: eksport (jernmalm og jernoksyder vesentlig EU-omr.)	1 104 760	789 830
innenlandssalg	6 095	5 361

l konsernets salgsinntekter inngår frakter med 6,7 mill.kr (4,6 mill.kr i 2018)

Note 12 - Lønnskostnader, antall ansatte, godtgjørelser, lån til ansatte mm.

Det var 261 faste og 17 midlertidige ansatt pr 31.12.19, mot 254 faste og 9 midlertidige pr 31.12.18. Av de ansatte var 23 personer beskjeftiget i datterselskapet RG Mineral AS gjennom en utleieavtale. I tillegg kommer 11 lærlinger (mot 12 ved forrige årsskifte)

	Rana Gruber konse	
Lønnskostnader	2019	2018
Lønninger	177 091	167 816
Arbeidsgiveravgift	10 590	10 016
Overført lønn til prosjekt N123	-2 931	-3 697
Pensjonskost	9 399	8 051
Andre ytelser	6 467	5 291
Sum lønnskostnader	200 616	187 477
Ytelser til ledende personer	2019	2019
Lønn, daglig leder	2 231	1 841
Pensjon, daglig leder	344	349
Forsikringer-sk.pliktig del, daglig leder	32	32
Fri tlf, daglig leder	4	4
Styrehonorar, kostnadsført	888	644
Revisorhonorar, kostnadsført ex.mva	1 093	745

#### Note 13 - Poster som er slått sammen i regnskapet

	Rana Gru	ıber konsern
Andre finansinntekter	2019	2018
Renteinntekt fra bank	48	39
Renteinntekt andre konsernselskaper	8 919	6 729
Annen finansinntekt	1 008	961
Valutakursregulering	-1 500	2 428
Gevinst prissikring jernmalm	-	-
Sum andre finansinntekter	8 475	10 157
Finanskostnader	2019	2019
Rentekostnad og provisjon kassekreditt	4 841	5 129
Rentekostnad pantegjeld og finansiell leasing	19 694	18 581
Rentekostnader konsernselskaper	1 178	8 454
Annen finanskostnad	370	16 811
Nedskrivning finans.anleggsmidler (aksjer)	-	3 999
Valutakursregulering omløpsmidler	22 911	339
Valutakursregulering langsiktig gjeld	2 232	9 756
Tap prissikring jernmalm	171 402	11 478
Sum finanskostnader	222 628	74 547

(alle tall i 1.000 kr)

(alle tall i 1.000 kr)

RANA GRUBER AS

Note 14 - Investeringer i andre aksjer og andeler			(alle tall i 1.000 kr)		
Anleggsmidler - konsern	Eierandel	Anskaffelses- kost	Balanseført verdi	Markeds- verdi	
Kunnskapsparken Helgeland	2,0 %	250	250	250	
Polarsirkelen Lufthavnutvikling	5,3 %	100	100	100	
Vitensenter Nordland		100	100	100	
Aksjer og andeler i andre selskaper		1 228	1 228	1 228	
Sum aksjer og andeler i andre selskaper eiet av Rana Gruber AS		1 678	1 678	1 678	

#### Note 15 - Pant og garantier

	Rana Gruber konserr		
	2019	2018	
Bundne skattetrekksmidler	8 109	7 038	
Bundet avsetning overfor dir.for mineralforvaltning	1 503		
Pantesikret gjeld	521 744	617 251	
som er sikret i panteobjekt med bokførte verdier:			
Kundefordringer	187 438	167 285	
Varebeholdning	123 523	179 018	
Driftsløsøre, maskiner og anlegg	196 684	175 710	
Bygninger og annen fast eiendom	12 527	11 546	
Gruveanlegg	264 408	257 588	
Sum bokført verdi av panteobjekt	784 580	791 147	
Eiendelene er også stillet som sikkerhet for ubenyttet kkreditt:	27 910	21 379	

Selskapet Rana Gruber AS står som kontoholder overfor kredittyter i en felles kassekredittordning med datterselskapet RG Mineral AS og LNS Mining. Deres andel av saldo pr. 31.12.19 var negativ med 3,6 mill.kr. I selskapets balanse føres dette som økning i kassekredittgjeld og motpost kortsiktig konsernfordring. Konsernselskapene er solidarisk ansvarlig for kredittrammen på 205 mill.kr pr 31.12 2019

Utover egen gjeld har selskapet/ konsernet avgitt en solidarisk selvskyldnerkausjon ovenfor Grønlandsbanken for Greenland Rubys lån i banken, som ved mislighold vil kunne påvirke selskapet/ konsernets finansielle stilling. Per utgangen av 2019 utgjør denne 63 MNOK, og nedbetales iht fastsatt nedbetalingsplan. Det jobbes med å få på plass en ny finansieringsløsning for Greenland Ruby i løpet av 2020, med mål om å sikre driften og å løfte kausjonen bort fra Rana Gruber.

#### Note 16 - Valuta, finansiell markedsrisiko

Prisrisiko

Svingninger i internasjonale jernmalmpriser medfører risiko for fremtidige salgspriser på Rana Grubers produkter. Prisene er svært volatile, og medfører dermed vesentlig resultatrisiko for selskapet og konsernet.

Risikoen knyttet til salgsprisene på jernkonsentratene styres gjennom en kombinasjon av fysiske fastprisavtaler med kunder og finansielle swapavtaler hvor en forhåndsselger jernmalm til en fastsatt pris. Swap-avtalene inngår i en sikringsportefølje, hvor det er fastsatt rammer for hvor stor andel av forventet produksjon som skal forhåndsselges, utover de volumer som er sikret gjennom fastprisavtaler med kundene direkte.

Pr. 31.12 2019 har selskapet følgende finansielle sikringsposisjoner:

Terminkontrakter	Beløp	Månedlige	Valutakurs,	Urealisert tap
	(1000)	forfall i	gjennomsnitt	(1000)
Terminer for sikring av fremtidig salg	390 tonn	2020	USD 8,79	USD 4 100

Valutarisiko

Rana Gruber er eksponert for svingninger i valutakursene EURNOK, USDNOK og GBPNOK da inntektene fra salg av selskapets produkter er priset i disse utenlandske valutaene. EURO-inntektene er i et slikt volum at det matcher kostnadene gruppen har til krafthandel, som også prises i EURO. Sikring av EURNOK foretas derfor kun ved enkeltstående transaksjoner av vesentlig betydning. Inntektene i GBPNOK er per i dag i et så lavt volum at det ikke foretas sikringer for dette valutaparet.

Alle salg av jernmalmkonsentrater til stålindustrien prises i USD. Hovedeksponeringen på valutasiden er derfor knyttet til USDNOK. For å dempe resultateffekten av svingninger i denne valutaen forhåndsselger selskapet deler av forventet USD-inntekter for en periode på 2 år frem i tid. Alle valutaterminkontrakter og strukturerte derivater inngår i en styrevedtatt sikringsportefølje.

#### Pr. 31.12 2019 har selskapet / konsernet følgende finansielle sikringsposisjoner:

Terminkontrakter	Beløp	Månedlige	Valutakurs,	Urealisert tap
	(1000)	forfall i	gjennomsnitt	(1000)
Terminer for sikring av fremtidig salg	USD 12 000	2020	8,79	-NOK 3 900

Verdiendringer regnskapsføres ikke for finansielle instrumenter som holdes under regnskapsmessig sikring.

Ved avleggelse av årsregnskapet har selskapet følgende finansielle instrumenter i utenlandsk valuta med verdiendring over resultat:

					Urealisert
Gjeld		Beløp		Valutakurs,	tap/gevinst
		(1000)	Forfallsdato	gjennomsnitt	(1000)
Langs.gjeld (swap fra NOK)	Endr.pr 2016	USD 25 100	2022		-NOK 68 500
Langs.gjeld (swap fra NOK)	Endr.2017	USD 23 500	2022	8,34	NOK 11 100
Langs.gjeld (swap fra NOK)	Endr.2018	USD 21 432	2022	8,13	-NOK 10 292
Langs.gjeld (swap fra NOK)	Endr.2019	USD 18 787	2022	8,79	-NOK 2 488
Langs.gjeld (swap fra NOK)	Endr.pr 2016	DKK 45 000	2022		-NOK 6 500
Langs.gjeld (swap fra NOK)	Endr.2017	DKK 38 850	2022	1,25	-NOK 4 300
Langs.gjeld (swap fra NOK)	Endr.2018	DKK 33 303	2022	1,29	-NOK 195
Langs.gjeld (swap fra NOK)	Endr.2019	DKK 26 313	2022	1,32	-NOK 806

Kraftprisrisiko

Kjøp av kraft er en av de viktigste innsatsfaktorene for produksjonen av jernkonsentrater. Svingningene i kraftpriser og produksjonsforbruk fører til resultatrisiko i Rana Gruber.

Risikoen knyttet til kjøp av kraft styres ved å inngå terminkontrakter hvor en forhåndskjøper kraft til en fastsatt pris. Terminkontraktene inngår i en sikringsportefølje, hvor det er fastsatt rammer for hvor stor andel av forventet forbruk (GWh) på et gitt fremtidig tidspunkt, som i dag kan være forhåndskjøpt. Sikringsporteføljen forhåndskjøpes på grunnlag av dette fortløpende for deler av forventet forbruk.

Administrasjonen og økonomiavdelingen følger opp den løpende risikoeksponeringen i forhold til styrevedtatte rammer. Alle finansielle avtaler er mot vår kraftleverandør og gjøres opp løpende som en del av det normale kraftkjøpet.

#### Renterisiko

Rana Gruber har eksponering mot renterisiko, men da i all hovedsak eksponert gjennom rentebærende gjeld. Selskapet har i dag ingen vedtatt strategi for å dempe resultatsvingningene av denne eksponeringen, men ivaretar dette gjennom oppfølgingen av den daglige finansstyringen i administrasjonen.

Selskapet har i dag en renteswap-avtale på 100 MNOK over 10 år for å dempe effekten av svingninger i NIBOR-renten. Pr. 31.1 2019 har denne avtalen et urealisert tap på NOK (1000) 3506 inkl påløpte renter på 244.

#### RANA GRUBER AS

#### Note 17 - Malmressurser

Selskapets malmressurser har tidligere vært klassifisert av interne ressurser på Geologi & Gruveplanavdelingen. I 2019 ble det igangsatt arbeid med å klassifisere ressursene i henhold til internasjonale standarder, der den Kanadiske standarden "NI 43-101" ble valgt. Standarden krever bl.a. at ressursestimatet utføres og signeres av en godkjent kvalifisert person uavhengig av Rana Gruber.

Baker Geological Services Ltd ble valgt som konsulent og arbeidet pågår fortsatt. Rapporten for hovedforekomsten i Kvannevann/ Ørtfjell ble ferdig i Juni 2019. Ressursestimatet fra denne rapporten er oppsummert i tabell 1

 Tabell 1: "Mineral Resource Statement at a 0% Fe\_Tot cut-off grade"

Classification Category	Mining Method	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Measured	Underground	75.9	3.5	33.7	3.7	0.020
Measured	Open Pit	10.0	3.4	32.7	6.6	0.007
Indicated	Open Pit	45.2	3.4	32.8	5.1	0.019
Sub-Total	OP + UG	131.0	3.5	33.3	4.4	0.019

Ved å vurdere hele malmkroppen uten av å hensyn til valg av brytningsmetode indikerer rapporten følgende mineralisering i hele Ørtfjellområdet (tabell 2)

Tabell 2: "Using the full classified model, with all mined material filtered out, the Ørtfjell deposit contains the Mineral Resources quoted. This is not considered the final Mineral Resource Statement, but rather an indication of the total classified material at the Ørtfjell deposit"

	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Measured	120.0	3.5	33.6	4.5	0.018
Indicated	232.6	3.5	33.4	4.4	0.021
Sub-Total	352.3	3.5	33.5	4.5	0.020

Det pågående arbeidet og neste rapport omhandler områdene Steinsundstjern og Ørtvann og ventes å bli ferdigstilt i løpet av første halvår 2020.

Internt har selskapet klassifisert områder med pågående og planlagt underjords og dagsbruddsdrift som reserver. Ved utgangen av 2019 var gjenstående tonnasje beregnet (Tabell 3)

Tabell 3: Reserver i pågående og planlagte gruver i Kvannevannsområdet:

Deposit	Mining Method	Million Tonnes
N155 Kvannevann	Sub Level Caving	4.1
N123 Kvannevann	Sub Level Caving	10.5
Kvannevann Øst	Open Pit	9.6
Erik 3 / Nordmalm	Open Pit	2.8

Av de resterende ressursene som befinner seg nært dagens infrastruktur er det kun nivå 123 som krever betydelige investeringer for å kunne realiseres. Investeringen i dette gruveområdet ble startet i 2019 og ventes pågå til et stykke ut i 2021.



Statsautoriserte revisorer Ernst & Young AS

Strandgata 31, NO-8400 Sortland Postboks 286, NO-8401 Sortland Foretaksregisteret: NO 976 389 387 MVA Tlf: +47 24 00 24 00

www.ey.no Medlemmer av Den norske revisorforening

#### UAVHENGIG REVISORS BERETNING

Til styret i Rana Gruber AS

#### Konklusjon

Vi har revidert konsernregnskapet for Rana Gruber AS for 2019 og 2018 som består av balanse per 31. desember 2019 og 31. desember 2018, resultatregnskap, oppstilling av endringer i egenkapital og kontantstrømoppstilling for årene avsluttet per disse datoene, og en beskrivelse av vesentlige anvendte regnskapsprinsipper og andre noteopplysninger.

Etter vår mening er konsernregnskapet avgitt i samsvar med lov og forskrifter og gir et rettvisende bilde av selskapets og konsernets finansielle stilling per 31. desember 2019 og 31. desember 2018, og av deres resultater og kontantstrømmer for årene avsluttet per disse datoene i samsvar med regnskapslovens regler og god regnskapsskikk i Norge.

#### Grunnlag for konklusjonen

Vi har gjennomført revisjonen i samsvar med lov, forskrift og god revisjonsskikk i Norge, herunder de internasjonale revisjonsstandardene (ISA-ene). Våre oppgaver og plikter i henhold til disse standardene er beskrevet i avsnittet *Revisors oppgaver og plikter ved revisjonen av konsernregnskapet*. Vi er uavhengige av selskapet og konsernet i samsvar med de relevante etiske kravene i Norge knyttet til revisjon slik det kreves i lov og forskrift. Vi har også overholdt våre øvrige etiske forpliktelser i samsvar med disse kravene. Etter vår oppfatning er innhentet revisjonsbevis tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon.

#### Ledelsens ansvar for konsernregnskapet

Ledelsen er ansvarlig for å utarbeide konsernregnskapet i samsvar med lov og forskrifter, herunder for at det gir et rettvisende bilde i samsvar med regnskapslovens regler og god regnskapsskikk i Norge. Ledelsen er også ansvarlig for slik intern kontroll som den finner nødvendig for å kunne utarbeide et konsernregnskap som ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller feil.

Ved utarbeidelsen av konsernregnskapet må ledelsen ta standpunkt til selskapets evne til fortsatt drift og opplyse om forhold av betydning for fortsatt drift. Forutsetningen om fortsatt drift skal legges til grunn for konsernregnskapet med mindre ledelsen enten har til hensikt å avvikle eller legge ned virksomheten, eller ikke har noe annet realistisk alternativ.

#### Revisors oppgaver og plikter ved revisjonen av konsernregnskapet

Vårt mål er å oppnå betryggende sikkerhet for at konsernregnskapet som helhet ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller feil, og å avgi en revisjonsberetning som inneholder vår konklusjon. Betryggende sikkerhet er en høy grad av sikkerhet, men ingen garanti for at en revisjon utført i samsvar med lov, forskrift og god revisjonsskikk i Norge, herunder ISA-ene, alltid vil avdekke vesentlig feilinformasjon. Feilinformasjon kan skyldes misligheter eller feil og er å anse som vesentlig dersom den enkeltvis eller samlet med rimelighet kan forventes å påvirke de økonomiske beslutningene som brukerne foretar på grunnlag av konsernregnskapet.

Som del av en revisjon i samsvar med lov, forskrift og god revisjonsskikk i Norge, herunder ISA-ene, utøver vi profesjonelt skjønn og utviser profesjonell skepsis gjennom hele revisjonen. I tillegg

identifiserer og anslår vi risikoen for vesentlig feilinformasjon i konsernregnskapet, enten det skyldes misligheter eller feil. Vi utformer og gjennomfører revisjonshandlinger for å håndtere slike risikoer, og innhenter revisjonsbevis som er tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon. Risikoen for at vesentlig feilinformasjon som følge av misligheter ikke blir avdekket, er høyere enn for feilinformasjon som skyldes feil,



siden misligheter kan innebære samarbeid, forfalskning, bevisste utelatelser, uriktige fremstillinger eller overstyring av intern kontroll;

- opparbeider vi oss en forståelse av den interne kontrollen som er relevant for revisjonen, for å utforme revisjonshandlinger som er hensiktsmessige etter omstendighetene, men ikke for å gi uttrykk for en mening om effektiviteten av selskapets interne kontroll;
- vurderer vi om de anvendte regnskapsprinsippene er hensiktsmessige og om regnskapsestimatene og tilhørende noteopplysninger utarbeidet av ledelsen er rimelige;
- konkluderer vi på om ledelsens bruk av fortsatt drift-forutsetningen er hensiktsmessig, og, basert på innhentede revisjonsbevis, hvorvidt det foreligger vesentlig usikkerhet knyttet til hendelser eller forhold som kan skape betydelig tvil om selskapets evne til fortsatt drift. Dersom vi konkluderer med at det foreligger vesentlig usikkerhet, kreves det at vi i revisjonsberetningen henleder oppmerksomheten på tilleggsopplysningene i konsernregnskapet. Hvis slike tilleggsopplysninger ikke er tilstrekkelige, må vi modifisere vår konklusjon. Våre konklusjoner er basert på revisjonsbevis innhentet frem til datoen for revisjonsberetningen. Etterfølgende hendelser eller forhold kan imidlertid medføre at selskapets evne til fortsatt drift ikke lenger er til stede;
- vurderer vi den samlede presentasjonen, strukturen og innholdet i konsernregnskapet, inkludert tilleggsopplysningene, og hvorvidt konsernregnskapet gir uttrykk for de underliggende transaksjonene og hendelsene på en måte som gir et rettvisende bilde;
- innhenter vi tilstrekkelig og hensiktsmessig revisjonsbevis vedrørende den finansielle informasjonen til enhetene eller forretningsområdene i konsernet for å kunne gi uttrykk for en mening om konsernregnskapet. Vi er ansvarlige for å fastsette strategien for, samt å følge opp og gjennomføre konsernrevisjonen, og vi har et udelt ansvar for konklusjonen på revisjonen av konsernregnskapet.

Vi kommuniserer med styret blant annet om det planlagte omfanget av revisjonen, tidspunktet for vårt revisjonsarbeid og eventuelle vesentlige funn i vår revisjon, herunder vesentlige svakheter i den interne kontrollen som vi avdekker gjennom vårt arbeid.

Tromsø, 12. november 2020 ERNST & YOUNG AS

Revisjonsberetningen er signert elektronisk

Kai Astor Frøseth statsautorisert revisor

2

## ΡΕΠΠΞΟ

Signaturene i dette dokumentet er juridisk bindende. Dokument signert med "Penneo™ - sikker digital signatur". De signerende parter sin identitet er registrert, og er listet nedenfor.

"Med min signatur bekrefter jeg alle datoer og innholdet i dette dokument."

Kai Astor Frøseth Oppdragsansvarlig partner Serienummer: 9578-5997-4-38773 IP: 37.200.xxx.xxx 2020-11-12 12:40:12Z



Kai Astor Frøseth Statsautorisert revisor Serienummer: 9578-5997-4-38773 IP: 37.200.xxx.xxx 2020-11-12 12:40:12Z



**Kai Astor Frøseth** Partner Serienummer: 9578-5997-4-38773 IP: 37.200.xxx.xxx 2020-11-12 12:40:12Z

I=I bankID 💸

Dokumentet er signert digitalt, med **Penneo.com**. Alle digitale signatur-data i dokumentet er sikret og validert av den datamaskin-utregnede hash-verdien av det opprinnelige dokument. Dokumentet er låst og tids-stemplet med et sertifikat fra en betrodd tredjepart. All kryptografisk bevis er integrert i denne PDF, for fremtidig validering (hvis nødvendig).

Hvordan bekrefter at dette dokumentet er orginalen?

Dokumentet er beskyttet av ett Adobe CDS sertifikat. Når du åpner dokumentet i

Adobe Reader, skal du kunne se at dokumentet er sertifisert av **Penneo e-signature service <penneo@penneo.com>**. Dette garanterer at innholdet i dokumentet ikke har blitt endret.

Det er lett å kontrollere de kryptografiske beviser som er lokalisert inne i dokumentet, med Penneo validator - **https://penneo.com/validate** 



# ÅRSBERETNING 2018



#### Virksomhetens art

Rana Gruber-gruppen består av morselskapet Rana Gruber AS med datterselskapet Rana Gruber Mineral AS. Rana Gruber AS eies i sin helhet av LNS Mining AS. Rana Gruber AS produserer og selger jernmalmkonsentrater til stålverk og en del andre anvendelsesområder. Mer enn 95% av produktmengden eksporteres; det meste til europeiske kjøpere. Malmproduksjonen skjer som underjordsdrift i Ørtfjell, men betydelige mengder dagbruddmalm tas også ut fra det samme området.

RG Mineral AS driver produksjon og salg av mikroniserte jernoksyder, og annen videreforedling av jernmalm. Også her er minst 95-97% eksportrettet, til de samme markedsområder. Enhetene har virksomheten lokalisert til Rana.

#### Fortsatt drift og hendelser etter balansedag:

Forutsetningen for fortsatt drift i Rana Gruber er til stede, og årsoppgjøret er avlagt under den forutsetningen. Det satses på langsiktig utvikling av gruvedriften og malmprosesseringen.

Som følge av stigende jernmalmpriser og iverksatte effektiviseringstiltak, forventer Rana Gruber positiv resultatutvikling og en positiv kontantstrøm fra driften i 2019. Med bakgrunn i dette er utsatt skattefordel tatt inn som eiendel i balansen.

Rana Gruber har på lik linje med øvrige selskaper i LNS konsernet avgitt en krysspant ovenfor konsernets hovedbankforbindelse, som ved mislighold hos et eller flere selskaper vil kunne påvirke selskapets finansielle stilling. Utover egen gjeld hefter selskapet per 28 februar 2019 for 248 MNOK gjennom krysspant for gjeld i andre selskaper i konsernet.

I løpet av 2018 er Rana Grubers investering i Greenland Ruby blitt løftet ut av selskapet og inn i morselskapet, LNS Mining.

#### Personale og arbeidsmiljø

Selskapet hadde i 2018 254 faste ansatte og 12 lærlinger, tilsvarende 249 årsverk.

Det er foretatt en større omorganisering og omdisponering av kompetanse, som følge av innføring av Lean Mining. Det er først og fremt på ledernivå og dessuten knyttet til Oppredningsverket at endringene har skjedd, med noen nødvendige erstatninger på grunnstillinger som følge av dette. Det er samtidig holdt vakanser iblant annet i underjordsgruva for å sikre rett bemanning iht. til produksjonstakt.

Sykefraværsstatistikken har økt noe siden 2017, Sykefraværet i konsernet var på totalt 5,9 % i 2018, mot 4,3% i 2017. Langtidssyke over 16 dager utgjorde 2,7 %, mot 1,8 % i 2016.

Det er gjennomført seniortiltak mot 9 ansatte, som alle har fått redusert stillingsandel. Ingen som har søkt om redusert stilling har fått avslag.

Arbeidet med å forebygge sykefravær og skader er strategisk viktig for selskapet. Det gis tett oppfølging av de ansatte ved uønskede hendelser og man vil øke fokuset på evt. tilrettelegging for å nå selskapets målsetninger i tiden fremover. Det jobbes også målrettet for stadig å forbedre sikkerheten i bedriften i form av holdninger og opplæring.

Det ble rapportert fire arbeidsskader med fravær i løpet av året som gir et H-tall på 9,8 ved utgangen av 2018. Skadene er interngransket og avviksbehandlet i henhold til våre rutiner og skade- og fraværsutviklingen har vært behandlet i Arbeidsmiljøutvalget. Skader har ikke vært alvorlige eller gitt langvarig fravær, men de bidrar dessverre til at målsetningen for H-tall ikke nås i 2018.



#### Likestilling mv.

Av totalt 254 fast ansatte i konsernet er 41 kvinner. Av fem ledere på nivå under administrerende direktør er to kvinner. Det er dessuten ytterligere fire kvinnelige ledere i linjen.

Selskapet har som policy at det ikke skal forekomme forskjellsbehandling grunnet kjønn, etnisitet, religion, alder eller på annen måte.

Bedriftens lønnssystemer skiller ikke mellom kjønnene, og arbeidstidsbestemmelsene er like for begge kjønn. Bedriften har tatt tydelig standpunkt i #metoo-kampanjen, og dessuten tatt frem og belyst rutinene for varsling.

Bedriften arbeider aktivt for å fremme likestilling, sikre like muligheter og rettigheter og hindre diskriminering. For å bidra til dette, har bedriften blant annet etablert rutiner for tilrettelegging av alternative arbeidsoppgaver i forbindelse med skader og langtids sykefravær.

#### Ytre miljø

Selskapet har en utslippstillatelse fra 2012 (rev. 06.2015) der rammevilkår for uttak av malm fra egen gruve er på 4,5 millioner tonn og importert malm på 85 000 tonn. Med utgangspunkt i rammevilkårene har selskapet utslippsbegrensninger både til vann og luft. Selskapet gjør alltid sitt ytterste for å overholde grenseverdier i utslippstillatelse og andre forskriftskrav, og har gode rutiner for overvåking av utslipp for å sikre at negativ miljøpåvirkning til resipient og luft forhindres eller reduseres.

Selskapet samarbeider med annen bergindustri som har sjødeponi for i fellesskap å komme frem til de beste løsninger for deponering og kontroll av sjødeponi. Selskapet har også tett samarbeid med NIVA og Sintef Molab AS for å minimere selskapets fotavtrykk. Selskapet gjennomfører kildesortering av både næringsavfall og farlig avfall.

#### Forskning og utvikling (FoU)

Selskapet har siste år hatt gående FoUprosjekter tilknyttet videreforedling av våre volumprodukter, renseanlegg og bergsikring. Alle kostnader tilknyttet FoU kostnadsføres løpende. Selskapet har i perioden hatt tre skattefunn-prosjekter pågående. Prosjektene er knyttet til «økt utvinning gjennom prosessoptimalisering», «utvikle ny kjemisk renseprosess for rubiner» og «utvikling av overvåkningsmodell og optimal sikringsmetodikk i underjordsgruve». Total kostnadsramme for disse tre prosjektene er 27,4 MNOK.

#### Resultat og finansiell stilling

Omsetningen i Rana Gruber AS ble 758 MNOK i 2018. Dette er en oppgang i omsetningen på 45 MNOK fra 713 millioner for 2017.

Årsresultatet for 2018 ble 14,5 MNOK mot 56,3 MNOK i 2017.

Ved inngangen til 2018 fortsatte prisveksten vi så mot slutten av 2017 for jernkonsentrat. I andre og tredje kvartal svekket prisene seg, for å igjen styrke seg mot slutten av 2018

Etterspørselen etter bedriftens produkter er samtidig god, og vi selger alt vi produserer. I 2018 produserte og solgte Rana Gruber 1,75 millioner tonn jernkonsentrater. Dette er tett opp mot rekordåret i 2015 hvor det ble produsert rett i underkant av 1,8 millioner tonn.

Samlet malmproduksjon ble 4,9 millioner tonn i 2018. Produksjonen av malm har i 2018 skjedd fra nivå 187 og 155 i underjordsgruva samt Paulsen-, Eriksbruddet og Nordmalmen oppe i dagen. Totalt ble det produsert 1,9 millioner tonn i dagen. Samlet bergfangst gikk ned fra 4,7 millioner tonn i 2017 til 4,6 millioner tonn 2018

Det er produsert 2,9 millioner tonn malm under jord i 2018. 0,4 millioner tonn fra N187 og 2,5 millioner tonn fra N155.

Økte driftskostnader på 67 MNOK skyldes i stor grad økte driftskostnader som følge av



høyere kraftpriser og vannproblematikk i Kvannevann Øst. Det har også vært en reduksjon i lagerbeholdningen av malm og ferdigprodukter i perioden, som også bidrar til økte driftskostnader sammenlignet med 2017.

Selskapet har i 2018 videreført innføringen av LEAN Mining for å redusere sløsing og bidra til økt effektivitet i produksjonen. Det forventes at dette vil bidra til vesentlige besparelser i årene som kommer.

Med de økonomiske utsiktene i bransjen mener styret at de balanseførte verdiene i selskapet er tilstede for å sikre en tilfredsstillende avkastning på kapitalen.

#### Investeringer

Det er i 2018 investert totalt 41,9 MNOK i varige driftsmidler.

#### Finansiering

Selskapet har gjennomført en emisjon mot LNS Mining på 31,6 MNOK fordelt på tre transjer i løpet av året.

Netto gjeldsreduksjon av langsiktig gjeld og leasing gjeld er i 2018 på 45 MNOK, mot netto gjeldsreduksjon på 85 MNOK i 2017.

Selskapet har i løpet av året økt belastningen på kassakreditten med 30 MNOK. Selskapet vil i 2019 jobbe mot å redusere kassakreditten og styrke selskapets likviditet.

#### **Finansiell risiko**

Rana Gruber sin virksomhet innebærer risiko på mange områder. Risikostyring handler ikke om å fjerne risiko, men å ta riktig risiko utfra konsernets risikovilje og -evne, kompetanse, soliditet og utviklingsplaner. Hensikten med risikostyringen er å identifisere trusler og muligheter for selskapet, og å styre risiko mot et akseptabelt nivå slik at det gis rimelig sikkerhet for at selskapets målsetninger oppnås.

Styret i Rana Gruber har med bakgrunn i et helhetlig risikosyn fastsatt overordnede strategier for risikostyring og rammer for finansiell risiko for områdene valuta og råvarebinding. Vedtatt strategi og etterlevelse av denne er et pålagt vilkår for finansiering fra selskapets hovedbankforbindelse. Den overordnede risikotilnærming danner grunnlaget for etablering av rammer for konsernet sin styring av risiko for valuta- og råvarebinding for å redusere nedsiderisikoen i selskapets kontantstrøm fra salg av jernkonsentrat.

Selskapet har i sin finansiering mot hovedbank avgitt krysspant for gjeld til øvrige selskaper i LNSE-konsernet. Usikkerhet tilknyttet fortsatt drift, eventuelt mislighold i et eller flere av selskapene vil kunne påføre Rana Gruber en økt gjeldsbelastning. Selskapet har i tillegg avgitt en solidarisk selvskyldnerkausjon ovenfor Grønlandsbanken for Greenland Ruby selskapenes engasjement hos banken. Denne er avgitt sammen med LNSE, LNS og LNSS.

Selskapet har en fordring på holdingselskapet LNS Mining AS på 265,5 MNOK. LNS Mining AS har på sin side eksponering mot det deleide datterselskapet Greenland Ruby DK Aps med en investering bokført til en verdi på 260,7 MNOK. Ledelsen har vurdert fremtidsutsiktene og risikoen knyttet til investeringene konsernet har i Greenland Ruby Aps. Beregnet bruksverdi overstiger bokført verdi av netto driftsmidler i prosjektet og det er ikke identifisert behov for nedskrivning av anleggsmidlene i Greenland Ruby-konsernet. Det er gjort en sensitivitets analyse knyttet til diskonteringsrenten og «break-even» er på 26,75%. Vurderingen er derfor at fordringen selskapet har mot LNS Mining AS kan bokføres til nominell verdi.

Styret mener at årsregnskapet gir et riktig bilde av stillingen ved årsskiftet for Rana Gruber AS og konsernets eiendeler og gjeld, finansielle situasjon og resultat.

#### Disponeringer

Årets overskudd på kr 14,5 MNOK overføres til annen egenkapital. Ved utgangen av 2018 har selskapet en bokført egenkapital på MNOK 368. Dette utgjør 31,5% av selskapets totale kapital.



Leif Teksum, styreleder

Styreleder

Kristian A Adolfsen Styremedlem

ein Svein Abelsen

Svein Abelsen Styremedlem

Frode Nilsen

Styremedlem

C en in 11

Ricky Hogen Styremedlem Ansattrepresentant

Børge Nilsen

Børge Nilsen Styremedlem

lu In

Karl Edvin Rando Styremedlem Ansattrepresentant

0 MAD

Ole Fredrik Hienn

Styremedlem

Gunnar Moe Adm. dir

<u>Mo i Rana</u> 28 juni 2019



#### Resultatregnskap

Rana Gruber AS

(beløp i 1000 kr)	Noter	2018	2017
DRIFTSINNTEKTER			
Salgsinntekter	11	751 403	704 989
Andre driftsinntekter	11	9 085	8 383
SUM DRIFTSINNTEKTER		760 489	713 372
DRIFTSKOSTNADER			
Varekostnad		309 484	282 445
Beholdningsendring produkter	5	1 509	-28 679
Lønnskostnad	9/12	171 306	167 873
Avskrivninger	2	91 083	92 843
Andre driftskostnader	12b	124 388	116 121
SUM DRIFTSKOSTNADER		697 771	630 603
DRIFTSRESULTAT		<u>62 718</u>	82 769
FINANSIELLE POSTER			
Inntekt på invest.i datterselskap (kons.bidrag)		5 585	6 342
Andre finansinntekter	13	9 831	17 829
Finanskostnader	13	-57 882	-32 629
Netto finansposter		-42 466	-8 458
RESULTAT FØR EKSTRAORD. POSTER		20 252	74 311
RESULTAT FØR SKATT		20 252	74 311
Skattekostnad	10	5 670	18 028
ÅRSRESULTAT		<u> </u>	<u>56 283</u>
Opplysninger om overføringer:			
Mottatt konsernbidrag (100%)			260 720
Avgitt tingsutbytte (aksjene i GR 100%)			-260 720
Overført til/fra annen egenkapital		14 582	56 283
SUM OVERFØRINGER		<u>14 582</u>	<u>56 283</u>



Balanse	Rana Gruber AS			
beløp i 1000 kr)	Noter 31.12.18		31.12.17	
EIENDELER				
Immateriell eiendel (utsatt skattefordel)	1/10	5 327	10 996	
Gruveanlegg		167 345	204 451	
Tomter, bygninger og annen fast eiendom		11 546	12 223	
Maskiner og utstyr		169 206	180 490	
Driftsløsøre og inventar		4 451	5 273	
Sum varige driftsmidler	1/2	352 547	402 436	
nvesteringer i datter-/tilknyttede selskaper	3	2 901	267 620	
nvesteringer i andre aksjer og andeler	14	1 089	1 464	
Lån til konsernselskaper	6	342 776	9 609	
Annet ansvarlig lån	14	1 500	1 000	
Andre langsiktige fordringer	9	10 381	8 526	
Sum finansielle anleggsmidler		358 647	288 219	
SUM ANLEGGSMIDLER		<u> </u>	701 652	
Varer	5	256 549	288 832	
Kundefordringer	6/16	161 530	104 745	
Andre kortsiktige fordringer		24 863	48 900	
Fordring konsernbidrag	6/10	5 585	6 342	
Sum kortsiktige fordringer		191 978	159 987	
Bankinnskudd og andre likvider	15	7 075	6 854	
SUM OMLØPSMIDLER		<u>455 602</u>	455 672	
SUM EIENDELER		<u> </u>	1 157 324	
EGENKAPITAL OG GJELD				
Aksjekapital	8	9 348	8 717	
Overkurs		92 783	61 855	
kke innbetalt aksjekapital		-	31 559	
Sum innskutt egenkapital		102 131	102 131	
Annen egenkapital		265 926	251 344	
Sum opptjent egenkapital		265 926	251 344	
SUM EGENKAPITAL	7	368 057	<u>353 475</u>	
Utsatt skatt		-	-	
Finansiell leasing gjeld	4	59 708	73 366	
Gjeld til kredittinstitusjoner	4/15	331 847	366 316	
Annen langsiktig gjeld		7 290	4 438	
Sum langsiktig gjeld		398 845	444 120	
Betalbar skatt	10	-4 406	-3 472	
Gjeld til kredittinstitusjoner	6b/15	225 696	195 430	
Leverandørgjeld	6	138 194	98 525	
Skyldig offentlige avgifter		9 501	9 312	
Annen kortsiktig gjeld	6	36 235	59 934	
Sum kortsiktig gjeld		405 220	359 730	
SUM GJELD		<u> </u>	803 849	



## Kontantstrømsoppstilling

(beløp i 1000 kr)

## Rana Gruber AS

Kontantstrøm fra driften	2018	2017
Resultat før skatt	20 252	74 311
Innbetaling skattefunn	3 472	2 107
Gevinst ved salg varige driftsmidler	-1 072	-6 119
Avskrivninger	91 083	92 843
Nedskrivning av aksjer	3 999	52 045
Valutakursregulering langs gjeld	10 488	-6 862
Endring i varelagre	32 282	-23 293
Endring i kundefordringer og lev. gjeld	-17 117	9 123
Endring i andre tidsavgrensningsposter	-14 043	-8 907
Netto kontantstrøm fra driften	129 344	133 203
Kontantstrøm fra investeringer		
Salg av varige driftsmidler	1 786	9 410
Investeringer i varige driftsmidler	-41 907	-41 075
Salg av aksjer	-	4 250
Investeringer i TS og andre aksjer	-67 621	-61 035
Endring i andre investeringer	-2 355	-2 313
Netto kontantstrøm fra investeringer	-110 098	-90 764
Kontantstrøm fra finansiering		
Nedbetaling langsiktig gjeld og finans.leasing	-58 614	-91 003
Opptak ny langsiktig gjeld og finans.leasing	-30 014	12 515
Valutakursregulering langs gjeld	10 488	-6 862
Eliminering urealisrt val.kurstap. langs gjeld	-10 488	6 862
Endring kortsiktig gjeld (KKreditt)	30 266	-22 646
Endring i lån til konsernselskaper	-22 236	26 396
Innbetaling ny aksjekapital	31 559	31 559
Netto kontantstrøm fra finansiering	-19 025	-43 179
Sum kontantstrøm (endring i likvidbeholdning)	221	-740
Bankinnskudd og kontanter pr 01.01	6 854	7 594
Bankinnskudd og kontanter pr 31.12.	7 075	6 854
+Limit kassekreditt	240 000	205 000
Ubenyttet kassekreditt og innskudd (likv.reserve)	21 379	16 424



Leif Teksum, styreleder Styreleder

le Fredrik Hienn Styremedlem

Kristian A Adolfsen

Styremedlem

allin Hol Svein Abelsen Styremedlem

Frode Nilsen Styremedlem

d wee en Jac Ricky Hagen Styremedlem U Ansattrepresentant

6 Børge Nilsen

Styremedlem

Elm 2 Kru lu Karl Edvin Randa

Styremediem Ansattrepresentant

ma 0

Gunnar Moe Adm. dir

<u>Mo i Rana</u> 28 juni 2019



## **Rana Gruber AS**

Regnskapsprinsipper

Årsregnskapet er satt opp i samsvar med regnskapslov og god regnskapsskikk.

## Aksjer og andeler i datterselskaper

Datterselskaper er vurdert etter kostprismetoden i selskapsregnskapet. Aksjene balanseføres således til historisk kostpris i morselskapet.

Ved varig verdifall foretas nedskrivning av aksjene. Når konsernets tapsandel overstiger investeringen i et tilknyttet selskap, reduseres konsernets balanseførte verdi til null, og ytterligere tap regnskapsføres ikke med mindre konsernet har en forpliktelse til å dekke tapet.

Mottatt utbytte eller konsernbidrag resultatføres som finansinntekt hos morselskapet, og som resultatdisponering hos datterselskaper, og i samme regnskapsår hos mottaker og giver. Overstiger utbyttet/konsernbidraget andel av opptjent resultat etter anskaffelsestidspunktet, representerer den overskytende del tilbakebetaling av investert kapital, og fratrekkes investeringens verdi i morselskapets balanse.

## Salgsinntekter

Inntekter fra salg av varer resultatføres når levering har funnet sted og det vesentligste av risiko og avkastning er overført.

## Klassifisering og vurdering av balanseposter

Omløpsmidler og kortsiktig gjeld omfatter poster som forfaller til betaling innen ett år etter balansedagen, samt poster som knytter seg til varekretsløpet. Øvrige poster er klassifisert som anleggsmiddel/langsiktig gjeld.

Omløpsmidler vurderes til laveste av anskaffelseskost og virkelig verdi. Kortsiktig gjeld balanseføres til nominelt beløp på etableringstidspunktet. Anleggsmidler vurderes til anskaffelseskost, fratrukket av- og nedskrivninger, men nedskrives til virkelig verdi dersom verdifallet ikke forventes å være forbigående. Langsiktig gjeld balanseføres til nominelt beløp på etableringstidspunktet.

## Fordringer

Kundefordringer og andre fordringer er oppført i balansen til pålydende etter fradrag for avsetning til forventet tap. Avsetning til tap gjøres på grunnlag av individuelle vurderinger av de enkelte fordringene. I tillegg gjøres det for øvrige kundefordringer en uspesifisert avsetning for å dekke antatt tap.

## Varebeholdninger

Lager av forbruksmateriell er verdsatt til laveste av gjennomsnittlig anskaffelseskost og virkelig verdi. Egentilvirkede ferdigvarer og varer under tilvirkning er vurdert til laveste av full tilvirkningskost og salgsverdi. Netto salgsverdi er estimert salgspris ved ordinær drift fratrukket estimerte salgsomkostninger. Anskaffelseskost tilordnes ved bruk av FIFO-metoden, og inkluderer utgifter påløpt ved anskaffelse av varene og kostnader for å bringe varene til nåværende tilstand og plassering. Det foretas nedskrivning for påregnelig ukurans.



## Valuta

Utvikling i valutakurser innebærer både direkte og indirekte en økonomisk risiko for selskapet. Pengeposter i utenlandsk valuta er vurdert etter kursen ved regnskapsårets slutt. Selskapet har ved inngangen av 2014 endret prinsipp for regnskapsføring av valutasikringer. Urealiserte gevinster/tap balanseføres ikke. Realiserte gevinster/tap føres direkte over resultatregnskapet.

### Kortsiktige plasseringer

Kortsiktige plasseringer (aksjer og andeler vurdert som omløpsmidler) vurderes til laveste av kostpris og antatt virkelig verdi på balansedagen.

## Kontantstrømoppstilling

Kontantstrømoppstillingen er utarbeidet etter den indirekte metode. Kontanter og kontantekvivalenter omfatter kontanter, bankinnskudd og andre kortsiktige likvide plasseringer.

### Varige driftsmidler

Varige driftsmidler balanseføres og avskrives over driftsmidlets levetid dersom de har levetid over 3 år og har en kostpris som overstiger kr 15.000. Direkte vedlikehold av driftsmidler kostnadsføres løpende under driftskostnader, mens påkostninger eller forbedringer tillegges driftsmidlets kostpris og avskrives i takt med driftsmidlet.

#### Pensjoner

Selskapet har en ytelsesbasert pensjonsordning som vurderes til nåverdien av de fremtidige pensjonsytelser som regnskapsmessig ansees opptjent på balansedagen. Pensjonsmidler vurderes til virkelig verdi. Ved regnskapsføringen er lineær opptjeningsprofil og forventet sluttlønn som opptjeningsgrunnlag lagt til grunn.

Planendringer amortiseres over forventet gjenværende opptjeningstid. Det samme gjelder estimatavvik i den grad de overstiger 10 % av den største av pensjonsforpliktelsene og pensjonsmidlene (korridor).

## Skatt

Skatter kostnadsføres når de påløper, det vil si at skattekostnaden er knyttet til det regnskapsmessige resultat før skatt. Skattekostnaden i resultatregnskapet omfatter både periodens betalbare skatt (skatt på årets skattepliktige inntekt) og endring i utsatt skatt/skattefordel. Utsatt skatt/skattefordel er beregnet med 22 % på grunnlag av de midlertidige forskjeller mellom regnskapsmessige og skattemessige verdier, samt ligningsmessig underskudd til fremføring ved utgangen av regnskapsåret. Skatteøkende-/reduserende midlertidige forskjeller som reverserer eller kan reversere i samme periode er utlignet og nettoført. Utsatt skatt og utsatt skattefordel er presentert netto i balansen.

## Offentlige tilskudd

I 2018 har selskapet mottatt 3.5 mill.kr i tilskudd fra skattefunnordningen. Selskapet har fått innvilget skattefunntilskudd på 4,4 mill kr som er hensyntatt som skatterefusjon for 2018 (se note 10 skatt).



## Note 1 - Hendelser etter balansedagen-fortsatt drift-utsatt skattefordel

Rana Gruber AS forventer en positiv kontantstrøm fra driften i 2019 og videre framover, og har således tatt inn utsatt skattefordel som eiendel i balansen (se note 10 skatt).

Forutsetningen om fortsatt drift er lagt til grunn for regnskapet, jfr regnskapsloven §4-5.

I gjeldende finansieringsavtaler med konsernets hovedbankforbindelse har Rana Gruber AS stillet alle sine eiendeler som sikkerhet for all bankgjeld hos hovedbankforbindelsen. Hovedbankforbindelsen har også pant i 79,75% av aksjene i Rana Gruber AS. Hovedbankforbindelsen har fraveket enkelte av sine lånebetingelser ut kalenderåret 2019. Alle konsernselskaper betaler renter/avdrag i tråd med opprinnelig betalingsplan.

De fleste selskaper i konsernet forventes å generere positiv kontantstrøm i 2019. Det er imidlertid fortsatt behov for refinansiering av gjelden til konsernets hovedbankforbindelse. Dette kan resultere i salg av virksomheter eller andre strukturelle tiltak.

Rana Gruber AS	Gruve	Bygninger og tomter	Maskiner og anlegg	Driftsløsøre og inventar	Sum
	Giuve	og tointer	og unicag	og inventar	5411
Anskaffelseskost pr 01.01.18	538 359	42 706	608 847	46 860	1 236 772
Tilgang driftsmidler	7 167	1 019	33 139	582	41 907
Avgang driftsmidler			274	439	713
Anskaffelseskost pr 31.12.18	545 526	43 725	641 712	47 003	1 277 966
Akkumulerte avskrivninger 01.01.18	333 908	30 483	428 357	41 587	834 336
Årets avskrivninger	44 273	1 696	44 149	965	91 083
Akkumulerte avskrivninger 31.12.18	378 181	32 179	472 506	42 552	925 419
Balanseført verdi pr. 31.12.18	167 345	11 546	169 206	4 451	352 547
Årets leasekostnader av ikke balanseførte					
driftsmidler			929	405	1 334
Årets leiekostnader av ikke balanseførte					
driftsmidler			9 817	101	9 918

## Note 2 - Varige driftsmidler

I 2018 har selskapet øket betydelig andelen stormaskiner i gruve som leies direkte og ikke leases via finansieringselskap. Både morselskapet og konsernet benytter lineære avskrivninger for alle anleggsmidler. Økonomisk levetid er den samme for morselskapet og konsernet og er beregnet til henholdsvis (3-10 år), (7-10 år), (5-10 år), (5 år).



Firma	Anskaffelses- tidspunkt (stiftet-dato)	Forretnings- kontor	Eierandel	Stemmeandel	Balanseført verdi
Rana Gruber Mineral AS	28.12.98	Rana	100 %	100 %	2 900
Skaland Graphite	09.12.10	Skaland	34 %	34 %	1
Sum balanseført verdi					2 901

#### Note 3 - Investeringer i datterselskaper og tilknyttede selskaper

Restrukturering med tanke på salg av datterselskapet Skaland Graphite har gitt et behov for nedskrivning med nær 4 mill.kr i 2018. Aksjene i Gr.Ruby DK er i 2018 solgt til morselskapet LNS Mining AS til bokført verdi, med vederlag ved at Rana Gruber yter tilsvarende i lån.

## Note 4 - Langsiktig gjeld og leasing gjeld

	2018		2017		
	Langsiktig gjeld	Leasing gjeld	Langsiktig gjeld	Leasing gjeld	
Rentebærende gjeld 1.1.	366 316	73 366	441 493	83 538	
Nye lån og finansielle leasingavtaler	0	0	0	12 515	
Kursregulering valutalån	10 488		-6 862		
Ordinære låne- og leasingavdrag	-44 957	-13 658	-68 315	-22 687	
Rentebærende gjeld 31.12.	331 847	59 708	366 316	73 366	
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>Etter 2022</u>
Avdragsprofil langsiktig gjeld	45 000	254 233	22 900	9 675	-

Avdragsprofil leasing gjeld: lease av jernbanevogner er blitt refinansiert i 2018 og utgjør 55 mill. av leasesaldo ved årets utgang, denne vil nedbetales iflg plan med ca 4,6 mill.kr pr. år over 12 år. Gruvemaskiner utgjør øvrig del av leasegjeld, og ved hver maskinanskaffelse gjøres i økende grad vurdering om leie istedet for lease eller kjøp.

Tre langsiktige lån i USD, DKK og NOK har ballong med forfall i løpet av 2020. Faktisk beløp vil avhenge av kurs på forfalls/ refinansieringstidspunktet.



	2018	2017
Ferdig egentilvirkede varer (slig)	47 191	42 051
Varer under tilvirkning (malmlager)	2 240	8 890
Forberedende tilvirkning (åpning borort)	93 015	126 018
Nedskrivn.forber. tilvirkn. (åpning borort)	-	-
Forberedende tilvirkn (gråberg og langhullsboring )	110 451	108 221
Halvfabrikata (innkjøpt råslig)	-	-
Driftsmateriell og reservedeler	3 652	3 652
Sum	256 549	288 832

Lager av forbruksmateriell er verdsatt til laveste av gjennomsnittlig anskaffelseskost og virkelig verdi. Egentilvirkede ferdigvarer og varer under tilvirkning er vurdert til laveste av gjennomsnittlig tilvirkningskost og netto salgsverdi fratrukket estimerte salgsomkostninger. Åpning borort og gråbergbryting er forhåndskostnader som periodiseres i forhold til uttak malm fra aktuelt felt.



#### Note 6 – Poster i balansen som viser mellomværende med selskaper i samme konsern

	RG Miner	al AS	Leonh.Nilsen 8	& Sønner AS	LNS Greenl	and AS
Kortsiktige fordringer og gjeld	2018	2017	2018	2017	2018	2017
Kundefordringer	1 517	1 452	168	59	5 763	4 147
Andre korts.fordringer	3 419	3 030	2 243	2 243	4 025	-
Fordring konsernbidrag	5 585	6 342	-	-	-	-
Leverandørgjeld	-	-	92 043	69 994	-	-
Annen korts. gjeld	1 688	5 212				22 610
Netto (fordr - gjeld)	8 833	5 612	-89 632	-67 692	9 788	-18 463
	LNS Spitsbe	rgen AS	LNS Min	ing AS	Skaland Gr	aphite
Kortsiktige fordringer og gjeld	2018	2017	2018	2017	2018	2017
Kundefordringer					121	121
Andre korts.fordringer	2 243	2 243	3 559	31 559		
Annen korts. gjeld			15	14		
Netto (fordr - gjeld)	2 243	2 243	3 544	31 545	121	121
	LNS Eiende	om AS				
Kortsiktige fordringer og gjeld	2018	2017				
Annen kortsiktig gjeld	10 892	10 892				
Netto (fordr - gjeld)	-10 892	-10 892				
	LNS Gre	eenland AS	LNS Min	ing AS	Skaland Gr	aphite
Langsiktige fordringer	2018	2017	2018	2017	2018	2017
Lån til konsernselskaper	72 730	5 110	265 545	-	4 500	4 500
Netto (fordr - gjeld)	72 730	5 110	265 545	-	4 500	4 500

Selskapet har en fordring på holdingselskapet LNS Mining AS på 265,5 millioner kroner. LNS Mining AS har på sin side eksponering mot det deleide datterselskapet Greenland Ruby DK Aps med en investering bokført til en verdi på 260,7 millioner kroner. Ledelsen har vurdert fremtidsutsiktene og risikoen knyttet til investeringene konsernet har i Greenland Ruby Aps. Beregnet bruksverdi overstiger bokført verdi av netto driftsmidler i prosjektet og det er ikke identifisert behov for nedskrivning av anleggsmidlene i Greenland Ruby-konsernet. Det er gjort en sensitivitets analyse knyttet til diskonteringsrenten og «break-even» er på 26,75%. Vurderingen er derfor at fordringen selskapet har mot LNS Mining AS kan bokføres til nominell verdi.

#### Note 6b - Kortsiktig gjeld kredittinstitusjoner

Kortsiktig gjeld til kredittinstitusjoner er ordinær kassekredittgjeld.



## Note 7 - Egenkapital

Årets endring i egenkapital	Aksje- kapital	Vedtatt nyemisjon	Over- kurs	Annen egenkapital	Sum
Egenkapital pr 31.12 2017	8 717	31 559	61 855	251 344	353 475
Årets resultat				14 582	14 582
Ny aksjekapital	631	31 559	30 928		
Egenkapital pr 31.12 2018	9 348	-	92 783	265 926	368 057

#### Note 8 - Aksjekapital og aksjonærinformasjon

Rana Gruber AS	Antall	Pålydende	Balanseført
Aksjekapitalen består av (A-aksjer):	9 348	1000	9 348
Oversikt over aksjonærene pr 31.12.18:	Aksjer	Eierandel	Stemmeandel
Oversikt over aksjonærene pr 31.12.18: LNS Mining AS	<b>Aksjer</b> 9 348	Eierandel 100,0 %	Stemmeandel 100,0 %

Selskapets aksjekapital ble tidlig i 2018 øket med 631 aksjer, som representerte en innbetaling inklusive overkurs på 31,5 mill.kr.

I slutten av november 2017 overtok LNS Mining AS alle aksjer i Rana Gruber AS idet de tidligere aksjonærene overførte sine aksjer i Rana Gruber AS til LNS Mining AS. I slutten av desember 2017 ble vedtatt å gjøre en kapitaløkning i Rana Gruber AS ved en emisjon på 631 aksjer og 31,5 mill.kr rettet til LNS Mining AS. Denne ble innbetalt i mars 2018. Kurs ved aksjeoverdragelse og nyemisjon er satt lik den i 2 forutgående emisjoner.



## Note 9 - Pensjoner

Selskapet har en kollektiv ytelsespensjonsordning som ved årsskiftet omfattet 393 personer, hvorav 255 yrkesaktive, fordelt på Rana Gruber og RG Mineral. Ordningene gir rett til definerte fremtidige ytelser som i hovedsak er avhengig av antall opptjeningsår, lønnsnivå ved oppnådd pensjonsalder og størrelsen på ytelsene fra folketrygden. Pensjonsavtalen er finansiert ved oppbygging organisert i forsikringselskap.

Selskapet har også en usikret pensjonsforpliktelse knyttet til medlemskap i AFP-ordningen som finansieres over selskapets drift. Netto pensjonsmidler knyttet til kollektiv ordning er bokført som eiendel i balansen. Premier til selskapets AFP-ordning kostnadsføres løpende. Morselskapet er kontoholder for pensjonsordningen.

Pensjonskostnader koll.ordning og AFP	2018	2017
Nåverdi av årets pensjonsopptjening	4 556	5 006
Rentekostnad av pensjonsforpliktelsen	1 558	1 558
Avkastning på pensjonsmidler	2 532	1 913
Resultatført estimatavvik	626	658
Netto pensjonskostnader	4 208	5 308
+arbeidsgiveravgift	215	271
Sum pensjonskostnader	4 422	5 579
+ kostnader ny AFP	3 036	2 744
- resultatført i datterselskap RG Mineral	-612	-678
Sum pensjonskostnad	6 846	7 645

Utover dette har morselskapet kostnader på 593 vedr pensjon over 12G (180 i 2017); inkl et etterslep fra 2017 på 244

Balanseført pensjonsforpliktelse	2018	2017
Opptjente koll.pensjonsforpliktelser pr 31.12.	-73 211	-69 241
Pensjonsmidler (til markedsverdi) pr 31.12.	65 541	62 025
Periodiseringer av estimatavvik, endr pensj.planer	18 629	16 795
Netto pensjonsmidler (kollektiv ordning)	10 959	9 579
Pensjon over 12G pr 31.12.	-578	-1 053
Netto pensjonsforpliktelse (AFP)	-	-
Sum pensjonsmidler/-forpliktelse	10 381	8 526
Økonomiske forutsetninger:		
Diskonteringsrente	2,60 %	2,40 %
Forventet avkastning på pensjonsmidler	4,30 %	4,10 %
Forventet lønnsregulering	2,75 %	2,50 %
Forventet årlig G-regulering	2,50 %	2,25 %
Forventet vekst pensjoner u/utbetaling koll.	0,00 %	0,00 %

Beregningen av pensjonsforpliktelsene er foretatt av aktuar. De aktuarmessige forutsetningene er basert på vanlige benyttede forutsetninger innen forsikring når det gjelder demografiske faktorer og avgang.



Årets skattekostnad fordeler seg på:	2018	2017
Betalbar skatt	-	-
Endring utsatt skatt	5 427	17 550
Virkning av endring i skattesats	242	478
+redusert uts.skattefordel pga konsernbidrag		
Skatteavregning vedr tidligere år	-	
Sum resultatført skattekostnad	5 670	18 028
Beregning av årets skattegrunnlag:	2018	2017
Resultat før skattekostnad	20 252	74 311
Permanente forskjeller	3 345	-1 185
Endring i grunnlag for utsatt skatt	36 012	18 678
Skattegrunnlag før rentebegrensning	59 608	91 804
Avskjæring rentefradrag nærstående i år	20 650	19 874
Anvendelse fremført rentefradrag tidligere år	-20 707	-21 428
Skattegrunnlag før anvendelse fremførbart underskudd	59 551	90 250
Anvendelse fremførbarbart underskudd	-59 609	-91 804
Årets overskudd/underskudd	-57	-1 554
Beregnet skatt av grunnlag	-	-
Virkning av skattefunn	-4 406	-3 472
Betalbar skatt i balansen	-4 406	-3 472
Oversikt over midlertidige forskjeller:	2018	2017
Varige driftsmidler	68 192	73 365
Finansiell leasing	13 290	14 758
Forberedende tilvirkning (borort)	93 016	126 018
Varer	22 481	20 057
Fordringer	-80	-80
Gevinst- og tapskonto	2 592	3 240
Pensjonsmidler-/forpliktelser, nto	10 381	8 526
Netto midlertidige forskjeller	209 872	245 884
Underskudd til fremføring	-196 790	-256 342
Avskåret rentefradrag til fremføring	-37 295	-37 352
Sum m.t.forskjeller (grunnlag utsatt skatt)	-24 213	-47 810
Anvendt sats utsatt skatt/skattefordel	22 %	23 %
Utsatt skatt(+)/skattefordel(-) i balansen	-5 327	-10 996



#### Note 11 - Driftsinntekter

Salgsinntekter pr. virksomhetsområde	2018	2017
Jernmalmkonsentrater	747 145	694 572
Øvrige salgsinntekter	4 258	10 417
Sum salgsinntekter	751 403	704 989
herav: eksport (jernmalm og jernoksyder vesentlig EU-omr.)	746 023	693 666
innenlandssalg	5 380	11 323

I selskapets salgsinntekter inngår frakter med 4,6 mill.kr (3,2 mill.kr i 2017).

## Note 12 - Lønnskostnader, antall ansatte, godtgjørelser, lån til ansatte mm.

Det var 254 faste og 9 midlertidige ansatt pr 31.12.18, mot 248 faste og 8 midlertidige pr 31.12.17. Av de ansatte var 23 personer beskjeftiget i datterselskapet RG Mineral AS gjennom en utleieavtale. Antall lærlinger varierer, og var ved årsskiftet 12 personer (mot 11 forrige).

Lønnskostnader	2018	2017
Lønninger	153 155	147 877
Arbeidsgiveravgift	9 268	9 123
Overført lønn til prosjekt	-3 697	-1 766
Pensjonskost	7 439	7 825
Andre ytelser	5 141	4 815
Sum lønnskostnader	171 306	167 873
Ytelser til ledende personer	2018	2017
Lønn, daglig leder (nytiltrådte april 2017)	1 841	1 190
Pensjon, daglig leder	349	244
Forsikringer-sk.pliktig del, daglig leder	32	20
Fri tlf, daglig leder	4	4
Styrehonorar, kostnadsført	644	827
Revisorhonorar, kostnadsført ex.mva	697	797

## Note 12b - Andre driftskostnader

Overgang til leie av stormaskiner gir en negativ klasseforskjell i 2018, økt el.kraftpris gir det substansielt største negative avviket



## Note 13 - Poster som er slått sammen i regnskapet

Andre finansinntekter	2018	2017
Renteinntekt fra bank	25	17
Renteinntekt konsernselskaper	6 729	318
Annen finansinntekt (aksjegevinst 2017 mm)	961	7 398
Valutakursregulering konsernselskaper	2 116	284
Gevinst prissikring jernmalm	-	9 812
Sum andre finansinntekter	9 831	17 829

Finanskostnader	2018	2017
Rentekostnad og provisjon kassekreditt	5 129	6 366
Rentekostnad pantegjeld og finansiell leasing	18 581	18 434
Rentekostnader konsernselskaper	8 454	-
Annen finanskostnad	146	68
Nedskrivning finans.anleggsmidler (aksjer)	3 999	-
Valutakurstap	10 827	14 624
Valutakursregulering langsiktig gjeld	-732	-6 862
Tap prissikring jernmalm	11 478	-
Sum finanskostnader	57 882	32 629

## Note 14 - Investeringer i andre aksjer og andeler

Anleggsmidler	Eierandel	Anskaffelses- kost	Balanseført verdi	Markeds- verdi
Kunnskapsparken Helgeland	1,98 %	250	250	250
Polarsirkelen Lufthavnutvikling	5,3 %	100	100	
Vitensenter Nordland		100	100	100
Aksjer og andeler i andre selskaper		820	639	639
Sum aksjer og andeler i andre selskaper eiet av Rana Gruber AS		1 270	1 089	989



## Note 15 - Pant og garantier

	2018	2017
Bundne skattetrekksmidler	7 038	6 817
Bankgarantier	-	1 000
Pantesikret gjeld	617 251	635 111
som er sikret i panteobjekt med bokførte verdier:		
Kundefordringer	161 530	104 745
Varebeholdning	256 549	288 832
Driftsløsøre, maskiner og anlegg	173 656	185 763
Bygninger og annen fast eiendom	11 546	12 223
Gruveanlegg	167 345	204 451
Sum bokført verdi av panteobjekt	770 626	796 012
Eiendelene er også stillet som sikkerhet for ubenyttet kkreditt:	21 379	16 424

Selskapet Rana Gruber AS står som kontoholder overfor kredittyter i en felles kassekredittordning med datter-/konsernselskaper RGM og LNSM. Deres andel av saldo pr 31.12.18 var positiv med 1,7 mill.kr. I selskapets balanse føres dette som reduksjon i kassekredittgjeld og motpost kortsiktig konserngjeld. Konsernselskaper er solidarisk ansvarlig for kredittrammen på 240 mill.kr pr 31.12.18

## Note 16 - Valuta, finansiell markedsrisiko

### Prisrisiko

Svigninger i internasjonale jernmalmpriser medfører risiko for fremtidige salgspriser på Rana Grubers produkter. Prisene er svært volatile, og medfører dermed vesentlig resultatrisiko for konsernet.

Risikoen knyttet til salgsprisene på jernkonsentratene styres gjennom en kombinasjon av fysiske fastprisavtaler med kunder og finansielle swap-avtaler hvor en forhåndsselger jernmalm til en fastsatt pris. Swap-avtalene inngår i en sikringsportefølje, hvor det er fastsatt rammer for hvor stor andel av forventet produksjon som skal forhåndsselges, utover de volumer som er sikret gjennom fastprisavtaler med kundene direkte.

Pr 31.12.2018 har selskapet følgende finansielle sikringsposisjoner:

Terminkontrakter	Beløp	Månedlige	Valutakurs,	Urealisert tap
	(1000)	forfall i	gjennomsnitt	(1000)
Terminer for sikring av fremtidig salg	450 tonn	2019	USD 67,3	USD 590
Terminer for sikring av fremtidig salg	0 tonn	2020	-	-

## Valutarisiko

Rana Gruber er eksponert for svigninger i valutakursene EURNOK, USDNOK og GBPNOK da inntektene fra salg av selskapets produkter er priset i disse utenlandske valutaene. EURO-inntektene er i et slikt volum at det matcher kostnadene gruppen har til krafthandel, som også prises i EURO. Sikring av EURNOK foretas derfor kun ved enkeltstående transaksjoner av vesentlig betydning. Inntektene i GBPNOK er per i dag i et så lavt volum at det ikke foretas sikringer for dette valutaparet.

Alle salg av jernmalmkonsentrater til stålindustrien prises i USD. Hovedeksponeringen på valutasiden er derfor knyttet til USDNOK. For å dempe resultateffekten av svingninger i denne valutaen



forhåndsselger selskapet deler av forventet USD-inntekter for en periode på 2 år frem i tid. Alle valutaterminkontrakter og strukturerte derivater inngår i en styrevedtatt sikringsportefølje.

Terminkontrakter	Beløp (1000)	Månedlige forfall i	Valutakurs, gjennomsnitt	Urealisert tap (1000)
Terminer for sikring av fremtidig salg	USD 33 000	2019	8,2	-NOK 12 400
Terminer for sikring av fremtidig salg	USD 0	2020	-	-

Pr 31.12.2018 har selskapet følgende finansielle sikringsposisjoner:

Verdiendringer regnskapsføres ikke for finansielle instrumenter som holdes under regnskapsmessig sikring. Ved avleggelse av årsregnskapet har selskapet følgende finansielle instrumenter i utenlandsk valuta med verdiendring over resultat:

Gjeld		Beløp (1000)	Forfallsdato	Valutakurs, gjennomsnitt	Urealisert tap/gevinst (1000)
Langs.gjeld (swap fra NOK)	Endr.pr 2016	USD 25 100	2020		-NOK 68 500
Langs.gjeld (swap fra NOK)	Endr.2017	USD 23 500	2020	8,34	NOK 11 100
Langs.gjeld (swap fra NOK)	Endr.2018	USD 21 432	2020	8,13	-NOK 10 292
Langs.gjeld (swap fra NOK)	Endr.pr 2016	DKK 45 000	2020		-NOK 6 500
Langs.gjeld (swap fra NOK)	Endr.2017	DKK 38 850	2020	1,25	-NOK 4 300
Langs.gjeld (swap fra NOK)	Endr.2018	DKK 33 303	2020	1,29	-NOK 195

## Kraftprisrisiko

Kjøp av kraft er en av de viktigste innsatsfaktorene for produksjonen av jernkonsentrater. Svingningene i kraftpriser og produksjonsforbruk fører til resultatrisiko i Rana Gruber.

Risikoen knyttet til kjøp av kraft styres ved å inngå terminkontrakter hvor en forhåndskjøper kraft til en fastsatt pris. Terminkontraktene inngår i en sikringsportefølje, hvor det er fastsatt rammer for hvor stor andel av forventet forbruk (GWh) på et gitt fremtidig tidspunkt, som i dag kan være forhåndskjøpt. Sikringsporteføljen forhåndskjøpes på grunnlag av dette fortløpende for deler av forventet forbruk.

Administrasjonen og økonomiavdelingen følger opp den løpende risikoeksponeringen i forhold til styrevedtatte rammer. "

Alle finansielle avtaler er mot vår kraftleverandør og gjøres opp løpende som en del av det normale kraftkjøpet.

## Renterisiko

Rana Gruber har eksponering mot renterisiko, men da i all hovedsak eksponert gjennom rentebærende gjeld. Selskapet har i dag ingen vedtatt strategi for å dempe resultatsvingningene av denne eksponeringen, men ivaretar dette gjennom oppfølgingen av den daglige finansstyringen i administasjonen. Selskapet har i dag en renteswap-avtale på 100 MNOK over 10 år for å dempe effekten av svingninger i NIBOR-renten.

Pr 31.12.2018 har denne avtalen et urealisert tap på NOK (1000) 6 508 inkl påløpte renter på NOK 338.



## Note 17 - Malmressurser

Iron Pre Reserves	Proven Tonnage Grade To		Probable		Proven and Probable	
Deposit			Tonnage Grade Tonnage Grade		Grade	Tonnage
	kt	%				
Kvannevann N123	12 508	31,2 %			12 508	31,2 %
Kvannevann N155	7 426	31,7 %			7 426	31,7 %
Kvannevann East to bench 210	10 670	34,1 %			10 670	34,1 %
Steinsundtjern		33,0 %	31 443	33,0 %	31 443	33,0 %
	30 604	32,3 %	31 443	33,0 %	62 047	32,7 %

Selskapet har totalt 62,047 millioner tonn som vi klassifiserer som reserver. Dette er reserver som vi med høy grad av sikkerhet kan uttale oss om når det gjelder kvalitet og tonnasje. Av dette er 30,604 Millioner tonn knyttet til området vi i dag driver på. Steinsundtjern er et mulig nytt dagbrudd som ligger langt borte fra dagens infrastruktur, og det kreves en grundig planlegging av dette før man eventuelt kan sette dette i drift. Av de resterende ressursene som befinner seg nært dagens infrastruktur er det kun nivå 123 som krever betydelige investeringer for å kunne realiseres.

Iron Pre Reserves	Meas	Measured		Indicated		I	Inferred
Deposit	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage
	kt	%	kt	%	kt	%	kt
Steinsundtjern	11 543	34,8 %			11 543	34,8 %	
Finnkåteng	9 269	37,4 %			9 269	37,4 %	
Ørtvann			53 275	33,6 %	53 275	33,6 %	
Nord-Dunderland							46 868
Ørtfjell							343 999
	20 812	36,0 %	53 275	32,3 %	74 087	34,3 %	390 867

I tillegg til reserver som selskapet har, er det estimert ressurser på totalt 390,867 Millioner tonn i området hvor selskapet har konsesjon. Dette er ressurser som vi med mindre grad av sikkerhet kan si noe om, og som krever utfyllende kartlegging. Høsten 2018 ble det startet en prosess som skulle ende opp med en klassifisering av malmressurser og reserver i henhold til Jork-standard. Dette forventes ferdigstilt medio 2019 og vil da ha en mer nøyaktig oversikt over volum av våre ressurser, klassifisering av disse, samt en tredjepartsevaluering av malmkvalitet.



Statsautoriserte revisorer Ernst & Young AS

Strandgata 31, NO-8400 Sortland Postboks 286, NO-8401 Sortland Foretaksregisteret: NO 976 389 387 MVA Tlf: +47 24 00 24 00 Fax: www.ey.no Medlemmer av Den norske revisorforening

#### UAVHENGIG REVISORS BERETNING

Til generalforsamlingen i Rana Gruber AS

#### Uttalelse om revisjonen av årsregnskapet

#### Konklusjon

Vi har revidert årsregnskapet for Rana Gruber AS som består av balanse per 31. desember 2018, resultatregnskap og kontantstrømoppstilling for regnskapsåret avsluttet per denne datoen, og en beskrivelse av vesentlige anvendte regnskapsprinsipper og andre noteopplysninger.

Etter vår mening er årsregnskapet avgitt i samsvar med lov og forskrifter og gir et rettvisende bilde av selskapets finansielle stilling per 31. desember 2018, og av dets resultater og kontantstrømmer for regnskapsåret avsluttet per denne datoen i samsvar med regnskapslovens regler og god regnskapsskikk i Norge.

#### Grunnlag for konklusjonen

Vi har gjennomført revisjonen i samsvar med lov, forskrift og god revisjonsskikk i Norge, herunder de internasjonale revisjonsstandardene (ISA-ene). Våre oppgaver og plikter i henhold til disse standardene er beskrevet i avsnittet *Revisors oppgaver og plikter ved revisjonen av årsregnskapet*. Vi er uavhengige av selskapet i samsvar med de relevante etiske kravene i Norge knyttet til revisjon slik det kreves i lov og forskrift. Vi har også overholdt våre øvrige etiske forpliktelser i samsvar med disse kravene. Etter vår oppfatning er innhentet revisjonsbevis tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon.

#### Øvrig informasjon

Øvrig informasjon omfatter informasjon i selskapets årsrapport bortsett fra årsregnskapet og den tilhørende revisjonsberetningen. Styret og daglig leder (ledelsen) er ansvarlig for den øvrige informasjonen. Vår uttalelse om revisjonen av årsregnskapet dekker ikke den øvrige informasjonen, og vi attesterer ikke den øvrige informasjonen.

I forbindelse med revisjonen av årsregnskapet er det vår oppgave å lese den øvrige informasjonen med det formål å vurdere hvorvidt det foreligger vesentlig inkonsistens mellom den øvrige informasjonen og årsregnskapet eller kunnskap vi har opparbeidet oss under revisjonen, eller hvorvidt den tilsynelatende inneholder vesentlig feilinformasjon. Dersom vi konkluderer med at den øvrige informasjonen inneholder vesentlig feilinformasjon, er vi pålagt å rapportere det. Vi har ingenting å rapportere i så henseende.

#### Ledelsens ansvar for årsregnskapet

Ledelsen er ansvarlig for å utarbeide årsregnskapet i samsvar med lov og forskrifter, herunder for at det gir et rettvisende bilde i samsvar med regnskapslovens regler og god regnskapsskikk i Norge. Ledelsen er også ansvarlig for slik intern kontroll som den finner nødvendig for å kunne utarbeide et årsregnskap som ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller feil.

Ved utarbeidelsen av årsregnskapet må ledelsen ta standpunkt til selskapets evne til fortsatt drift og opplyse om forhold av betydning for fortsatt drift. Forutsetningen om fortsatt drift skal legges til grunn for årsregnskapet med mindre ledelsen enten har til hensikt å avvikle selskapet eller legge ned virksomheten, eller ikke har noe annet realistisk alternativ.

#### Revisors oppgaver og plikter ved revisjonen av årsregnskapet

Vårt mål er å oppnå betryggende sikkerhet for at årsregnskapet som helhet ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller feil, og å avgi en revisjonsberetning som inneholder vår konklusjon. Betryggende sikkerhet er en høy grad av sikkerhet, men ingen garanti for at en revisjon utført i samsvar med lov, forskrift og god revisjonsskikk i Norge, herunder ISA-ene, alltid vil avdekke vesentlig feilinformasjon. Feilinformasjon kan skyldes misligheter eller feil og er å anse som vesentlig



dersom den enkeltvis eller samlet med rimelighet kan forventes å påvirke de økonomiske beslutningene som brukerne foretar på grunnlag av årsregnskapet.

Som del av en revisjon i samsvar med lov, forskrift og god revisjonsskikk i Norge, herunder ISA-ene, utøver vi profesjonelt skjønn og utviser profesjonell skepsis gjennom hele revisjonen. I tillegg

- identifiserer og anslår vi risikoen for vesentlig feilinformasjon i årsregnskapet, enten det skyldes misligheter eller feil. Vi utformer og gjennomfører revisjonshandlinger for å håndtere slike risikoer, og innhenter revisjonsbevis som er tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon. Risikoen for at vesentlig feilinformasjon som følge av misligheter ikke blir avdekket, er høyere enn for feilinformasjon som skyldes feil, siden misligheter kan innebære samarbeid, forfalskning, bevisste utelatelser, uriktige fremstillinger eller overstyring av intern kontroll;
- opparbeider vi oss en forståelse av den interne kontrollen som er relevant for revisjonen, for å utforme revisjonshandlinger som er hensiktsmessige etter omstendighetene, men ikke for å gi uttrykk for en mening om effektiviteten av selskapets interne kontroll;
- vurderer vi om de anvendte regnskapsprinsippene er hensiktsmessige og om regnskapsestimatene og tilhørende noteopplysninger utarbeidet av ledelsen er rimelige;
- konkluderer vi på om ledelsens bruk av fortsatt drift-forutsetningen er hensiktsmessig, og, basert på innhentede revisjonsbevis, hvorvidt det foreligger vesentlig usikkerhet knyttet til hendelser eller forhold som kan skape betydelig tvil om selskapets evne til fortsatt drift. Dersom vi konkluderer med at det foreligger vesentlig usikkerhet, kreves det at vi i revisjonsberetningen henleder oppmerksomheten på tilleggsopplysningene i årsregnskapet. Hvis slike tilleggsopplysninger ikke er tilstrekkelige, må vi modifisere vår konklusjon. Våre konklusjoner er basert på revisjonsbevis innhentet frem til datoen for revisjonsberetningen. Etterfølgende hendelser eller forhold kan imidlertid medføre at selskapets evne til fortsatt drift ikke lenger er til stede;
- vurderer vi den samlede presentasjonen, strukturen og innholdet i årsregnskapet, inkludert tilleggsopplysningene, og hvorvidt årsregnskapet gir uttrykk for de underliggende transaksjonene og hendelsene på en måte som gir et rettvisende bilde.

Vi kommuniserer med styret blant annet om det planlagte omfanget av revisjonen, tidspunktet for vårt revisjonsarbeid og eventuelle vesentlige funn i vår revisjon, herunder vesentlige svakheter i den interne kontrollen som vi avdekker gjennom vårt arbeid.

#### Uttalelse om øvrige lovmessige krav

#### Konklusjon om årsberetningen

Basert på vår revisjon av årsregnskapet som beskrevet ovenfor, mener vi at opplysningene i årsberetningen om årsregnskapet, forutsetningen om fortsatt drift og forslaget til disponering av resultatet er konsistente med årsregnskapet og i samsvar med lov og forskrifter.

#### Konklusjon om registrering og dokumentasjon

Basert på vår revisjon av årsregnskapet som beskrevet ovenfor, og kontrollhandlinger vi har funnet nødvendige i henhold til internasjonal standard for attestasjonsoppdrag (ISAE) 3000 «Attestasjonsoppdrag som ikke er revisjon eller forenklet revisorkontroll av historisk finansiell informasjon», mener vi at ledelsen har oppfylt sin plikt til å sørge for ordentlig og oversiktlig registrering og dokumentasjon av selskapets regnskapsopplysninger i samsvar med lov og god bokføringsskikk i Norge.

28. juni 2019 ERNST & YOUNG AS

ai Arter Frankh

Kai Astor Frøseth statsautorisert revisor

Uavhengig revisors beretning - Rana Gruber AS

A member firm of Ernst & Young Global Limited





# Rana Gruber Q3 2020 interim report



## HOVEDPUNKTER TIL NÅ I 2020

Fjorårets tall i ()

- Rana Gruber-konsern omsetninger per 30.09 ble 863,8 MNOK (845 MNOK).
- Rapportert driftsresultat på 301,6 MNOK (252,5 MNOK)
- EBITDA på 409,9 MNOK (355 MNOK)
- Rana Gruber inngikk samarbeidsavtale med Cargill Metals and Minerals, som innebærer «Offtake agreement», «Sales and Marketing», og «Working capitals solutions». Denne avtalen har vist seg å være veldig verdifull for selskapet.
- COVID-19 har ikke per Q3 påvirket driften til Rana Gruber i vesentlig grad.
- Selskapet har hatt en netto gjeldsreduksjon på 197 MNOK i 2020
- Selskapet er i ferd med å ferdigstille nytt produksjonsnivå under jord, forventet ferdigstillelse Q1-21. Til nå i år er det investert 117,6 MNOK på nivå 123 og er tatt over kontantstrømmen.
- Helt i slutten av september ble området rammet av en 200-års flom, noe som medførte en produksjonsstans på 4-5 dager.

Produksjon og marked til nå i år:

- Malmproduksjon 3,8 millioner tonn (3,7)
- Produksjon konsentrat 1,16 (1,22)
- Solgt konsentrat 1,16 (1,25)
- Gjennomsnittlig markedspris 100,5 USD (95 USD)



## RANA GRUBER – INTRO

Rana Gruber-konsern består av morselskapet Rana Gruber AS med datterselskapet Rana Gruber Mineral AS. Rana Gruber AS produserer og selger jernmalmkonsentrater til stålverk og en del andre anvendelsesområder. Rana Gruber Mineral AS driver med produksjon og salg av mikroniserte jernoksyder, og annen videreforedling av jernmalm. Rana Gruber Mineral AS markedsføres under merkenavnet Colorana.

Rana Gruber-konsernet er lokalisert i Mo i Rana og tilnærmet all produksjon går til eksport.

Forekomsten Rana Gruber utvinner på har vært kjent i over 200 år. Selskapets gruveplaner omfatter 56 millioner tonn malm, og kjente ressurser utgjør 509 millioner tonn.

Selskapets totale produksjonskapasitet er om lag 5 millioner tonn malm og 1,8 millioner tonn ferdigprodukt (hematitt og magnetitt)

Personale og arbeidsmiljø

Rana Grubers visjon er å være en bærekraftig mineralprodusent i verdensklasse. Dette ønsker vi å oppnå gjennom sikkerhet for våre ansette, miljøansvar og kontinuerlig forbedring.

Konsernet utgjør per 30. september 261 fast ansatte. I tillegg har selskapet 12 lærlinger i løp.

Selskapets kvinneandel utgjør 20% av arbeidsstyrken. I selskapets ledergruppe er 3 av 7 medlemmer damer.

Arbeidet med å forebygge sykefravær og skader er strategisk viktig for selskapet. Det gis tett oppfølging av de ansatte ved uønskede hendelser og man jobber aktivt for å nå selskapets målsetning om lavere sykefravær og null skader.

## Miljø

Rana Gruber jobber aktivt for å minimere selskapets fotavtrykk og bidra til mer bærekraftige løsninger. Sammen med øvrig bergindustri i Norge samarbeider selskapet for å utvikle dagens og fremtidens løsninger for å komme frem til «best-in-class» løsninger for deponering og kontroll av avgangsmasser. Bedriften samarbeider tett med nasjonale, lokale og øvrige industribedrifter i Rana om luftovervåking i Rana og tiltaksovervåking av fjorden.

Selskapet er i kontinuerlig dialog med selskapets maskin- og utstyrsleverandører om å ta i bruk ny teknologi for å redusere selskapets CO<sub>2</sub>-avtrykk.

Forskning og utvikling (FoU) Rana Gruber satser aktivt på FoU for å kunne å maksimere utnyttelsen av forekomsten, både i økonomisk og bærekrafts-perspektiv. Dette krever økt kunnskap og kompetanse. FoU er derfor et strategisk viktig satsingsområde for Rana Gruber.

FoU er organisert i fagavdelingene Prosessteknologi og Geologi, med til sammen 9 ansatte. 3 av disse har Ph.D.-grad, i løpet av 2021 starter vi i tillegg en ny nærings Ph.D. FoU har også ansvar for laboratorievirksomheten og drifter et laboratorium med "State of the Art" utstyr og kompetanse.



## Finansiell utvikling

## Resultat

Styrking av prisen på selskapet hematittprodukter og svekkelse av den norske kronen bidrar til en solid finansiell utvikling for selskapet YTD20. Per Q3-20 omsatte Rana Gruber konsern for 863,8 MNOK (845 MNOK).

Selskapet leverer en EBITDA på 409,9 MNOK (355 MNOK). Økningen sammenlignet med samme periode i fjor skyldes i hovedsak økt realisert pris på hematittproduktene.

## Driftskostnader

Kontantkostnadene for selskapet økte med 6 MNOK sammenlignet med samme periode i 2019. Av dette er økte personalkostnader 8 MNOK og skyldes økt bruk av vikarer i forbindelse «føre vare» tiltak knyttet til COVID-19, og ekstra personell for å håndtere utkjøring av gråberg i forbindelse med etableringen av N123.

## Investeringer

YTD20 er det investert totalt 106 MNOK i varige driftsmidler, herunder 75,6 MNOK knyttet til etableringen av nivå 123. Det er og investert i ny lastemaskin UJ, et større pumpeanlegg i dagbruddet for vannhåndtering og nytt reservebånd i for knuser under jord.

I tillegg til 75,6 millioner knyttet til etableringen av N123 er det aktivert kostnader på NOK 42 millioner på borort som balanseføres under varer. Nivået 123 forventes ferdigstilt iløpet av Q1-21, mens produksjonen starter opp i Q4-20.

Alle investeringer YTD20, med unntatt av noen produksjonsmaskiner og utstyr som er leasing finansiert, er finansiert over kontantstrømmen.

## Finansielle sikringer

Selskapet har i perioden gått fra å ha en mekanisk sikringsstrategi, hvor en %-andel av salget frem i tid skulle sikres, til en mer åpen strategi hvor administrasjonen <u>kan</u> sikre opp til 50% av salget kommende kvartal.

Ved utgangen av Q3 mener selskapet det er mest hensiktsmessig, ut fra finansiell stilling og investeringsbehov fremover, å være eksponert i større grad mot spotmarkedet.

Per 30.09 har selskapet et finansielt tap på råvaresikringer på 93,5 MNOK i 2020. Gjenstående portefølje utgjør per 30.09 705.000 tonn med forfall i perioden Q4-20 til og med Q2-21. Porteføljen med forfall i Q4-20 utgjør 345.000 tonn.

## Finansiering

Netto gjeldsreduksjon av langsiktig gjeld og leasing gjeld per Q3-20 er på 27,6 MNOK, mot netto gjeldsreduksjon på 46,9 MNOK for hele 2019. Svekkelsen av den norske kronen i samme periode tilsvarer 11 MNOK i økte valutalån.

Selskapet har i løpet av året redusert belastningen på kassakreditten med 170 MNOK. Selskapet forventer ved utgangen av Q4-20 å ha en ubenyttet kassakreditt og en positiv kontantbeholdning.

## Utbytte

Selskapet har i perioden betalt ut utbytte på NOK 18 millioner knyttet til 2019-resultatet.

Ved utgangen av Q3 ble det utbetalt et ekstraordinært utbytte på NOK 96 millioner, som ble ført mot selskapets fordring mot morselskapet LNS Mining. Per 30.09.20 utgjør denne fordringen NOK 133 millioner. Denne forventes være nedbetalt i løpet av Q4-20.

Ved utgangen av Q3 har selskapet en bokført egenkapital på 378 MNOK. Dette utgjør 42% av selskapets totale kapital.



## HENDELSER TIL NÅ I ÅR

## Produksjon/drift

Samlet malmproduksjon per 30.09 er 3,8 mTonn, mot 3,7 mTonn på samme tid i 2019. Malmproduksjonen fordeler seg mellom underjordsgruve og dagbrudd. Underjordsgruven har levert malm fra områdene N187 og N155, og noe malm fra ortdriften på det nye N123. Tyngdepunktet for dagbruddsproduksjonen er Kvannevann Øst, men det har også vært produsert en del magnetittrik malm fra Eriksbruddet.

Dagbruddsproduksjonen har også fokusert på å klargjøre nytt produksjonsnivå i Kvannevann Øst. Dette har medført mye kjøring av gråberg, og dertil økt kontantkost for operasjonen.

Oppredningsverket har per 30.09 produsert 1.16 mTonn med ferdigprodukt, mot 1.22 mTonn på samme tid i fjor. Forskjellen skyldes fremst noe flere vedlikeholdsstanser i 2020, samt noe svakere jerninnhold i malmen

## Nivå 123

Etableringen av nytt produksjonsnivå under jord er godt i rute og forventes ferdigstillt Q1-21. Produksjonen fra nivået starter opp i Q4-20. I forbindelse med etableringen av N123 blir det parallelt kjørt testprosjekter på oppbygging av kjørebane for å redusere slitasje på maskiner og personell, og for å øke effektiviteten under jord.

Personale og arbeidsmiljø Selskapet hadde 261 faste ansatte og 12 lærlinger per 30.09.2020

Sykefraværet per 30.09.20 var 6,9 % for året, hvor 0,8 % av fraværet er som følge av «førevar-prinsippet» knyttet til COVID-19 situasjonen.

Det er rapportert to mindre arbeidsskader med fravær til nå i 2020. Begge skadene medførte et kortere sykefravær, og det er sørget for tilrettelagt arbeid for å sikre rask tilbakekomst i arbeid. Skadene er avviksbehandlet i henhold til våre rutiner og skade- og fraværsutviklingen har vært behandlet i Arbeidsmiljøutvalget.

## Covid-19

Så langt har ikke Covid rammet Rana Gruber i vesentlig grad. Noe økt sykefravær, som følge av at folk skal holde seg hjemme dersom de har symptomer, noe mange naturlig nok har hatt. Vi har vært svært nøye med å følge myndighetsråd på alle områder, noe de ansatte har vært lojale til.

Alle store sammenkomster, som Allmøter og sosiale sammenkomster er avlyst ut året. Møtevirksomheten er redusert til et minimum og i perioder har også de som har kunnet jobbe hjemmefra gjort det. Det har også vært tilnærmet stopp i reisevirksomhet i regi av bedriften. Smitte inn i skiftene vil kunne påvirke produksjonen negativt, spesielt i gruveorganisasjonen, derfor vies dette ekstra oppmerksomhet.

## Marked

Det europeiske stålmarkedet har vært svært svakt i hele år, men viser tegn til bedring. Vi har solgt alt vi har produsert, både av Hematitt og Magnetitt. Vi vurderer markedet til å være sterkt de kommende 6-12 mnd., med mange stimulansepakker som settes i drift og en langsom bedring av bilindustrien.

Prisene har gjennomgående vært høye i hele år – og signalene tilsier bra priser også fremover.

## Cargill

I Q2 inngikk selskapet en partnerskapsavtale med Cargill som sikrer off-take på all hematittproduksjon. Avtalen har også bidratt til å redusere arbeidskapitalbehovet i selskapet, og selskapet har siden inngåelsen av avtalen kvittert ned store deler av kassakreditttrekket. Avtalen med Cargill har vist seg å være svært verdifull for Rana Gruber, både økonomisk og markedsmessig. Vår største kunde har redusert sin produksjon vesentlig og som en følge av det har vi kunnet levere mindre enn det en full produksjon tilsier.



Cargill har solgt dette volumet til andre, en oppgave vi ikke hadde vært i stand til på egen hånd, på så kort varsel.

Avtalen innebærer også større fokus på produktkvalitet og arbeidet med å se på mulige forbedringsprosesser for å nå nye markeder frem i tid.

## Lean Mining

Prosessen med å bli en Lean bedrift fortsetter. Det har vært spesiell fokus på innføring av tavlemøter, kontinuerlig forbedringsarbeid og involvering. Det går fremover, kanskje litt saktere enn vi ønsker, men det viktigste er at vi gjør dette riktig. Det er satt ned en styringsgruppe som holder hånd i det daglige arbeidet, men alt er forankret helt til topps i bedriften.

Det er administrasjonens inntrykk at arbeidet er i ferd med å bære frukter og at målet om å bli en Lean bedrift er det eneste riktige med tanke på fremtiden. Involveringsprosessen blir stadig bedre, selv om det ennå er en vei å gå.

DocuSigned by: Morten Stører

42D6BAA3ADCC43C. Morten Støver Styreleder

DocuSigned by: Hary CFC7FB3BC9754A8..

Andreas Haugen Styremedlem

-DocuSigned by: N A0D425CD8676481..

Gunnar Moe Adm. dir

- DocuSigned by: Virihim A. Addynn - F9FCDEDB2A884B1...

Kristian A Adolfsen Styremedlem

> — DocuSigned by: Jolian Horrind — 440FDA416F2E4B4...

Johan Hovind Styremedlem

DocuSigned by: -3DE9058A8A3A426...

Frode Nilsen Styremedlem

DocuSigned by: dame () Stiam 07662C

Lasse O. Strøm Styremedlem



Børge Nilsen Styremedlem

DocuSigned by: Thomas Hammer 50AEABAEAA0846

Thomas Hammer Styremedlem

<u>Mo i Rana</u> 11. november 2020

Resultatregnska	ар			
			uber konsern	
(	N	Urevidert	Urevidert	2010
(beløp i 1000 kr)	Noter	2020	2019	2019
DRIFTSINNTEKTER		(01.jan-30.sep)	(01.jan-30.sep)	(01.jan-31.des)
Salgsinntekter	7	861 564	843 147	1 110 855
Andre driftsinntekter	7	2 242	2 240	9 936
SUM DRIFTSINNTEKTER		863 806	845 386	1 120 791
DRIFTSKOSTNADER				
Varekostnad		251 845	250 285	345 586
Beholdningsendring produkter		-25 026	18 020	38 997
Lønnskostnad		152 095	143 961	200 616
Avskrivninger	2	78 646	76 881	101 502
Andredriftskostnader		104 672	103 736	147 437
SUM DRIFTSKOSTNADER		562 231	592 883	834 137
DRIFTSRESULTAT		<u> </u>	252 503	286 654
FINANSIELLE POSTER				
Inntekt på invest.i datterselskap (kons.bidrag)				-
Andrefinansinntekter		6 586	6 219	8 475
Finanskostnader		-140 717	-180 146	-222 628
Netto finansposter		-134 132	-173 927	-214 153
RESULTAT FØR SKATT		<u> </u>	<u> </u>	72 501
Skattekostnad		36 982	17 310	15 536
RESULTAT FOR PERIODEN		<u> </u>	61 266	<u> </u>
Opplysning om disponering av resultat:				
Avgitt utbytte		-	-	18 000
Overført til/fra annen egenkapital		130 461	61 266	38 965
SUM DISPONERING		<u> </u>	61 266	<u> </u>

Balanseregnskap		Rana Grube Urevidert	r konsern
(beløp i 1000 kr)	Noter	30.09.20	31.12.1
EIENDELER			
Utsatt skattefordel			
Gruveanlegg	2	305 319	264 408
Tomter, bygninger og annen fast eiendom	2	11 371	12 527
Maskiner og utstyr	2	182 018	192 410
Driftsløsøre og inventar	2	3 095	4 274
Sum varige driftsmidler		501 803	473 619
Investeringer i datterselskaper		-	-
Investeringer i andre aksjer og andeler		2 021	1 678
Lån til konsernselskaper Annet ansvarlig lån		133 165 1 500	224 464
Andre langsiktige fordringer		14 456	1 500 11 475
Sum finansielle anleggsmidler		151 143	239 117
SUM ANLEGGSMIDLER		652 946	712 736
Varer		161 548	123 523
Kundefordringer		43 102	187 438
Andre kortsiktige fordringer		35 904	25 646
Fordring konsernbidrag		-	-
Sum kortsiktige fordringer		79 006	213 084
Bankinnskudd og andre likvider		6 545	9 648
SUM OMLØPSMIDLER		247 099	346 255
SUM EIENDELER		900 045	1 058 992
EGENKAPITAL OG GJELD			
Aksjekapital	5,6	9 348	9 348
Overkurs	5	92 783	92 783
Sum innskutt egenkapital		102 131	102 13
Annen egenkapital	5	276 558	242 09
Sum opptjent egenkapital		276 558	242 097
SUM EGENKAPITAL		<u> </u>	344 228
Utsatt skatt		10 843	10 843
Finansiell leasing gjeld	3	67 914	63 510
Gjeld til kredittinstitusjoner	3	249 103	281 146
Annen langsiktig gjeld Sum langsiktig gjeld		6 258	6 258 361 757
Betalbar skatt		334 118	
Gjeld til kredittinstitusjoner	4,8	-1 608 7 051	-1 608 177 089
Leverandørgjeld	4,0	115 954	100 352
Skyldig offentlige avgifter		7 179	10 755
Annen kortsiktig gjeld		21 680	26 24
Påløpt skatt av årets resultat		36 982	-
Kortsiktig gjeld konsernselskaper		-	22 178
Avsatt til utbytte		-	18 000
Sum kortsiktig gjeld		187 239	353 007
SUM GJELD		<u> </u>	714 764
SUM EGENKAPITAL OG GJELD		900 045	1 058 992

Kontantstrømsoppstilling
(beløp i 1000 kr)
Kontantstrøm fra driften
Resultat før skatt Innbetaling skattefunn

Rana Gruber konsern

(01.jan-30.sep) (01.jan-31.des)

2019

Urevidert

2020

Resultat før skatt	167 443	72 501
Innbetaling skattefunn	-	4 683
Gevinst ved salg varige driftsmidler	-2 627	-141
Avskrivninger	78 646	101 501
Nedskrivning aksjer	-	-
Valutakursregulering langs gjeld	-	2 232
Endring i varelagre	-38 025	55 495
Endring i kundefordringer og lev. gjeld	159 938	-59 551
Endring i andre tidsavgrensningsposter	-18 395	-11 883
Netto kontantstrøm fra driften	346 980	164 837
Kontantstrøm fra investeringer		
Salg av varige driftsmidler	2 627	2 471
Investeringer i varige driftsmidler	-106 830	-132 608
Salg av aksjer	-	1
Investeringer i TS og andre aksjer	-344	444
Endring i andre investeringer	-2 981	-1 094
Netto kontantstrøm fra investeringer	-107 528	-130 786
Kontantstrøm fra finansiering		
Nedbetaling langsiktig gjeld og finans.leasing	-40 324	-63 611
Opptak ny langsiktig gjeld og finans.leasing	12 685	14 480
Endring kortsiktig gjeld (KKreditt)	-170 037	-48 607
Endring i gjeld og mellomværende kons.selskaper	69 121	66 261
Utbytte (utbetalt)	-114 000	-
Innbetaling ny aksjekapital	-	-
Netto kontantstrøm fra finansiering	-242 555	-31 477
5		
Sum kontantstrøm (endring i likvidbeholdning)	-3 103	2 574
	-3 103	2 374
Bankinnskudd og kontanter ved periodens start	9 648	7 075
Bankinnskudd og kontanter ved periodens slutt	6 5 4 5	9 648
bankiniskuu oy kontanter veu periodens sidtt	0 545	7 040
+Ordinær limit kassekreditt	156 000	205 000
Ubenyttet kassekreditt og innskudd (likv.reserve)	155 494	37 559

Gunnar Moe Adm. dir

DocuSigned by: DocuSigned by: DocuSigned by: DocuSigned by: Windin A. Addyn Fordinh Morten Storer Børge Mlsen E13AD2075930440... F9FCDEDB2A884B1.. 42D6BAA3ADCC43C.. 3DE9058A8A3A426 Morten Støver Kristian A Adolfsen Børge Nilsen Frode Nilsen Styreleder Styremedlem Styremedlem Styremedlem DocuSigned by: DocuSigned by: -DocuSigned by: DocuSigned by: Наци \_\_\_\_\_СГС7FB3BC9754A8... Johan Howind Thomas Hammer dance () Stiam 440FDA416F2E4B4. 07662CB55A0F4 Andreas Haugen Johan Hovind Lasse O. Strøm Thomas Hammer Styremedlem Styremedlem Styremedlem Styremedlem DocuSigned by: N A0D425CD8676481.

<u>Mo i Rana</u> 11 november 2020

## Erklæring fra styret og administrerende direktør i Rana Gruber AS

Vi bekrefter at kvartalsregnskapet for perioden 1. januar til 30.september 2020, etter vår beste overbevisning, er utarbeidet i samsvar med regnskapslovens bestemmelser og god regnskapsskikk, og at opplysningene i regnskapet gir et rettvisende bilde av selskapets og konsernets eiendeler, gjeld, finansielle stilling og resultat som helhet.

Vi bekrefter at kvartalsberetningen gir en rettvisende oversikt over utviklingen, resultatet og stillingen til foretaket og konsernet, sammen med en beskrivelse av de mest sentrale risiko- og usikkerhetsfaktorer foretaket står ovenfor.

DocuSigned by: DocuSigned by: DocuSigned by DocuSigned by: Morten Stower ood Wh Børge Mlsen Windin A. Addyn 42D6BAA3ADCC43C... E13AD2075930440. F9FCDEDB2A884B1... 3DE9058A8A3A426 Morten Støver Kristian A Adolfsen Frode Nilsen Børge Nilsen Styremedlem Styremedlem Styreleder Styremedlem DocuSigned by: DocuSigned by: DocuSigned by: DocuSigned by: Parin Johan Howind Thomas Hammer darri () Stiam CFC7FB3BC9754A8. 440FDA416F2E4B4. 07662CB55A0F469. Andreas Haugen Johan Hovind Lasse O. Strøm Thomas Hammer Styremedlem Styremedlem Styremedlem Styremedlem DocuSigned by: 71 A0D425CD8676481. Gunnar Moe Adm. dir

<u>Mo i Rana</u> 11 november 2020

## Noter

## Note 1 - Regnskapsprinsipper

Det vises til konsernregnskap for 31.12.19 for prinsippnotene. De samme prinsippene er benyttet ved avleggelse av denne interimsrapporten.

Note 1Regnskapsrapporten er godkjent 11.11.2020. Presentasjonsvalutaen er norske kroner. Kvartalsrapporten er satt opp i samsvar med regnskapslov og god regnskapsskikk i Norge. Det presiseres at kvartalsrapporten er urevidert.

Virkningen av hvilke effekter COVID-19 er ventet å medføre for selskapet er vurdert. Ved avleggelse av kvartalsregnskapet har ikke koronautbruddet påvirket selskapet direkte. Basert på dagens situasjon så vurderer styret at COVID-19 ikke vil påvirke selskapets evne til fortsatt drift. Rana Gruber AS har hatt en positiv kontantstrøm fra driften i 2020 og forventer dette framover.

Rana Gruber konsern	Gruve	Bygninger og tomter	Maskiner og anlegg	Driftsløsør e og inventar	Sum
Anskaffelseskost pr 01.01.20	700 376	46 415	714 586	50 563	1 511 940
Tilgang driftsmidler (invest.)	75 624	2 568	27 155	1 483	106 830
Avgang driftsmidler	-	-	-	-	-
Anskaffelseskost pr 30.09.20	776 000	48 982	741 741	52 045	1 618 770
Akkumulerte avskrivninger 01.01.20	435 968	33 887	522 176	46 289	1 038 320
Balanseført verdi pr 01.01.20	264 408	12 528	192 411	4 274	473 619
Årets avskrivninger	34 714	3 724	37 547	2 661	78 647
Akkumulerte avskrivninger 30.09.20	470 682	37 612	559 723	48 951	1 116 967
Balanseført verdi pr. 30.09.20	305 319	11 371	182 018	3 095	501 803
Årets leasekostnader av ikke balanseførte driftsmidler			2 597	188	2 785
Årets leiekostnader av ikke balanseførte driftsmidler			11 171	145	11 316

## Note 2 - Varige driftsmidler

Både morselskapet og konsernet benytter lineære avskrivninger for alle anleggsmidler. Økonomisk levetid i selskapet er beregnet til: (3-10 år) (7-10 år) (5-10 år) (5 år)

## Note 3 - Langsiktig gjeld og leasing gjeld

	30.09.202	20	2019	
	Langsiktig gjeld	Leasing gjeld	Langsiktig gjeld	Leasing gjeld
Rentebærende gjeld 1.1.	281 146	63 510	331 847	59 708
Nye lån og finansielle leasingavtaler	0	12 685	0	14 479
Kursregulering valutalån	15 728		2 232	
Ordinære låne- og leasingavdrag	-47 771	-8 281	-52 933	-10 677
Rentebærende gjeld 30.09.	249 103	67 914	281 146	63 510
	<u>2020</u>	<u>2021</u>	<u>2022</u>	Etter 2022
Avdragsprofil langsiktig gjeld	63 487	60 258	125 358	-

Selskapet venter å ha på plass en avtale om refinansiering av langsiktig gjeld i løpet av 1.halvår-20.

Avdragsprofil leasing gjeld: lease av jernbanevogner utgjør 46 mill.kr av leasesaldo per 30.09.20, denne nedbetales i henhold til plan med ca. 4,6 mill.kr over 11 år. Gruvemaskiner utgjør øvrig del av leasegjeld, her overtar direkte leie en større andel.

På langsiktig gjeld løper en 10 års rentesikringsavtale på 100 mill.kr med utløp i 2021, til en fiksert rentesats av 3,86%.

## Note 4 - Kortsiktig gjeld kredittinstitusjoner

Kortsiktig gjeld til kredittinstitusjoner er ordinær kassekredittgjeld.

## Note 5 – Endringer i egenkapital

Periodens endring i _egenkapital	Aksjekapital	Emisjon	Overkurs	Annen EK	Sum
Egenkapital pr 31.12 2019	9 348	-	92 783	242 097	344 228
Periodens resultat	, 010		72,700	130 461	130 461
Avsatt ekstraordinært utbytte				-96 000	-96 000
Egenkapital pr 30.09 2020	9 348	-	92 783	276 558	378 689

Periodens endring i _egenkapital	Aksjekapital	Emisjon	Overkurs	Annen EK	Sum
Egenkapital pr 31.12 2018	9 348	-	92 783	265 926	368 057
Periodens resultat				61 266	61 266
Avsatt utbytte				-18 000	-18 000
Tingsutbytte				-71 912	-71 912
Egenkapital pr 30.09 2019	9 348	-	92 783	237 280	339 441

I 2019 ble det foretatt et ekstraordinært tingsutdeling på 71,9 mill.kr. til LNS Mining AS. Rana Gruber AS hadde en fordring på Greenland Ruby DK Aps som ble konvertert til aksjer som da ble delt ut til LNS Mining AS.

## Note 6 - Aksjekapital og aksjonærinformasjon

	Antall	Pålydende	Balanseført
Aksjekapitalen består av (A-aksjer):	9 348	1000	9 348
Oversikt over aksjonærene pr 30.09.20:	Aksjer	Eierandel	Stemmeandel
LNS Mining AS	9 348	100,0 %	100,0 %
Sum	9 348	100,0 %	100,0 %

## Note 7 – Driftsinntekter

Salgsinntekter pr. virksomhetsområde	30.09.2020	2019
Jernmalmkonsentrater	856 869	1 105 508
Øvrige salgsinntekter	4 695	5 347
Sum salgsinntekter	861 564	1 110 855
herav: eksport (jernmalm og jernoksyder vesentlig EU-omr.)	856 154	1 104 760
innenlandssalg	5 410	6 095

I selskapets salgsinntekter inngår frakter med 2,1mill.kr (6,7 mill.kr i 2019).

## Note 8 - Pant og garantier

	30.09.2020	2019
Bundne skattetrekksmidler	5 006	8 109
Bundet avsetning overfor dir for mineralforvaltning	1 503	1 503
Pantesikret gjeld	324 068	521 744
som er sikret i panteobjekt med bokførte verdier:		
Kundefordringer	43 102	187 438
Varebeholdning	161 548	123 523
Driftsløsøre, maskiner og anlegg	185 114	196 684
Bygninger og annen fast eiendom	11 371	12 527
Gruveanlegg	305 319	264 408
Sum bokført verdi av panteobjekt	706 453	784 580
Eiendelene er også stillet som sikkerhet for ubenyttet kkreditt:	148 949	27 910

Selskapet Rana Gruber AS står som kontoholder overfor kredittyter i en felles kassekredittordning med datterselskap Rana Gruber Mineral. Deres andel av saldo pr 30.09.20 var positiv med 3,6 mill.kr. I selskapets balanse føres dette som reduksjon i kassekredittgjeld og motpost korts. konsernfordring. Konsernselskaper er solidarisk ansvarlig for kredittrammen på 156 mill.kr pr 30.09.20

## Note 9 – Malmressurser

Selskapets malmresurser har tidligere vært klassifisert av interne ressurser på Geologi & Gruveplanavdelingen. I 2019 ble det igangsatt arbeid med å klassifisere resursene i henhold til internasjonale standarder, der den Kanadiske standarden "NI 43-101" ble valgt. Standarden krever bl.a. at resursestimatet utføres og signeres av en godkjente kvalifisert person uavhengig av Rana Gruber.

Baker Geological Services Ltd ble valgt som konsulent og arbeidet pågår fortsatt. Rapporten for hovedforekomsten i Kvannevann/Ørtfjell ble ferdig i Juni 2019. Resursestimatet fra denne rapporten er oppsummert i tabell 1

Classification Category	Mining Method	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Measured	Underground	75.9	3.5	33.7	3.7	0.020
Measured	Open Pit	10.0	3.4	32.7	6.6	0.007
Indicated	Open Pit	45.2	3.4	32.8	5.1	0.019
Sub-Total	OP + UG	131.0	3.5	33.3	4.4	0.019

Tabell 1: "Mineral Resource Statement at a 0% Fe\_Tot cut-off grade"

Baker Geological Services har fortsatt arbeidet med andre deler av malmresursen gjennom 2020, og en ny rapport ventes foreligge i løpet av november. Pr. september er det utarbeidet et draft som oppsummeres i tabell 2

Deposit	Classification	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Ørtfjell	Measured	116.7	3.5	33.6	4.5	0.02
Sub-Total - Measured		116.7	3.5	33.6	4.5	0.02
Ørtfjell	Indicated	230.1	3.5	33.4	4.5	0.02
Stensundtjern	Indicated	39.4	3.5	34.3	8.3	0.06
Finnkåteng	Indicated	6.8	3.5	36.2	4.8	0.03
Ørtvann	Indicated	29.0	3.4	32.8	20.4	0.23
Sub-Total - Indicated		305.3	3.5	33.5	6.5	0.04
Ørtfjell	Inferred	20.1	3.4	30.1	4.8	0.01
Stensundtjern	Inferred	1.4	3.5	35.1	4.3	0.04
Finnkåteng	Inferred	8.8	3.6	38.2	4.7	0.02
Ørtvann	Inferred	35.1	3.5	33.3	15.6	0.21
Nord Dunderland	Inferred	21.3	3.6	37.1	4.2	0.01
Sub-Total - Inferred		86.7	3.5	34.1	9.0	0.09

Tabell 2: "From Draft Report BGS151\_Rana\_Gruber\_xxxx2020"

Malmbasen vil da basert på dette utvides ytterligere ved endelig ferdig rapport

Selskapets interne rapportering på operative og gruver under planlegging baserer seg på den eksterne ressursrapporten og er pr. september oppsummert i tabell 3

Tabell 3: Reserver i pågående og planlagte gruver

FOREKOMST	GRUVEMETODE	Millioner tonn	Status
N155 Kvannevann	Underjordsdrift - Skiveras	1.9	l drift
Kvannevann Øst	Dagbrudd	9.6	I drift
Erik 3 / Nordmalm	Dagbrudd	2.8	I drift
N123 Kvannevann	Underjordsdrift - Skiveras	10.5	Under bygging
N91 Kvannevann	Underjordsdrift - Skiveras	10.9	Under planlegging
Steinsundstjern	Dagbrudd	25.0	Under planlegging

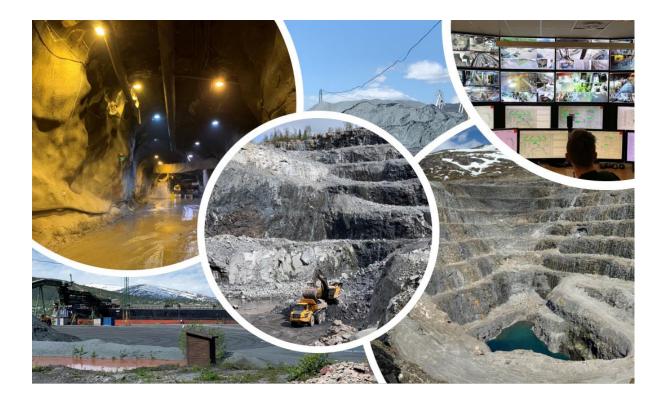
## Independent Mineral Resource Estimate for the Rana Gruber AS Iron Ore Deposits, Norway, June 2019.

REPORT PREPARED UNDER THE GUIDELINES OF NATIONAL INSTRUMENT 43-101 AND ACCOMPANYING DOCUMENTS 43-101.F1 AND 43-101.CP.

> Prepared for: Rana Gruber AS

# Report Prepared by: Baker Geological Services Ltd

June 2019



# TABLE OF CONTENTS

1	ΙΝΤ	RODUCTION	1
	1.1	Background	1
	1.2	Qualifications of Consultant	2
	1.3	Report Authors	2
2	RE	LIANCE ON OTHER EXPERTS	3
3	PR	OJECT DESCRIPTION AND LOCATION	3
	3.1	Project Location	3
	3.2	Norwegian Mineral Industry	4
	3.3	Mining Tenure	4
	3.4	Licence Agreements	5
	3.5	Operating License	3
4		CESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE A YSIOGRAPHY	
	4.1	Project Access	5
	4.2	Climate	5
	4.3	Physiography	6
5	HIS	STORY	8
	5.1	Area History	8
	5.2	Underground Development	9
	5.3	Historical Exploration	12
		5.3.1 Mapping	12
		5.3.2 Drilling	13
		5.3.3 Survey and deviation measurements	15
		5.3.3.1 Survey Risk	17
		5.3.3.2 Core Recovery	17
		5.3.4 Historical assays and QAQC	17
		5.3.5 QAQC Historical assays	18
	5.4	Previous Mineral Resource Estimates	18
		5.4.1 Historic Estimates	18
6	GE	OLOGICAL SETTING AND MINERALISATION	. 19
	6.1	Regional Geology and Tectonics	19
	6.2	Local Geology	20
		6.2.1 Schists	20
		M-Sch	20
		Bt-Sch	21
		6.2.2 Banded Iron-Formations	21
		6.2.3 Marbles	23
		6.2.4 Amphibolite (Amp)	24

		6.2.5 Ti	llite	. 24
		6.2.6 SC	GM log	. 24
	6.3	Mineralis	sation	. 25
		6.3.1 SC	GM Mineralisation and Alteration Review	. 27
		6.3.1.1	Banded Iron Formation	. 27
		6.3.1.2	Post-Banded Iron Formation alteration	. 27
		6.3.1.3	Magnetite	. 27
		6.3.1.4	Hematite	. 28
		6.3.1.5	Epidote	. 29
		6.3.1.6	Sericite	. 29
	6.4	Structure	9	. 29
		6.4.1 O	verview	. 29
		6.4.1.1	Ulrik Søvegjarto's Model	. 29
		6.4.1.2	Strain and Competency	. 31
		6.4.1.3	Alpha Angles	. 32
		6.4.1.4	Structural Measurements	. 33
		6.4.1.5	Foliation (schistosity)	. 34
		6.4.1.6	Folding & Lineation's	. 35
		6.4.1.7	Significant Structures	. 38
	6.5	Geology	Summary	. 38
		6.5.1 St	ratigraphy and mineralisation	. 38
		6.5.2 St	ructure	. 39
7	DE	POSIT	<b>TYPES</b>	40
8	EX	PLORA	TION	40
	8.1	Introduct	tion	. 40
	8.2	Geophys	sical Survey - 2012	. 41
			· · · · · · · · · · · · · · · · · · ·	
	8.4	Core Re	covery	. 42
	8.5	Drill Spa	cing	. 44
9	DR	ILLING	SUMMARY	47
			al Logging	
		-	nd Downhole Surveying	
10			PREPARATION, ANALYSIS AND SECURITY	
			Security	
			Preparation	
		•	g	
			]	
			,	
			vin Drilling	

	10.6 Re-assaying Project	61
	10.7 Density Testwork	
	10.8 Mining Production	
11	DATA VERIFICATION	71
	11.1 BGS Comment on Data Quality	71
12	MINERAL PROCESSING AND METALLURGICAL TESTING	72
13	MINERAL RESOURCE ESTIMATE	72
	13.1 Deposit Modelling	72
	13.2 Topography	
	13.3 Iron Formation	
	13.3.1 Geology Host Model	
	13.3.2Domains	
	13.3.3Modelling Summary	
	13.4 Statistical Analysis	
	13.4.1 Introduction	
	13.4.2Length Analysis	
	13.4.3Assay Count	
	13.4.4Absent Data Handling	
	13.4.5Assay Correlation – Fe_Tot and Fe_Mag	
	13.4.6Compositing	
	13.4.7Composite Length Analysis	
	13.4.8Composite Zone Statistics	
	13.4.9Density Analysis	
	13.5 Top Cutting	
	13.6 Geostatistical Study	
	13.6.1 Summary	
	13.6.2Quantitative Kriging Neighbourhood Analysis (QKNA)	
	13.6.2.1 QKNA Process	103
	13.6.3 Interpolation Parameters	
	13.7 Resource Estimation	106
	13.7.1 Block Model Parameters	
	13.7.2Search Ellipse Parameters and Dynamic Anisotropy	106
	13.7.3Grade Interpolation	
	13.7.4Blocks Filled	108
	13.7.5Blocks Model Validation	
	13.7.5.1 Visual Validation	109
	13.7.5.2 Global Mean Comparison	
	13.7.5.3 Swath Plots	
	13.7.5.4 Slope of Regression	

	13.8 Mine	Depletion and Sterilisation	
	13.9 Waste	e Dumps	
	13.10	Mineral Resource Classification	
	13.10	.1 CIM Definitions	
	13.10	.1.1 Mineral Resource	
	13.10	.1.2 Inferred Mineral Resource	118
	13.10	.1.3 Indicated Mineral Resource	
	13.10	.1.4 Measured Mineral Resource	
	13.11	Classification	120
	13.11	.1 Introduction	120
	13.11	.2 Geological Complexity	120
	13.11	.3 Quality of data used in the estimation	120
	13.11	.4 Results of the geostatistical study	121
	13.11	.5 Model Validation	121
	13.11	.6 Classification	121
	13.12	Exploitation Rights Boundary	123
	13.13	Global Classified Tonnage	123
	13.14	Mineral Resource Statement	126
	13.15	Grade Tonnage Curves	128
	13.16	Resource Potential	129
14	OTHER	RELEVANT DATA ANDE INFORMATION	130
	14.1 Block	Model Variables	130
15	INTERPI	RETATION AND CONCLUSIONS	131
16	RECOM	ENDATIONS	131
17	CERTIFI	САТЕ	135

# LIST OF FIGURES

Figure 3-1:	Location of the Dunderland valley deposits relative to Mo i Rana, Norway4
Figure 3-2:	Exploration and exploitation rights in the Dunderland valley, Rana Gruber AS (orange
	- exploration rights; lilac - exploitation rights). (Source: RG)2
Figure 3-3:	Operating licenses held by Rana Gruber in the Dunderland valley. (Source: RG)3
Figure 3-4:	Resource model within the exploitation rights boundary highlighting areas at Ørtfjell
<b>J</b> • • •	outside of the boundary (Source: BGS)4
Figure 4-1:	Mo i Rana Climate Data (Source http://www.mo-i-rana.climatemps.com/)
Figure 4-2:	View looking southeast from the abandoned Vesteråli pit. (Source: BGS)
Figure 5-1:	Production tonnage since 1958
	Longitudinal cross section (West - East) through the Kvannevann mine, Ørtfjell
Figure 5-2:	
	showing the abandoned sublevel stope mine with its 16 stopes and the underlying
	sublevel caving mine with levels 221(219), 187, 123 (Source: RG)10
Figure 5-3:	Layout of the production / extraction rings and blast holes (Source: RG)10
Figure 5-4:	Underground development of the Ørtfjell Kvannevann deposit (Source: BGS)11
Figure 5-5:	Historic and current open pit locations showing the underlying underground
	development (Source: BGS)11
Figure 5-6:	Geological map of the Dunderland iron ore formation (mapped and compiled by U.
-	Søvegjarto in the period between 1973 to 1986) (Source: RG)
Figure 5-7:	Geological map of the Ørtfjell iron ore deposit (mapped and compiled by U. Søvegjarto
<b>J</b> • • •	in the period 1973 to 1986 (Source: RG)13
Figure 5-8:	Drillholes completed between 1949 and 2018 (Source: RG / BGS)
Figure 6-1:	Regional Geology (Source: Ramberg et al. 2006)
Figure 6-2:	Schists and Marbles located outside of the Banded Iron Formations (Source: SGM) 22
Figure 6-3:	Banded iron formations and Amphibolite (Source: SGM)
•	
Figure 6-4:	SGM log of drillhole 921 (Source: SGM)
Figure 6-5:	(a) Sandy hematite ore, b) Flaky hematite ore (specularite ore) from the Kvannevann
<b>-</b> ;	ore body. (Source: RG)
Figure 6-6:	Two generations of hematite crystals, folded tabular and elongated hematite overgrown
	by a second generation of hematite (blue grain) along fold axis (Martinussen 2014).
	(Source: RG)
Figure 6-7:	BH75-2011, 153 m, Intervals rich in Mag clusters at schist - marble contact (Source:
	SGM)
Figure 6-8:	A magnetite crystal overprinting a hematite layer (Source: SGM)
Figure 6-9:	BH75-2011, 93.5 m. Enriched? Banded Iron Formation. (Source: SGM)
Figure 6-10:	Image from Ulrik's notes. (Source: SGM)
Figure 6-11:	Image from Ulrik's notes. (Source: SGM)
Figure 6-12:	Deformation differences due to competency contrast. (Source: SGM)
Figure 6-13:	Folded intervals of interbedded calcareous meta-sediments and schists. (Source:
0	SGM)
Figure 6-14:	Alpha angles of contacts (shown as green cones) measured along drillhole 1239 show
	a good fit with the mineralisation model. (Source: SGM)
Figure 6-15:	Alpha angles of contacts measured along BH 135-2012 fit the model well. (Source:
riguie o 15.	SGM)
Figure 6-16:	Stereograms with planar and linear data from Ørtfjell and Dunderland and stereograms
Figure 0-10.	5 I 5
<b>Figure C 17</b>	planar and linear data from central Ørtfjell. (Source: SGM)
Figure 6-17:	Axial planar cleavage in folded rocks
Figure 6-18:	Axial planar foliations are commonly found around folded competent intervals and
	lineation's are uncommon (Source: SGM)
Figure 6-19:	Pancaked "dropstones" in tillite? (Source: SGM)
Figure 6-20:	S-Tectonite (Source: SGM)
Figure 6-21:	Probable shear zone (Source: SGM)
Figure 6-22:	Periclinal folding with corresponding stereogram. Ulrik's fold axes shown in 3D shown
	in (top right). (Source: SGM)
Figure 6-23:	White disks are foliations and axial planar foliations (Source: SGM)40
Figure 8-1:	Flight lines for the 2012 airborne geophysical survey) (Source: RG)41
Figure 8-2:	Aeromagnetic results from 2012 airborne survey (Source: RG)
Figure 8-3:	Diamond Drilling completed by RG between 2009 and 2018 (Source: BGS)
Figure 8-4:	Example of drill core being packed tightly in some cases and loosely in others. Drill runs
	and depths are not recorded by drillers. As whole meters are marked per meter on
	and applied are not received by anilotor no whole motore are marked per motor of

	boxes, it seems unlikely that these number are accurate in the example above (Source	
	SGM)	
Figure 8-5:	Drillhole 106- Ort. Missing core is core loss (Source: SGM)	
Figure 8-6:	Plan view of Ørtfjell. Section spacing is generally 50m but there are exceptions such a	
	the 106m gap above (Source: SGM)4	
Figure 8-7:	Horizontal intercept spacing is generally 50m, although there can be large gaps i	
	vertical sections such as the 300m gap displayed above (Source: SGM)4	
Figure 10-1:	RG Core Saw (Source: BGS)4	9
Figure 10-2:	Histogram of sampling interval length. Note sampling interval over 70m (Source: BGS	3)
	5	0
Figure 10-3:	BH 257-2014, 263.3 m. Sampling was frequently observed to end prior to the end of	٥f
	mineralisation (Source: SGM)5	
Figure 10-4:	BH 64-2011, 224-237m shows a large interval of unsampled Banded Iron Formatio	n
-	(Source: SGM)	1
Figure 10-5:	Core Store (Source: BGS)5	5
Figure 10-6:	Sulphur analysis (Source: BGS)5	6
Figure 10-7:	Satmagan for Fe_Mag determination (Source: BGS)5	
Figure 10-8:	Fe_Tot titration in process (Source: BGS)	
Figure 10-9:	MnO analysis in process (Source: BGS)	9
Figure 10-10:	Location of twin drillholes at Stensundtjern. Red collars are the 2012 drillholes and th	e
	blue collars are the historic drillholes (Source: BGS)	
Figure 10-11:	Comparison of total Fe intercepts between twinned holes at Stensundtjern (Source	
	SGM)	
Figure 10-12:	Location of check samples	
Figure 10-13:	Historical Fe_Tot vs Modern Fe_Tot, R <sup>2</sup> -value of 0.9633 from 432 samples	
Figure 10-14:	Kvannevann open pit	
Figure 10-15:	Truck within the Kvannevann open pit	
Figure 10-16:	Mining in the Kvannevann open pit with the iron formation clearly visible in the pit wa	4 .II
Figure 10-10.	(Source: BGS)	5
Figure 10 17		
Figure 10-17:	Access to the underground operation at Kvannevann (Source: BGS)	
Figure 10-18:	Underground infrastructure and truck at Kvannevann (Source: BGS)	
Figure 10-19:	Ore crushing underground at Kvannevann (Source: BGS)	
Figure 10-20:	Train loading station underground at Kvannevann (Source: BGS)	
Figure 10-21:	Process plant control room (Source: BGS)	
Figure 10-22:	Process plant located in Mo i Rana (Source: BGS)	
Figure 10-23:	Concentrate being loaded on to a vessel at the Port in Mo i Rana (Source: BGS)7	
Figure 13-1:	Current Ørtfjell topographic surface (Source: BGS)	
Figure 13-2:	Original Ørtfjell topographic surface (yellow) and the waste dunps (blue) generated from	
	the current topographic surface (Source: BGS)	
Figure 13-3:	Histogram of all Fe_Tot data (Source: BGS)7	
Figure 13-4:	Cross section through Ortfjell West showing modelled units corresponding with a	
	approximate cut off of 20% Fe_Tot (Source: BGS)7	
Figure 13-5:	Cross section through Ortfjell East showing modelled units corresponding with a	
	approximate cut off of 20% Fe_Tot (Source: BGS)7	
Figure 13-6:	Location of RG Banded Iron Formation deposits (Source: BGS)7	
Figure 13-7:	Finnkåteng and Stensundtjern Banded Iron Formations (Source: BGS)7	7
Figure 13-8:	Cross section through the Finnkåteng and Stensundtjern Banded Iron Formation	IS
	(Source: BGS)	7
Figure 13-9:	Ørtvann Banded Iron Formation (Source: BGS)7	8
Figure 13-10:	Cross section through the Ørtvann Banded Iron Formation (Source: BGS)7	8
Figure 13-11:	Ørtfjell Banded Iron Formations (Source: BGS)7	
Figure 13-12:	Cross section through the Ørtfjell West Banded Iron Formation (Source: BGS)7	
Figure 13-13:	Cross section through the Ørtfjell East Banded Iron Formations (Source: BGS)8	
Figure 13-14:	Cross section through the Ørtfjell East, Kvannevann and Ørtfjell West Banded Iro	
J	Formation and additional Fe_Mag wireframe domaining. Green <0.7% Fe_Mag, orang	
	>0.7% Fe_Mag, red >5% Fe_Mag. (Source: BGS)	
Figure 13-15:	Cross section through Ørtfjell West (left) and Kvannevann (right). (Source: SGM)8	
Figure 13-16:	Kvannevann and Ortfjell East (Source: SGM)	
Figure 13-17:	Surface map of the Ortfjell deposit (Source: SGM)	
Figure 13-18:	Internal waste domains (blue) within zones 1, 4 and 6 (Source: BGS)	
<u> </u>	$\langle , , \rangle$	

Figure 13-19: Figure 13-20:	Banded Iron Formation Model at Ørtfjell (Source: BGS)
Figure 13-21:	Fe_Tot grade against length of sample (Source: BGS)87
Figure 13-22:	Fe_Tot / Fe_Mag Scatterplot (Source: BGS)89
Figure 13-23:	Fe_Tot / Fe_Mag Scatterplot for Ørtfjell zone 1 and Ørtfjell West (Source: BGS)90
Figure 13-24:	Fe_Mag probability plot for Ørtfjell zone 1 and Ørtfjell West (Source: BGS)91
Figure 13-25:	Fe_Mag histogram and probability plot for Ørtfjell zone 4 (Source: BGS)
Figure 13-26:	Fe_Mag histogram and probability plot for Ørtfjell zone 6 (Source: BGS)
Figure 13-27:	Fe_Mag histogram and probability plot for Ørtfjell zone 9 (Source: BGS)
Figure 13-28:	Historic (1968) density data (left) with the data duplicated in excel (right) (Source: BGS)
<b>-</b> : (0.00	
Figure 13-29:	Fe_Tot versus Density regression curve using new data (Source: BGS)
Figure 13-30:	Sulphur probability plot for combined zone 1,3,18 (Source: BGS)
Figure 13-31:	Ørtfjell Fe_Tot directional variograms for zones 1,3,18 combined (Source: BGS) 101
Figure 13-32:	Ørtfjell Fe_Mag omni-directional variograms for zones 1,3,18 combined (Source: BGS)
Figure 13-33:	Ørtfjell Fe_Tot directional variograms for the combined zones (Source: BGS) 102
Figure 13-34:	Ørtfjell Fe_Mag directional variograms for the combined zones (Source: BGS) 102
Figure 13-35:	Zone coded empty block model at Ørtfjell West and Ørtfjell East. (Source: BGS) 106
Figure 13-36:	Search ellipse orientation validation (Source: BGS)
Figure 13-37:	Ørtfjell West cross section showing visual validation of Fe_Tot block grades and sample
rigure to or.	grades (Source: BGS)
Figure 13-38:	Ørtfjell East cross section showing visual validation of Fe_Tot block grades and sample
<b>J</b>	grades (Source: BGS)
Figure 13-39:	Ørtfjell Fe_Tot SWATH plot for zone 1 (Source: BGS)113
Figure 13-40:	Ørtfjell Fe_Mag SWATH plot for zone 1 (Source: BGS)113
Figure 13-41:	Slope of Regression (Source: BGS)115
Figure 13-42:	Depleted Model. "MINED" material is coloured green. (Source: BGS)116
Figure 13-43:	Waste dump locations. (Source: BGS)117
Figure 13-44:	Modelled waste dump domain (pink). (Source: BGS)117
Figure 13-45:	Classified Mineral Resources at Ørtfjell (Source: BGS)122
Figure 13-46:	Slices through the classified Mineral Resources at Ørtfjell (Source: BGS)122
Figure 13-47:	Composite drillholes set against all classified material. Non-classified material has been
	filtered out (Source: BGS)123
Figure 13-48:	Global Grade Tonnage curve – Includes all Inferred Material (Source: BGS)
Figure 13-49:	Measured Mineral Resources below and to the west of the current underground
	operation (Source: BGS)
Figure 13-50:	Open pit resources, being 150m in depth from the natural surface. Existing
	underground stopes shown in red. (Source: BGS)
Figure 13-51:	Drillhole Bh62-2011 that shows the potential depth extension to the Ørtfjell deposit.
<b>F</b> '	(Source: BGS)
Figure 13-52:	Grade Tonnage Curve for the Measured Material only (Source: BGS)
Figure 13-53:	Grade Tonnage Curve for the Indicated Material only (Source: BGS)129

# LIST OF TABLES

Table 3-1:	Rana Gruber exploration tenements, area and expiration dates for the D valley. (Source: RG)	
Table 3-2:	Rana Gruber exploitation tenements and area for the Dunderland valley. (So	ource: RG)
Table 5-1:	Diamond Drilling completed at the Dunderland iron ore projects	
Table 5-2:	Downhole survey methods used relative to year	15
Table 5-3:	Downhole survey method relative to drilled meters	17
Table 5-4:	RG Mineral Resource Estimate for the Dunderland Valley Iron ore Project	
	RG)	
Table 10-1:	Chémical Analysis	54
Table 10-2:	Twin Drillhole intersection comparison – Fe_Tot	61
Table 10-3:	Twin Drillhole intersection comparison – Fe_Mag	61
Table 13-1:	Average sample length of all Banded Iron Formation zones	
Table 13-2:	Number of assays per modelled zone	87

Table 13-3:	Composite sample results	95
Table 13-4:	Composite sample results – CoV data	97
Table 13-5:	Waste Density	99
Table 13-6:	Top-Cut Values	100
Table 13-7:	Ørtfjell Post QKNA Interpolation Parameters	
Table 13-8:	Block Model Framework	106
Table 13-9:	Ørtfjell Percentage of Blocks Filled	108
Table 13-10:	Ørtfjell comparison of block and sample mean grades	111
Table 13-11:	Ørtfjell slope of regression by zone	114
Table 13-12:	Ørtfjell Global Classified Tonnage at a 0% Fe_Tot cut-off	123
Table 13-13:	Measured Mineral Resources below the current underground mining operat	ion at
	Ørtfjell - 0% Fe_Tot cut-off grade applied	125
Table 13-14:	Open Pit Resources, being 150m in depth from the natural ground level and at	a 0%
	Fe_Tot cut-off	125
Table 13-15:	Mineral Resource Statement at a 0% Fe_Tot cut-off grade	128

# **List of Technical Appendices**

Α	STATISTICS	.A-1
В	VARIOGRAMS	.B-1
С	SWATH PLOTS	.C-1

# Executive Summary Independent Mineral Resource Estimate for the Rana Gruber AS Iron Ore Deposits, Norway, June 2019

#### Background

Baker Geological Services Ltd ("BGS") has been requested by Rana Gruber AS ("RG", the "Company" or the "Client") to complete an independent Mineral Resource Estimate ("MRE") on the Mineral Assets of the Company comprising the Dunderland Valley Iron Ore Deposits (the "Project") located near Mo i Rana in Norway. This report covers the Mineral Resource Estimation of the Ørtfjell deposit only. Other deposits within the licence include Finnkåteng, Stensundtjern, Ørtvann and Nord Dunderland, all of which host significant volumes of Banded Iron Formation and have been mined historically. Ortfjell is however the current deposit being mined by the Company, through open pit and underground methods.

The Project has a long history with exploration commencing in 1949 and the creation of an iron ore mining operation supported by processing plant and port facility. Records show that since the 1950's, over 130 Million tonnes ("Mt") of iron ore has been mined and RG now produce and sell a range of hematite and magnetite concentrates to the international markets. To date however, RG has relied on internal technical studies to develop the Mineral Resources for the Project with the study described herein being the first time that independent consultants have undertaken an update to the geology and resource model that supports the operation.

In completing the MRE, a geology and mineralisation model has been created with grades of iron (Fe\_Tot), magnetic iron (Fe\_Mag), sulphur (S), phosphorous (P), manganese oxide (MnO) and titanium dioxide (TiO<sub>2</sub>) being estimated into the mineralisation model. Density testwork has been completed to allow a tonnage estimate and validation check sampling and assaying has been undertaken to confirm the validity of the assay data being used. The model created has been depleted for the mined and sterilised zones and a resource model containing Measured, Indicated and Inferred Mineral Resources has been defined for the Ørtfjell deposit.

This Technical Report serves as an independent report prepared by the Qualified Person ("QP") as defined by National Instrument 43-101 ("NI 43-101") and the companion policy 43-101CP.

#### Independent Consultants

Personal inspection of the Project was undertaken by Qualified Person Mr Howard Baker who covered all the aspects of the project, including inspections of the mining operation and processing facility, laboratory and core shed. Mr Baker compiled the Technical Report using data supplied by RG and its external geological consultants. RG utilised the services of the independent organisation Specialised Geological Mapping (SGM) and, Mr Chris Gordon of SGM. Mr Gordon completed / supervised the following activities:

- Re-logging 1,092m of drill core (verification of logging, sampling, core recovery, etc)
- Supervised a density testwork programme
- Drillhole database verification

- Digitisation of structural data from historical maps
- Plotted stereograms and provided a structural summary
- Geological modelling of Ørtfjell & Stensundtjern in Leapfrog Geo

#### Location and Access

The iron ore deposits in the Dunderland valley are situated about 27km northeast of the city Mo i Rana and about 15km south of the Arctic Circle. The area currently mined is easily accessible by car (public road and mining road) and connected by railway.

#### Data Quantity and Quality

In total, 1,518 drillholes have been completed for a total of 206,309m. BGS was supplied with the database from RG which was validated by SGM and BGS.

Diamond drilling was carried out over multiple phases between 1949 and 2018. No QAQC programmes have however been documented throughout these programmes and as such, check assaying and a series of density testwork programmes on ore and waste material were implemented.

In total, 432 historic pulp samples were analysed at the independent laboratory ALS Scandinavia AB with a full suite XRF study being completed. The XRF results showed a very high correlation to the historic Titration Fe\_Tot assays and existing S assays. Fe\_Mag is currently analysed by RG through a Satmagan and future testwork is required to validate the historic results that are used in the MRE.

The density testwork programme resulted in 100 ore samples being tested and assayed so that a density / Fe\_Tot regression curve could be developed. Satmagan assays were also run on the density samples to assess the impact of the Fe\_Mag content on the density. The Fe\_Mag content showed little or no impact on the final density and was not used in the determination of the final regression curve.

The Project has used multiple downhole survey methods since the initial drilling in 1949. With historical data of this nature and multiple survey methods having been used, it is quite common for some holes, or even entire phases of drilling to be removed from the database due to errors or uncertainties in the quality of the data. SGM and BGS has reviewed the data and the geological models created from the data and believes all data is fit for purpose. There does not appear to be any drillholes where major disruptions to the models have resulted from deviating drillholes and in all cases, the models produced can be designed from section to section with little difficulty from a drillhole location perspective. As such, all survey methods associated with the drilling have been used an no drillholes have been excluded due to dubious looking survey data.

After a review of the available data and through the studies completed by RG, SGM and BGS in verifying the historic drill logs, downhole survey data and historic assays results, BGS is confident that the quality of the data provided by RG is suitable for use in the production of a Mineral Resource Estimate.

#### Drill Spacing

Generally, current and historical drilling occurs along 50m planned section lines. Stensundtjern adheres to the 50m horizontal spacing and while intercept spacing is more variable within

sections, the distance is dominantly less than 50m with many drillholes intersecting mineralisation at spacings of less than 25m. Infrequent spacing of 70-85m exists in vertical sections but mostly at the fringes of the deposit. At Ørtvann, 50m horizontal spacing is maintained but vertical spacing is erratic. Shallower drillholes and drilling in the eastern half of the deposit generally intersect the ore at spacings less than 50m but as the mineralisation plunges westward, drilling is less frequent. Spacings in the western half vary from 50-150m with spacings higher as the mineralisation extends deeper.

#### Geology

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 outcropping iron oxide deposits and mineralisation cover an area of about 105 km<sup>2</sup> in the Dunderland valley north of Mo i Rana.

Banded Iron Formation hosts the economic mineralisation at Dunderland. It comprises thinly bedded, intercalated lithologies. The most common are fine-grained, blue-grey siliceous meta-sandstones and very fine grained to medium grained, charcoal-coloured, hematite beds. These beds vary from mm-scale to 30-40mm. Beds of calcareous meta-sediments, many epidote-altered, are common. They are generally thicker, from 100's mm to 1.0m. The Banded Iron Formation is generally strongly deformed with isoclinal folding and crenulations. Rare primary sedimentary structures are found.

#### Mineralisation

The iron ore contains an average of 30 to 34% iron in the form of the oxide minerals hematite  $(Fe_2O_3)$  and magnetite  $(Fe_3O_4)$ . In the Kvannevann ore body, the total oxide content is made up by about 97.5 to 98% hematite, while the remaining 2 to 2.5% are formed up by magnetite. In other ore bodies, e.g. Stensundtjern, RG observe a different distribution between the two iron oxide minerals with magnetite forming up to 15% of the total iron oxide content. Typical gangue minerals are quartz, feldspar, calcite / dolomite, epidote, chlorite, mica, amphibole and apatite.

The main types of ore found can be characterised as sandy hematite, flaky hematite, magnetite / hematite ore and magnetite ore.

The sandy hematite ore is often banded, with alternating layers of hematite and quartz (mmscale and is equigranular in appearance with straight grain boundaries). The average grain size is about 20µm and the hematite crystals show a random orientation in thin section. The quartz rich bands contain some disseminated hematite crystals.

Due to the heavy tectonic and metamorphic overprint RG quite often observe flaky hematite (specularite) ore containing hematite crystals that underline the strongly foliated nature of the ore. The ore is banded with alternating layers containing hematite, quartz and carbonates. Compared to the sandy hematite, the hematite occurs as tabular and elongated grains and has larger grain sizes in the range of 40 to 50µm. In general, the hematite is orientated along the folded layering and foliation. However, some hematite grains have grown over these orientated crystals especially in fold axes.

Very often the ore contains both hematite and magnetite with hematite being the most prominent oxide mineral. This magnetite / hematite ore is layered and folded quite similar to the sandy and flaky ore types. The amount of magnetite varies between 1-2% in the Kvannevann ore and 9-10% in the Stensundtjern ore. The hematite is tabular and elongated in shape and is oriented along the prominent foliation and has a typical grain size of 30µm. In contrary, the magnetite has a much larger grain sizes (1mm) and shows no apparent orientation.

The magnetite ore is coarse grained with an average grain size of 0.5cm, grain boundaries are straight to slightly irregular, and magnetite crystals occur rounded while hematite has a tabular shape.

At RG, both magnetite and hematite concentrates are produced.

#### Geological Model

SGM suggest that the Banded Iron Formation at Ørtfjell represents two stratigraphic horizons. These have been complexly folded into a series of steeply dipping and plunging units with an overall synformal structure at the Ortfjell deposit.

The modelling was undertaken in Leapfrog Geo software based on an approximate 20% Fe\_Tot cut off or where a sharp boundary between mineralised Banded Iron Formation and non-mineralised host lithology occurs.

The host geological model created has been subdivided into four primary units. These are Marble, Dolomite, Schist and Banded Iron Formation.

#### Mineral Resource Estimate

The MRE was completed in Datamine Studio RM with the geostatistical study completed in Supervisor.

A composite file was used in a geostatistical study (variography and Quantitative Kriging Neighbourhood Analysis – "QKNA") that enabled Ordinary Kriging ("OK") to be used as the main interpolation method. The results of the variography and the QKNA were utilised to determine the most appropriate search parameters used in the grade estimate.

The interpolation used an elliptical search following the predominant dip and dip direction of the geological zones.

Grades of Fe\_Tot, Fe\_Mag, S, P, MnO and TiO<sub>2</sub> have been estimated into the mineralisation model using OK and post estimation processes calculated the Slope of Regression to enable an assessment of the quality of the estimate.

Density was applied to the ore zones using a regression-based formula.

The interpolated block model was validated through visual checks and a comparison of the mean input composite and output model grades. BGS is confident that the interpolated block grades are a reasonable reflection of the available sample data.

#### Mineral Resource Classification

To classify the RG deposits, the following key indicators were used:

- Geological complexity
- Quality and quantity of data used in the estimation
  - QAQC data
  - o Density
  - o Results of the geostatistical analysis, namely the Variography and QKNA results, and
- Quality of the estimated block model

Due to the amount of drilling across the RG deposits, along with the mining and detailed knowledge of the various deposits, the risks associated with the geological interpretation have been mitigated to allow continuous iron formation units to be modelled. In addition, a statistical analysis shows a simple and homogeneous series of iron formations that has allowed continuous and clean populations of data to be created based on the assayed Fe\_Tot assays. Complexities lie in the distribution of the minor elements, being S, MnO, TiO<sub>2</sub> and also Fe\_Mag. Additional domaining has been carried out within some of the host iron formation units to control the Fe\_Mag distribution but further work is required to assess the distribution of S and MnO in particular. MnO distribution is hindered by the limited data for this analyte and overall, S levels appear to be low. Large sample intervals do however mask the actual distribution of the S and more geological understanding is required to fully assess the non-Fe\_Tot assays.

Ørtfjell West is also a highly folded unit and although the modelling undertaken appears to honour the mapping in this area, a greater degree of structural modelling is no doubt required.

BGS does however consider the geological risk to be low overall with the distribution of the iron bearing lithologies being well constrained by drilling and the knowledge from mining activities.

No quality control data exists for the Project and as such, SGM implemented a programme of check assaying. The results of this programme showed that very little bias exists between the old and new data and as such, BGS is confident that the data used in the grade estimation is fit for purpose.

It is however the opinion of BGS that a risk still exists in utilising the historic data in areas of unmined material. As such it is advised that thorough QAQC protocols are implemented in future exploration drilling campaigns. Additionally, it is strongly recommended that RG continue to undertake check assaying of existing core for areas that lie within the near term mine plan.

BGS also comment that RG have undertaken recent density testwork that has allowed standard regression-based density algorithms to be developed based on the iron grade. As such the density and tonnage estimate is considered robust although further density testwork should be implemented.

The data used in the geostatistical analysis resulted in suitably reliable downhole variograms for all zones that allowed the nugget variance to be fixed with robust directional and omni directional variograms being created.

QKNA studies were undertaken using the variograms and suitable estimation parameters were selected through testing alternative sample support and search ellipse scenarios. The slope of regression was calculated for all zones giving an indication of the quality of the estimated grade.

The Project has been classified as containing Measured, Indicated and Inferred Mineral

Resources.

Measured Mineral Resource have been assigned based on the following criteria:

- Material lying directly below and to the west of the current underground mining area and where the underground mining target maintains a thickness and geometry like the current underground operation.
- Where the Fe\_Tot search volume = 1 and displays an elevated and continuous Fe\_Tot Slope of Regression being a statistical measure of the accuracy of the estimate.

Indicated Mineral Resource have been assigned based on the following criteria:

• Where the Fe\_Tot search volume = 1 and displays an elevated and continuous Fe\_Tot Slope of Regression greater than 0.3.

Inferred Mineral Resource have been assigned to zones with a low sample count and in zones of geological uncertainty. It should be noted that limited Inferred Mineral Resources have been assigned to the project. At depth this is because most of the drilling terminates at a similar depth with very few drillholes to test the down-dip extensions to the mineralisation.

#### Mineral Resource Statement

In generating the final Mineral Resource Statement for the Project, BGS has used the Measured Mineral Resources quoted that could form extensions to the current underground operation and those resources that fall within 150m of the natural surface as potential open pit resources. Both mining methods are currently being applied at the RG operation with 3mtpa being extracted from the underground operation and 2mtpa being extracted from the open pit operations. All material is crushed and transported to the processing facility in Mo i Rana and multiple product type are currently being produced and sold to the open market. As such, BGS is confident that the resources defined herein meet the criteria to demonstrate reasonable prospects for eventual economic extraction. Furthermore, additional classified resources lie below the quoted underground Measured Mineral Resources and there is clear potential to extend the classified resource base through further drilling at depth that could support the underground operation. For example, drillhole Bh62-2011 has an intersection with a true thickness of approximately 90m and being approximately 200m below the base of the Measured Mineral Resource Statement.

As defined by the CIM guidelines, the interpretation of the word 'eventual' in this context relates to a bulk commodity where it is reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years, a time period which RG have currently exceeded.

No cut-off grade has been applied to the final Mineral Resource Statement due a lack of sensitivity and all material mined up until the end of May 2019 has been excluded from the statement. In addition, BGS has excluded all data that falls outside of the exploitation rights boundary. This represents the material considered by BGS to have reasonable prospects for eventual economic extraction potential.

Table ES1 shows the resulting Mineral Resource Statement for the Rana Gruber Project. The statement has been restricted to Fe\_Tot, Fe\_Mag and S due to these analytes being the focus of most of the drill programmes completed since 1949.

The statements have been classified by Qualified Person, Howard Baker (FAusIMM(CP)) in accordance with the Guidelines of NI 43-101 and accompanying documents 43-101.F1 and 43-101.CP. It has an effective date of 28 June 2019. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability. BGS and RG are not aware of any factors (environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors) that have materially affected the Mineral Resource Estimate.

The quantity and grade of reported Inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource; and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.

Classification Category	Mining Method	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Measured	Underground	75.9	3.5	33.7	3.7	0.020
Measured	Open Pit	10.0	3.4	32.7	6.6	0.007
Indicated	Open Pit	45.2	3.4	32.8	5.1	0.019
Sub-Total	OP + UG	131.0	3.5	33.3	4.4	0.019
Inferred	Open Pit	2.2	3.4	32.3	5.1	0.005

 Table ES1:
 Mineral Resource Statement at a 0% Fe\_Tot cut-off grade

Notes:

(1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability

(2) The effective date of the Mineral Resource is 28 June 2019

(3) The MRE was constrained within lithological and grade-based solids with the open pit resources being restricted to a depth of 150m from the original topographic surface and all underground resources limited to areas that lie directly below and to the west of the current underground operation.

(4) Mineral Resources have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines (2014)" by Howard Baker (FAusIMM(CP)), an independent Qualified Person as defined in NI 43-101.

(5) Depleted for mined / sterilised material

(6) Only reports material within the exploitation rights boundary

In total, BGS has derived an underground Measured Mineral Resource of 75.9Mt grading 33.7% Fe\_Tot, 3.7% Fe\_Mag and 0.020% S. BGS has derived an open pit Measured Mineral Resource of 10.0Mt grading 32.7% Fe\_Tot, 6.6% Fe\_Mag and 0.007% S, an open pit Indicated Mineral Resource of 45.2Mt grading 32.8% Fe\_Tot, 5.1% Fe\_Mag and 0.019% S and an open pit Inferred Mineral Resource of 2.2Mt grading 32.3% Fe\_Tot, 5.1% Fe\_Mag and 0.005% S.

BGS believes that there is significant resource potential to extend the resource base at depth and below the current classified underground resources. Additionally, a full optimisation study may show the potential to maximise the open pit resources.

There is also significant upside resource potential for the inclusion of the remaining deposits, listed below and it is strongly recommended that these resources be included in an updated Mineral Resource Statement and included in all on-going technical feasibility studies to be carried out by the Company.

- Finnkåteng
- Stensundtjern
- Ørtvann
- Nord Dunderland

Multiple recommendations are made by BGS and SGM with these documented in full in the main body of the report.

# Independent Mineral Resource Estimate for the Rana Gruber AS Iron Ore Deposits, Norway, June 2019

## 1 INTRODUCTION

#### 1.1 Background

Baker Geological Services Ltd ("BGS") has been requested by Rana Gruber AS ("RG", the "Company" or the "Client") to complete an independent Mineral Resource Estimate ("MRE") on the Mineral Assets of the Company comprising the Dunderland Valley Iron Ore Deposits (the "Project") located near Mo i Rana in Norway. This report covers the Mineral Resource Estimation of the Ørtfjell deposit only. Other deposits within the licence include Finnkåteng, Stensundtjern, Ørtvann and Nord Dunderland, all of which host significant volumes of Banded Iron Formation and have been mined historically. Ørtfjell is however the current deposit being mined by the Company, through open pit and underground methods.

The Project has a long history with exploration commencing in 1949 and the creation of an iron ore mining operation supported by processing plant and port facility. Records show that since the 1950's, over 130 Million tonnes ("Mt") of iron ore has been mined and RG now produce and sell a range of hematite and magnetite concentrates to the international markets. To date however, RG has relied on internal technical studies to develop the Mineral Resources for the Project with the study described herein being the first time that independent consultants have undertaken an update to the geology and resource model that supports the operation.

In completing the MRE, a geology and mineralisation model has been created with grades of iron (Fe\_Tot), magnetic iron (Fe\_Mag), sulphur (S), phosphorous (P), manganese oxide (MnO) and titanium dioxide (TiO<sub>2</sub>) being estimated into the mineralisation model. Density testwork has been completed to allow a tonnage estimate and validation check sampling and assaying has been undertaken to confirm the validity of the assay data being used. The model created has been depleted for the mined and sterilised zones and a resource model containing Measured, Indicated and Inferred Mineral Resources has been defined for the Ørtfjell deposit.

This Technical Report serves as an independent report prepared by the Qualified Person ("QP") as defined by National Instrument 43-101 ("NI 43-101") and the companion policy 43-101CP.

The definitions of Measured, Indicated and Inferred Resources, as well as Reserves, as used in this report, conform to the definitions and guidelines of the CIM (Canadian Institute of Mining, Metallurgy and Petroleum) Definition Standards for Mineral Resources and Mineral Reserves, 2014.

The data used for the MRE, including drillhole databases and topographic surveys, was provided by RG. BGS has however undertaken a site visit to the Project and discussed the Project development and protocols employed with the onsite team.

The known iron ore deposits in the Dunderland valley belong to the Ørtfjell Group. The immediate host rocks 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 outcropping deposits cover an area of about 105 km<sup>2</sup> in the Dunderland valley north of Mo i Rana.

In total, 1,518 drillholes have been completed for a total of 206,309m.

All data has been used in the MRE with some recent check sampling confirming the validity of the historic assay grades. The MRE described in this technical report has been developed using the supplied database and the report summarises the exploration and technical work undertaken at the Project and describes the methodology employed by BGS to produce the MRE which has been prepared under the Guidelines of NI 43-101 and accompanying documents 43-101.F1 and 43-101.CP.

BGS is not an insider, associate or affiliate of RG, and neither BGS nor any affiliate has acted as advisor to RG or its affiliates in connection with the Project.

This report includes technical information, which requires subsequent calculations to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, BGS does not consider them to be material.

This report is intended to be read as a whole, and sections should not be read or relied upon out of context. The report contains expressions of the professional opinion of the Qualified Person based upon information available at the time of preparation.

#### **1.2** Qualifications of Consultant

Mr Howard Baker of BGS is a resource geologist with over 20 years' experience covering multiple commodities from early stage exploration through to definitive feasibility studies. Mr Baker is the Managing Director of BGS and previously worked for the International Mining Consultancy, SRK Consulting (UK) Ltd ("SRK") where he was employed for eight years as a Principal Consultant and Practise Leader. In his time at SRK, he focussed on the management of Mineral Resource Estimates with a strong focus on technical quality management and compliancy to international reporting codes. In addition, he played a key role in advising on suitable exploration protocols and drill programmes and effectively assisted clients in the development of numerous large scale African based projects. Prior to his time at SRK, Mr Baker lived and worked in Australia, working for Rio Tinto, BHP Billiton, Iluka Resources and Anaconda Nickel.

Mr Baker was educated in the United Kingdom, being a dual British and Australian citizen. He is a Chartered professional fellow (#224239) of the Australasian Institute of Mining and Metallurgy.

Mr Baker has extensive global experience in the geology and Mineral Resource Estimation of iron ore projects and also worked as a mine geologist and specialist resource geologist in the iron ore Pilbara district of Western Australia.

#### **1.3 Report Authors**

Personal inspection of the Project was undertaken by Qualified Person Mr Howard Baker who covered all the aspects of the project, including inspections of the mining operation and

processing facility, laboratory and core shed. Mr Baker compiled the Technical Report using data supplied by RG and its external geological consultants. RG utilised the services of the independent organisation Specialised Geological Mapping (SGM) and, Mr Chris Gordon of SGM. Mr Gordon completed / supervised the following activities:

- Re-logging 1,092m of drill core (verification of logging, sampling, core recovery, etc)
- Supervised a density testwork programme
- Drillhole database verification
- Digitisation of structural data from historical maps
- Plotted stereograms and provided a structural summary
- Geological modelling of Ørtfjell & Stensundtjern in Leapfrog Geo

For some historical aspects of the project, BGS relied on an RG Technical Report, dated February 2018 and entitled "Ore Resources and Reserves, Dunderland Valley". This report was used to complete Section 3 through to Section 12.

BGS also relied on report extracts from SGM and in particular, Sections 6, through to Section 9 and Section 13.1.

The Report is intended to be read as a whole, and sections should not be read or relied upon out of context. The Report contains the expression of the professional opinions of the QPs based upon information available at the time of preparation.

# 2 RELIANCE ON OTHER EXPERTS

With respect to mineral tenure and agreements (see Section 4 of this report), the Qualified Persons have relied on RG. BGS has also used a geology model created by SGM and validated by BGS.

## **3 PROJECT DESCRIPTION AND LOCATION**

The country of Norway is in northern Europe and has a land area of approximately 307,442km<sup>2</sup>. It borders three countries, namely Finland (727km), Sweden (1,619km) and Russia (196km). The landscape is rugged and mountainous with few areas of lowlands. The capital city is Oslo, in the sout-southeast, and other major cities are Bergen, Trondheim, Stavanger and Tromsø. Norway has a temperate climate along the coast which is modified by the North Atlantic Current. The interior is colder with increased precipitation and colder summers. It is rainy year-round on the west coast.

The population of Norway was estimated at 5.32 million in October 2017, with a current population growth rate of 0.9% per annum. The official languages are Bokmål and Nynorsk Norwegian. There are small Sami and Finnish speaking minorities and the Sami language is official in six municipalities.

#### 3.1 Project Location

The iron ore deposits in the Dunderland valley are situated about 27km northeast of the city Mo i Rana and about 15km south of the Arctic Circle. The area currently mined is easily accessible by car (public road and mining road) and connected by railway.

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.

Figure 3-1 shows the location of the Project.

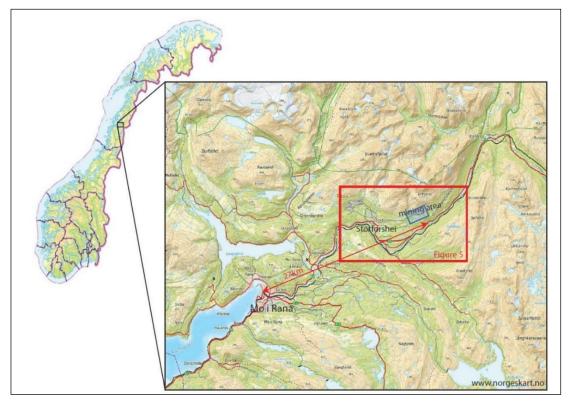


Figure 3-1: Location of the Dunderland valley deposits relative to Mo i Rana, Norway

#### 3.2 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.

#### 3.3 Mining Tenure

Under the Norwegian Mining Act of 1 January 2010, mining rights consist of exploration rights and extraction rights.

A legal entity may apply to the relevant authority (DIRMIN) for an exploration right in order to investigate the potential for minerals that may be economically extracted. The maximum size of an exploration right is 10km<sup>2</sup>. An exploration right is granted for a period of 7 years, within which time the holder of the exploration right has the right to file an application for an extraction right. If an application to convert the exploration right to an extraction right is not filed within that

time, the exploration right is deemed to have lapsed and the area declared free for new exploration rights or extraction rights to be granted.

To convert an exploration right to an extraction right, the tenement holder must present documentation to prove that the results of the exploration are sufficient to support a production scenario within reasonable time. This is typically a feasibility or development study to indicate that an economic return would justify development, also highlighting the ability of the tenement holder to carry out those plans.

The Norwegian Mining Act also allows for exploration right applications to be lodged over the top of valid and existing exploration rights. This has no impact on the valid exploration right during the 7-year life but gives the overlaying exploration right holder the first priority for the tenement if, after the 7-year period, the first exploration right holder has not converted to an extraction right.

An extraction right can be defined as an exclusive right to extract all claimable minerals from the ground within the claim area, i.e. conduct mining. The maximum size of an extraction right is 1km<sup>2</sup> and should not be bigger than necessary to cover the deposit. Holding an extraction right is also a prerequisite for obtaining a mining concession.

Once granted, an extraction right will cease to be when A: Mining concession has not been obtained within 10 years. B: Extraction doesn't fall under the regulation of mining concession C: The owner fails to pay the annual fee. In any of these cases, the extraction right is deemed to have lapsed and the area declared free for new exploration rights to be granted.

Extraction rights can be prolonged by 10 years at a time as long as the holder can demonstrate that the mineralisation is an important reserve for the holder of the extraction right.

Under the Norwegian Mining Act, no extraction right may be lodged over the top of a valid and existing extraction right. Thus, as long as one is the first to register an extraction right and pays the yearly fee to the Directorate of Mining, one has exclusive rights to all claimable minerals within the extraction right area.

#### 3.4 Licence Agreements

RG has no joint ventures, partnerships or royalty agreements with third parties in Dunderland valley concerning the extraction of mineral resources.

The area north of the Rana river in the Dunderland valley is shown on official maps as a pasture area for reindeer herding (summer, autumn and winter pasture). In the 1980's, RG set forth an agreement with the local reindeer organisations (Reinbeitedistrikt) and paid a compensation to the organisation covering all future obstruction and loss of these pasture rights.

There are no known historical sites in the mining area.

RG currently holds several exploration and exploitation rights in the Dunderland valley about 25km north of Mo i Rana. The terminology is described below:

#### Exploration license (Norwegian: undersøkelsesrett)

Gives the holder the right to do the necessary investigations in a specific area in order to assess whether a mineral deposit can be commercially viable. Grants the right to investigate for all state-owned minerals. It also gives the right to make some minor blasts for bulk sampling (this however needs some permitting from the mining directorate). The holder of an exploration right has the right to apply for an exploitation license.

#### Exploitation rights (Norwegian: Utvinningsrett)

An exploitation right grants an exclusive right to the holder to extract all minerals in the covered area. In order to obtain an exploitation right, you must be a holder of an exploration right with first priority in the same area. An exploitation right does not entitle one to operate on the deposit but gives the right to apply for an operating license.

#### Operating license (driftskonsesjon)

All mining operations with a production volume exceeding 10,000m<sup>3</sup> needs an operating license granted by the Directorate for Mining (DIRMIN). An operating license can only be given to a holder of an exploitation license. When granting an operation license, DIRMIN 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.

Table 3-1, Table 3-2 and Figure 3-2 display and summarise the current licenses held by RG.

ID	Name	Mineral type	Area (m2)	expires
0017/1-2017	Vesteråli 1	Fe	1 000 000	24.01.2024
1356-1/2012	Ørtvann 5	Fe	2 827 500	30.08.2019
1355-1/2012	Lomli 3	Fe	2 465 000	30.08.2019
1353-1/2012	Ørtfjellmoen 4	Fe	2 257 500	30.08.2019
1354-1/2012	Blåbergan	Fe	1 696 000	30.08.2019
1345-1/2012	Rundfjellet	Fe, Cu, Zn, Pb	6 700 000	30.08.2019
1346-1/2012	Lasken 1	Fe	10 000 000	30.08.2019
0007/2019	Futmoen	Fe	6 950 000	27.02.2026
0051/2019	Lomli 2	Fe	1 320 000	27.02.2026
0050/2019	Lomli 1	Fe	1 816 000	27.02.2026
0032/2019	Eiteråga 3	Fe	543 000	27.02.2026
0031/2019	Eiteråga 2	Fe	291 000	27.02.2026
0030/2019	Eiteråga 1	Fe	805 000	27.02.2026
0034/2019	Ørtfjell 1	Fe	98 000	27.02.2026
0042/2019	Ørtfjell 2	Fe	98 000	27.02.2026
0043/2019	Ørtfjell 3	Fe	560 000	27.02.2026
0044/2019	Ørtfjell 4	Fe	117 000	27.02.2026
0045/2019	Ørtfjell 5	Fe	188 000	27.02.2026
0046/2019	Ørtfjell 6	Fe	160 000	27.02.2026
0047/2019	Ørtfjell 7	Fe	113 000	27.02.2026
0048/2019	Ørtfjell 8	Fe	191 000	27.02.2026
0049/2019	Ørtfjell 9	Fe	18 000	27.02.2026
0035/2019	Ørtfjell 10	Fe	612 000	27.02.2026
0036/2019	Ørtfjell 11	Fe	271 000	27.02.2026
0037/2019	Ørtfjell 12	Fe	2 218 000	27.02.2026
0038/2019	Ørtfjell 13	Fe	2 680 000	27.02.2026
0039/2019	Ørtfjell 14	Fe	643 000	27.02.2026
0040/2019	Ørtfjell 15	Fe	791 000	27.02.2026
0041/2019	Ørtfjell 16	Fe	117 000	27.02.2026
0052/2019	Ømmervassåsen 1	Fe	5 785 000	27.02.2026
0033/2019	Ømmervassåsen 2	Fe	4 156 000	27.02.2026

 Table 3-1: Rana Gruber exploration tenements, area and expiration dates for the Dunderland valley. (Source: RG)

ID	Navn	Status	Mineraltype	Areal (m2)
0031/1986	Stensundtj.1	leid	Fe	160000
0032/1986	Stensundtj.2	eid	Fe	264000
0033/1986	Stensundtj.3	eid	Fe	160000
0034/1986	Stensundtj.4	leid	Fe	155000
0028/1986	Vesteråli 3	eid	Fe	250000
0029/1986	Vesteråli 4	eid	Fe	300000
0020-1/2015	Ørtvann Sør 1	eid	Fe	369260
0021-1/2015	Ørtvann Sør 2	eid	Fe	454000
0001/1986	Ørtfjell 1	eid	Fe	225000
0002/1986	Ørtfjell 2	eid	Fe	300000
0003/1986	Ørtfjell 3	eid	Fe	250000
0004/1986	Ørtfjell 4	eid	Fe	100000
0005/1986	Ørtfjell 5	eid	Fe	260000
0006/1986	Ørtfjell 6	eid	Fe	297500
0007/1986	Ørtfjell 7	eid	Fe	255000
0018-1/2015	Nord-Dunderland 1	eid	Fe	747639
0018-1/2015	Nord-Dunderland 2	eid	Fe	724645

Table 3-2: Rana Gruber exploitation tenements and area for the Dunderland valley. (Source: RG)

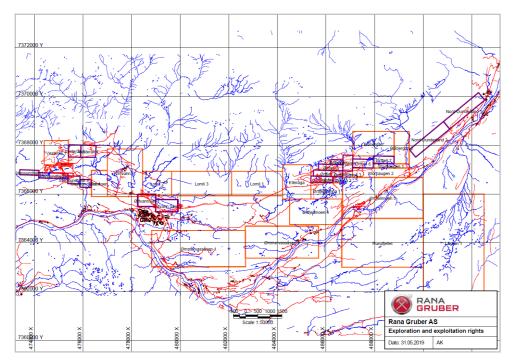
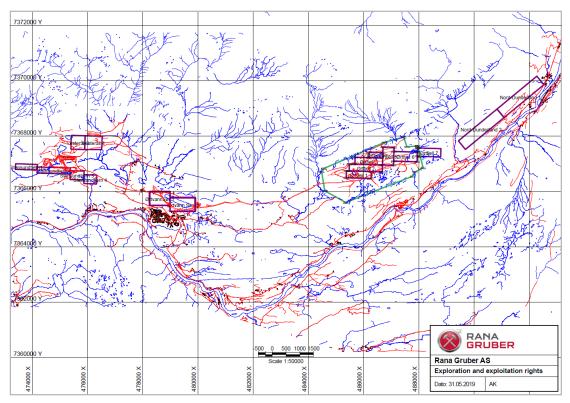


Figure 3-2: Exploration and exploitation rights in the Dunderland valley, Rana Gruber AS (orange - exploration rights; lilac - exploitation rights). (Source: RG)

#### 3.5 Operating License

The license area covers an area of approx. 5km<sup>2</sup> in the Ørtfjell area and includes the exploitation rights Ørtfjell 1 to 6, and parts of Ørtfjell 7. Figure 3-3 shows the operating licence held by the Company.



# Figure 3-3: Operating licenses held by Rana Gruber in the Dunderland valley. (Source: RG)

Some protected forests are present in the exploration tenements area but are situated outside of the mining area and are not a burden.

Expiration dates for exploration and exploitation rights are displayed in the graphs above. There are no known impediments to extending these licenses.

Figure 3-4 shows the Ortfjell resource model within the context of the extraction right limits. As shown, there are several areas where the resource model lies outside of the extraction rights. These areas have been excluded from the final Mineral Resource Statement.

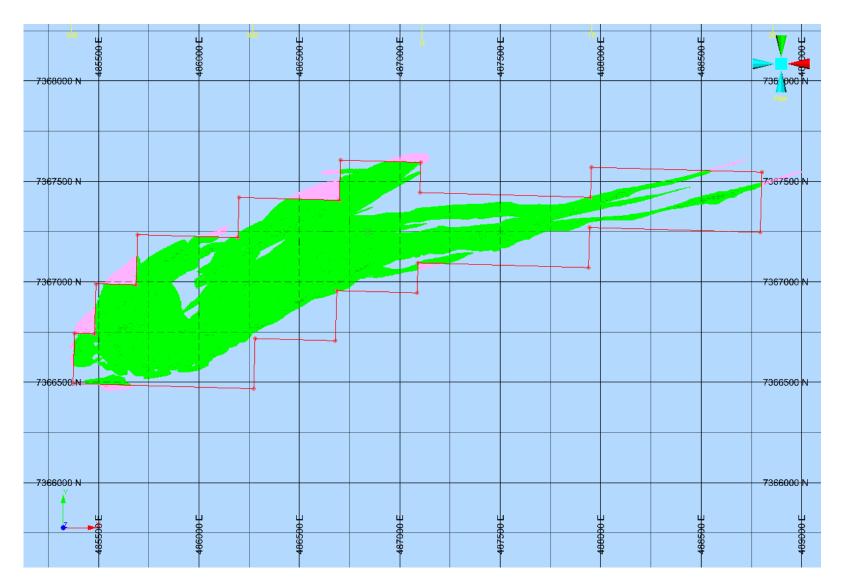


Figure 3-4: Resource model within the exploitation rights boundary highlighting areas at Ørtfjell outside of the boundary (Source: BGS)

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

#### 4.1 **Project Access**

The concentrator and port facilities are in the town of Mo i Rana, and the mines are located approximately 27km to the east-northeast (ENE), connected by a rail line. The project is accessed via bitumen roads and is well serviced by grid power and mobile phone coverage. Mo i rana airport lies 12km to the ENE of Mo i Rana being well serviced from Oslo, Trondheim and Bodø.

#### 4.2 Climate

The region has a climate described as follows with Figure 4-1 showing the annual fluctuations.

- Mo i Rana has a subarctic climate that has severe winters, no dry season, with cool, short summers and strong seasonality.
- According to the Holdridge life zones system of bioclimatic classification Mo i Rana, is situated in or near the boreal rain forest biome.
- The average temperature is 2.8°C (37.1°F).
- Average monthly temperatures vary by 21.5°C (38.7°F). This indicates that the continentality type is continental, subtype subcontinental.
- In the wintertime, records indicate temperatures by day reach -3.3°C (26°F) on average falling to -9.3°C (15.2°F) overnight.
- In springtime, temperatures climb reaching 5.7°C (42.2°F) generally in the afternoon with overnight lows of -2.7°C (27.2°F).
- During summer, average high temperatures are 16.7°C (62°F) and average low temperatures are 8.7°C (47.6°F).
- Come autumn, temperatures decrease achieving average highs of 6.3°C (43.4°F) during the day and lows of 0.7°C (33.2°F) generally shortly after sunrise.
- Total annual Precipitation averages 1,337mm (52.6 inches) which is equivalent to 1,337 Litres/m<sup>2</sup> (32.79 Gallons/ft<sup>2</sup>).

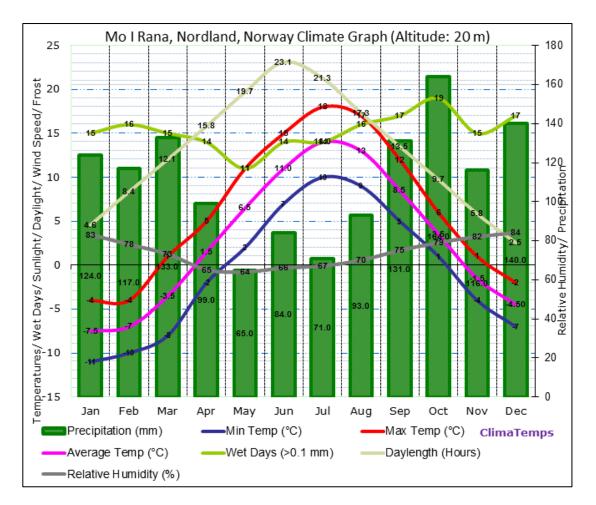


Figure 4-1: Mo i Rana Climate Data (Source http://www.mo-i-rana.climatemps.com/)

#### 4.3 Physiography

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. Some of the large mountains in Rana include Ørtfjelltind, Bolnatind and Nasafjell. There are many valleys such as the Dunderland Valley and Grønnfjelldal.

Rana and Saltfjellet are famous for their numerous caves due to the limestone rock. There are several nature reserves in the municipality, such as Alterhaug with several warmer-climate plants grow including the elm. Engasjyen, the estuary of the Rana river, has a rich bird life in the spring. Blakkådalen has old growth spruce forests. Fisktjørna, has a largely undisturbed mixed old growth forest with unusually rich plant life due to the extremely lime-rich soil.

Figure 4-2 shows the general landscape looking east from the Finnkåteng deposit. Ørtvann can be seen in the foreground.



Figure 4-2: View looking southeast from the abandoned Vesteråli pit. (Source: BGS)

## 5 **HISTORY**

#### 5.1 Area History

Mining, building boats (Nordlands boats), and hunting / fishing used to be the main ways of life in Mo i Rana with a Sami market starting in the summer of 1730 in Mo. The market was held on the main church grounds until 1810. In 1860, wholesale merchant L.A. Meyer started a trade center on license from royal authority. Meyer traded flour, herring and tobacco, reindeer meat, skins and venison with Sweden. The trade with Sweden increased, especially during Sweden's difficult economic years from 1892 to the start of the First World War. Many paths now used as hiking trails were originally trade paths for mountain dwellers in Sweden to Mo i Rana. One example is a path that starts in the Vindelfjällens Nature Reserve at Ammarnäs and follows the Vindel River valley then joins Vindelkroken and then crosses the Norwegian border to Mo i Rana.

Dunderland Iron Ore Company (1902–1947) established the first mines in Storforshei (27km north of Mo i Rana). RG was established in 1937 and in 1946 the Norwegian Parliament approved plans for the construction of an Iron Mill in Norway. The Parliament selected Mo i Rana as the location. In 1955, the first steel was produced in Norway.

During this period the village of Mo i Rana changed to an industrial city and people from all over the country moved to Mo i Rana in order to obtain work. The community needed homes for thousands of new residents. Construction of houses and residential blocks started immediately. In 1930, the population was 1,300 people, this increased to 7,000 in 1955. In 1978 The Iron Mill employed approximately 4,500 of the 25,000 town's inhabitants.

The Norwegian Parliament resolved in June 1988 to phase out state ownership of the company. Today there are 119 industrial companies at the industrial estate (Mo Industrial Park). The companies have activity in the iron and steel industry, the engineering industry, the research and development service industry and the information technology industry. In total, the companies employ approximately 1,900 people.

The iron ore mineralisation in the Dunderland valley was first mentioned in literature in 1828 by Bergmester H.C.Strøm. Strøm describes the rock type as iron-mica schists. However, the first serious attempts to investigate the area started 1880 to 1890 by engineer Haaselblom.

Mining tonnage data has been made available by RG with the first reported record showing mining commencing in 1958. Since then, 133.3Mt of ore has been mined. Of this, 20.4Mt has been mined from underground with the remainder being from open pits. Figure 5-1 shows the mined tonnages per year since 1958. In 2017 and 2018, approximately 4.9Mt was mined.

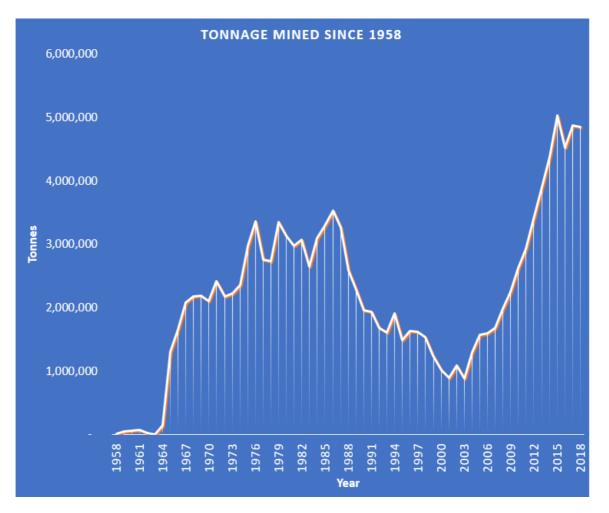


Figure 5-1: Production tonnage since 1958

#### 5.2 Underground Development

Mining was via open pit methods with underground mining starting in 1999 using open stope methods along a length of about 1,200m of the Kvannevann ore. A production level was established at the 250m relative level ("RL") and a drilling level was established at 320m RL. A total of 16 stopes being on average 60m long, 30m wide and 100m high were aligned along the ore body. These were separated by several 30m thick vertical pillars. On average, the crown pillar had a 30m thickness and separated the bottom of the open pit and underground operation. Broken ore was hauled to the surface.

As reserves in this developed level came close to being exhausted, RG investigated alternative mining methods to continue mining at the levels below with increased capacity and a higher resources recovery. This investigation resulted in a decision to change mining method from sublevel open stoping to sublevel caving. Transition from sub level stoping to sublevel caving started 2009 with the removal of both the vertical and horizontal crown pillar. At the same time development of the first sublevel at 221m RL as well as the main production level at 123m RL started.

The sublevel caving mine was planned with four sublevels with a vertical spacing of 32m (level 219, level 187, level 155 and level 123) and 22m horizontal spacing between the production / extraction drives. Figure 5-2 shows a longitudinal cross section through the underground mine at Ørtfjell. Production / extraction levels are shown together with stopes from the sublevel stoping operations and extraction rings from the sublevel caving mine. Stopes and rings are coloured

according to their expected grade (from lowest to highest: green, yellow, orange, red, red-brown). Figure 5-3 illustrates the shape of the production rings and levels as well as the orientation of blast holes in selected rings. In general, 13 holes are drilled in each production ring and the rings have a burden varying between 3 to 2.7m.

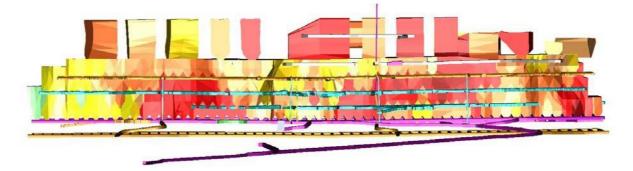
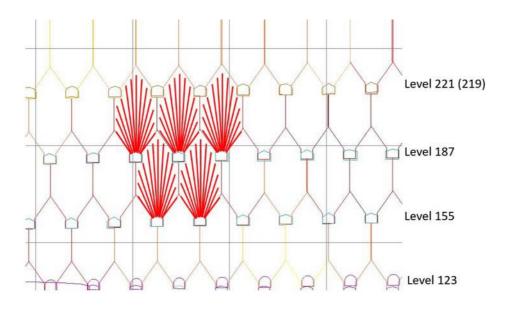


Figure 5-2: Longitudinal cross section (West - East) through the Kvannevann mine, Ørtfjell showing the abandoned sublevel stope mine with its 16 stopes and the underlying sublevel caving mine with levels 221(219), 187, 123 (Source: RG)



#### Figure 5-3: Layout of the production / extraction rings and blast holes (Source: RG)

Each level comprises a haulage drive situated in the footwall and orientated parallel to the strike of the ore body as well as several production / extraction drives that run the width of the ore body from the haulage drive all the way towards the hangingwall. Four ore passes are placed strategically along the strike of the developed drives.

The main level at the 123m RL comprises a crusher, workshops, offices and a canteen for the miners.

Since the start of the sublevel caving operations, levels 221 and 187 are exhausted and mining currently commences on level 155.

Figure 5-4 and Figure 5-5 shows the underground development at the Ørtfjell Kvannevann deposit

and the overlying historic and current open pits.

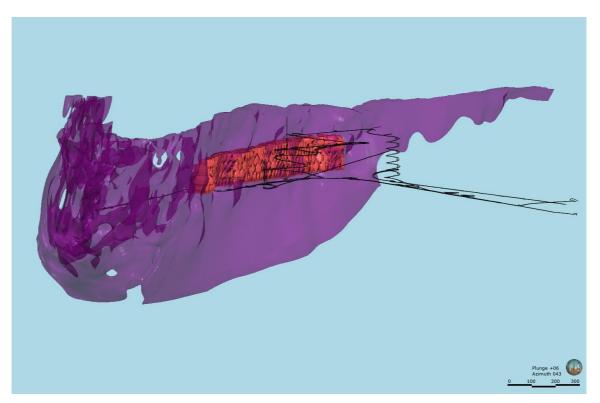


Figure 5-4: Underground development of the Ørtfjell Kvannevann deposit (Source: BGS)

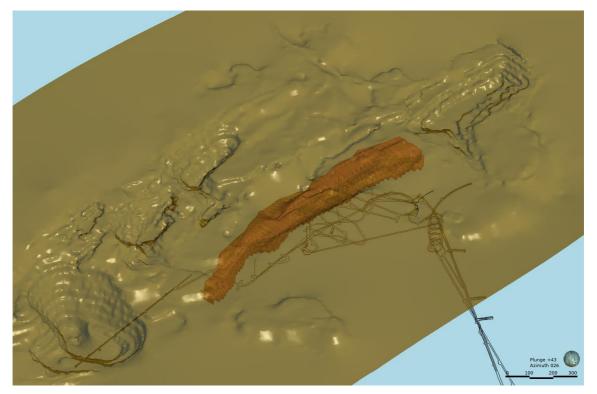


Figure 5-5: Historic and current open pit locations showing the underlying underground development (Source: BGS)

#### 5.3 Historical Exploration

#### 5.3.1 Mapping

The iron ore mineralisation in the Dunderland valley was first mentioned in literature in 1828 by Bergmester H.C.Strøm. Strøm describes the rock type as iron-mica schists. However, the first serious attempts to investigate the area started 1880 to 1890 by engineer Haaselblom. This work and more geological mapping and some core drilling was then carried on by the Dunderland Iron Ore Company (DIOC) and focused mainly on the Bjørnhei, Vesteråli, Finnkåteng and Ørtvann area. The early history of mapping and ore production is described in detail by Oxaal (1919).

Later, from the late 1940's onward, intensive mapping and diamond drilling were main activities in the Dunderland valley being carried out by RG. All geological mapping was primarily completed by RG's geologists in scale 1:2,000 and 1:1,000. Results from this detailed mapping were compiled in a regional map covering large parts of the Dunderland valley ore district (Søvegjarto 1986). These maps also form the base for the published geological maps by the geological survey of Norway (NGU), sheets "Storforshei" and "Dunderlandsdalen" scale 1:50,000 covering the area (Søvegjarto et al. 1989, Gjelle et al. 1991).

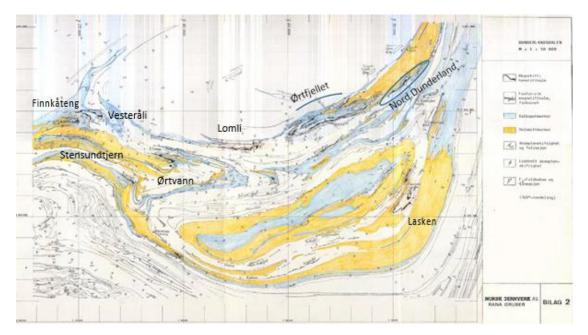
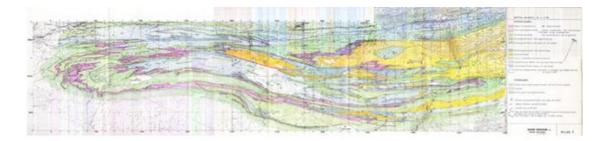


Figure 5-6: Geological map of the Dunderland iron ore formation (mapped and compiled by U. Søvegjarto in the period between 1973 to 1986) (Source: RG)



# Figure 5-7: Geological map of the Ørtfjell iron ore deposit (mapped and compiled by U. Søvegjarto in the period 1973 to 1986 (Source: RG)

#### 5.3.2 Drilling

Diamond drilling on the deposits commenced in the late 1940's with drilling being concentrated on the main ore deposits at Ørtvann, Vesteråli, Stensundtjern, Finnkåteng and Ørtfjell. Both surface and underground drilling has been undertaken.

A large exploration drilling program ended around 1986 and after drilling 1,410 totalling 185,107m. Until 1973 / 74 all core was drilled with a diameter of 22mm. Thereafter, from approximately borehole no. 955, the core was drilled at a diameter of 35mm.

After approximately 1950, most of the drillholes were measured for deviation. The oldest deviation measurements were performed using the HF etching method. Subsequently, from the late 1960's onwards both the Craelius orientation and the Fotobor method were applied.

Around 2009, diamond drilling commenced in the Ørtfjell area and during 2012 in the Stensundtjern area to increase the geological understanding, to increase the resource and reserve base and for quality control of previously acquired data from the 1970's. All modern (post 2010) drill core has a core diameter of 46mm.

All holes drilled after 2012 (and longer than 100m in length) were measured for hole deviation using a non-magnetic Devico DeviFlex instrument with all holes exceeding 100m in length being measured for drillhole deviation.

Table 5-1 shows the drilling completed at the various deposits within the Dunderland iron ore region with Figure 5-8 showing the number of drillholes completed by year.

In total, 1,518 drillholes have been completed for a total of 206,309m.

Area	Year	1901 to 1986	2009 to 2014
Ørtfjell	# holes	592	47
	Meters drilled	101,591.60	7,070
Nord Dunderland	# holes	40	4
	meters drilled	5,115.50	1,283.90
Stensundtjern	# holes	212	37
	meters drilled	20,225.80	7,120.50
Lomli	# holes	9	12
	meters drilled	1,304.10	3,556.20
Bjørnhei	# holes	10	-
	meters drilled	932.81	-
Vesteråli	# holes	168	-
	meters drilled	14,411.89	-
innkåteng	# holes	150	8
	meters drilled	12,934.90	2,251.00
Ørtvann	# holes	197	-
	meters drilled	25,090.00	-
Neverhaugen	# holes	10	-
	meters drilled	934.35	-
Ørtfjellmo	# holes	21	-
	meters drilled	2,567.64	-
Total number		1,410	108
Total meter drilled		185,108.59	21,281.60

#### Table 5-1: Diamond Drilling completed at the Dunderland iron ore projects

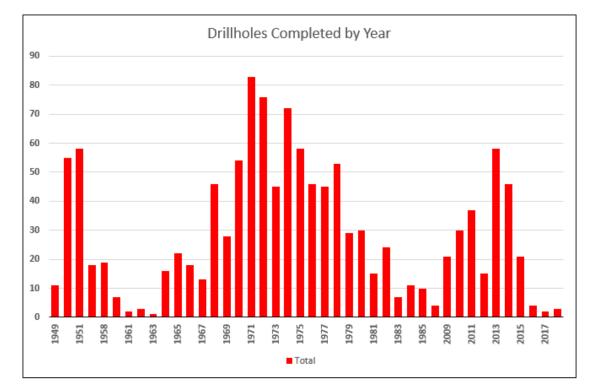


Figure 5-8: Drillholes completed between 1949 and 2018 (Source: RG / BGS)

From 1950 through the 1980's, all drilling was done "in house" by RG staff and using their own drill rigs (Atlas Copco Diamek 250; Boart). Post-2000, exploration drilling was conducted by contractors: Bleikvassli Gruver AS drilled in 2009 and LNS from 2010 onwards, employing Atlas Copco U4 and U6 wireline drill rigs. Some drillholes with total lengths <100m were drilled using a Sandvik Onram 100.

Historical documentation is lacking but from 2009 onwards, drilling contractors were closely supervised by RG staff. Operations followed RG's guidelines and instructions with shift reports being provided for each drillhole.

Drill programs throughout the operational history of the project have dominantly employed wireline-diamond drilling with standard tube; there was no known reverse circulation drilling. When till was present, drillers implemented the rig's top hammer to drill open holes. There was therefore no recovery of overburden. These holes were then cased.

RC holes with diamond tails have not been drilled at Dunderland and RG has never drilled oriented core.

#### 5.3.3 Survey and deviation measurements

Evaluating the downhole surveys of drillholes at Dunderland is essentially an investigation into the evolution of the technology itself. There are five techniques that have been used:

- HF: hydrofluoric acid in glass container
- Craelius instrument
- PP drillhole inclinometer
- ABEM Reflex Fotobor
- Devico DeviFlex

Table 5-2 shows the dates each method was employed.

#### Table 5-2:Downhole survey methods used relative to year

Date	Method			
1949 to 1960	HF			
1965 to 1976	Craelius	+ PP		
1976 to 1986	Fotobor	+ PP		
2010 to present	DeviFlex			

While the original measured azimuth and dip recordings are available for most of the drillholes, that does not mean that the accuracy of the techniques are well understood. SGM and BGS has come across the HF method on several occasions on projects in Sweden and has observed mixed results. The inclination is measured by acid etching a glass tube, meanwhile, a compass needle would lock into place via cooling gelatine; the gelatine was protected from heat by a vacuum flask (Tweedie, 2010). The presence of magnetite at Dunderland along with the limited number of survey points, greatly decreases confidence in this method. These are also the drillings that produced 22mm drill core and are the most susceptible to deviations. Their trajectories should be treated with scepticism. 134 drillholes are known to have been surveyed with this method, totalling 26,553m and though they are generally short with a median length of 175m, the longest is 500m. The earliest usage is recorded from 1949 and the latest from 1960.

PP slopes were used only for inclination and the technique is fairly simple. It employs a pendulum, electrical relays and a resistance arch to electrically measure the displacement of the pendulum. It takes approximately 10 seconds to conduct a measurement, accuracy is  $\pm 0.2^{\circ}$  and measurements can be taken for any drillhole angled 88° or less. There are two models: PP90 only takes measurements of drillholes inclined downwards while the PP180 can also measure drillholes inclined upwards. PP slopes were typically used in conjunction with the Craelius instrument and sometimes with Fotobor.

86 drillholes were surveyed only with PP slopes (for inclination but not deviation) for a total of 9,161m. The longest of these holes is 334m and the median drillhole length is 90m.

The Craelius Dip and Direction Indicator must have been one of the first downhole survey methods developed that is not affected by magnetism. The method requires a drillhole diameter of at least 36mm. The first record of this tool being used at RG dates back to 1965. Brochures list its inclination range as ±5° from the horizontal with an accuracy of ±0.2°. Azimuth accuracy is listed as ±3.0°. A full survey of a 300m hole took approximately 8 hours. Even in 1969, it seems to have been in use for a decade. Measuring the dip in this tool is essentially the same as the PP slopes. A pendulum is used and the force of gravity acting on the pendulum is counteracted by a current pushed through an electromagnet. The strength of the current is proportional to the dip of the probe. Azimuth was measured by mechanically rotating the probe within the hole using "orientation rods". The direction of the orientation plane of the pendulum is then read off at the surface. Prior to surveying, calibrations were made in order to correspond "current values to dip angles and to obtain an amplitude curve that will show the direction of the orientation plane of the probe in relation to a zero direction". Correspondence with staff at Devico AS suggests that it was a complicated survey method and results were likely questionable. This may explain why drillholes surveyed with a Craelius instrument were typically also surveyed with PP slopes.

200 drillholes accounting for 37,666m of drilling are known to have been surveyed with a Craelius tool between 1965 and 1976. The deepest of these drillholes is 493m and the median length is 180m. It is easy to see which surveys were conducted with a Craelius tool from the historical drillhole documentation as the amplitude curves associated with the calibration are easily identified.

The Fotobor method is essentially a precursor to the Maxibor. It required hole diameters of at least 46mm but did not require orientation rods which were apparently cumbersome to use. A 300m drillhole could be measured in 4 hours. Total trajectory error is listed as less than 0.1m per 100 m. It functions similarly to the Maxibor with four 3m rod sections screwed together and containing 3 reflector rings (1 placed every 3 m). A miniature camera using 16mm black and white panchromatic film and miniature lamps as well as an electronic pulse system are used to image the reflectors during a 15 second exposure time. The angular distances between reflectors is then used to calculate inclination and deviation. Correspondence with Devico staff indicates that the tool was not user friendly and required significant handling which could have resulted in frequent errors.

153 drillholes were surveyed with Fotobor for a total of 36,343 m. The longest of these drillholes is 440m and the median length is 235m. The earliest record of its usage is 1976 and the latest is 1986.

Recent drilling, from 2010 onwards, was surveyed with a Devico Deviflex tool owned by RG. This method uses 3 accelerometers and 4 strain gauges to measure inclination and deviation. Gravity vector, temperature and battery capacity are also recorded, and potential erroneous measurements are flagged when the data is exported. Inclination accuracies are listed as  $\pm 0.1^{\circ}$  and azimuth at  $\pm 0.01^{\circ}$  per station (errors accumulate with each station). Surveys conducted with this tool should be the most accurate.

Table 5-3 displays the number of drillholes and drillhole meters that were surveyed with each method.

Method	No. of drillholes	Meters	Median drillhole length	Percentage of total drillholes*
HF	134	26,653	175	14.9%
Only PP	89	9,161	90	5.1%
Craelius	200	37,666	180	21.1%
Fotobor	153	36,343	235	20.3%
Deviflex	86	20,537	238	11.5%
Unknown or No survey	490	48,265	80	27.0%

 Table 5-3:
 Downhole survey method relative to drilled meters

\*some drillholes, such as hand drillings, have been removed

#### 5.3.3.1 Survey Risk

With historical data of this nature and multiple survey methods having been used, it is quite common for some holes, or even entire phases of drilling to be removed from the database due to errors or uncertainties in the quality of the data. SGM and BGS has reviewed the data and the geological models created from the data and believes all data is fit for purpose. There does not appear to be any drillholes where major disruptions to the models have resulted from deviating drillholes and in all cases, the models produced can be designed from section to section with little difficulty from a drillhole location perspective. As such, all survey methods associated with the drilling have been used an no drillholes have been excluded due to dubious looking survey data.

#### 5.3.3.2 Core Recovery

Core recovery is not evaluated at Dunderland; neither has it been evaluated historically. This is discussed further in Section 8.4.

#### 5.3.4 Historical assays and QAQC

Historical assay methods employed since the initial drilling in 1949 have not been documented, or at least, RG have not yet found any documentation that describes the assaying methods over the course of the multiple drilling campaigns. It is believed that Fe\_Tot has always been determined through Titration methods and through discussions of RG personnel with laboratory personnel who have a long history with the mine, it is also believed that Satmagan has been employed throughout the operation to determine the magnetic content of the samples. It is understood that wet chemistry Fe2+ analysis of the Fe\_Mag was conducted as a quality control measure due to "higher" Satmagan values though to have potential for errors.

It is also believed that wet chemical analysis for MnO was employed historically.

Twin drilling and re-assaying of existing core at an independent laboratory has been undertaken to assess the validity of the historic assays. This is discussed further in Section 10.5.

#### 5.3.5 QAQC Historical assays

No QAQC data exists for the historic or modern drilling campaigns. Due to this, SGM implemented a check assaying programme that is discussed further in Section 10.6.

#### 5.4 **Previous Mineral Resource Estimates**

#### 5.4.1 Historic Estimates

BGS has only been presented with an internal Mineral resource Estimate for the Project. This is summarised below in Table 5-4 and supplied by RG. In undertaking the Resource Estimates, RG state the following:

"All resource estimations are done by company geologists. Currently RG AS's resource estimates are not signed off by a qualified person. Additionally, RG AS cannot document some of the old drilling and logging procedures as well as the oldest laboratory procedures. To increase the confidence level in these data sets, RG AS initiated drilling programs to address these issues by obtaining drill cores parallel to existing diamond drill cores from the 70's and 80's. This is done to verify the results from previous core-logging and laboratory analyses."

Twin drilling is discussed further in Section 10.5.1.

### Table 5-4:RG Mineral Resource Estimate for the Dunderland Valley Iron ore Project.<br/>(Source: RG)

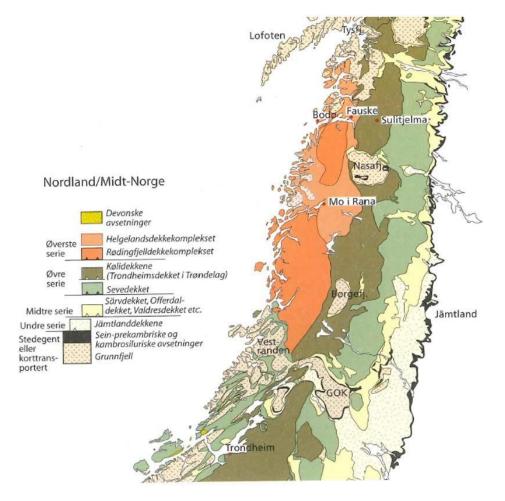
	Tonnage		Fe_Total %	Fe_Mag %	Comment
1 Ørtfjell	332 287 436	Indicated			
1.1 Kvannevann N91	11 711 930	Probable			Underground
1.2 Kvannevann N123	12 508 244	Proven	31.36	2.14	Underground
1.3 Kvannevann N155	9 902 826	Proven	31.69	2.12	Underground
1.3 Kvannevann Øst	11 450 471	Probable			Open Pit
Ørtfjell, total	377 860 907				
	tonnage		Fe total %	FeMag %	Comment
2 Stensundtjern	31 442 576	Probable	33.01	9.13	Open Pit
2 Stensundijern	11 543 115	Measured			
Stensundtjern, total	42 985 691		32.99	9.18	
3 Finnkåteng	9 269 242	Measured			Open Pit
4 Ørtvann	53 275 024	Indicated			Underground
5 Nord Dunderland	46 868 188	Inferred			
TOTAL	530 259 052				

#### 6 GEOLOGICAL SETTING AND MINERALISATION

#### 6.1 Regional Geology and Tectonics

The geology in Nordland County in northern Norway mirrors very much the general geology in Norway. Caledonian nappes (mainly the upper and uppermost nappe units) dominate and lie on top of the autochthonous basement gneisses that are exposed in so-called tectonic windows. In Nordland these windows are the Høgtuva, Nasafjellet, Tysfjord windows.

Figure 6-1 shows a map illustrating the extent of the Caledonian upper and uppermost nappe units in Nordland and Trøndelag (greenish and orange coloured units). The upper nappe unit is built up over the Seve - and Køli nappes. The Seve unit consists of a heterogeneous collection of different nappes. The lithologies range from ultramafic and mafic rock sequences to metapelitic and psammitic gneisses. These rocks represent the transition zone between the Baltic shield and the lapetus ocean. The Köli nappes also includes a very large number of ultramafic bodies of all sizes and varied sedimentary (partly fossiliferous) and volcanic / igneous rocks. The units represent the relics of the former lapetus ocean and local marginal basins. The uppermost nappe unit (with its sub-units Helgeland nappe complex and Rødingfjell nappe complex) represent remnants of the western part of the continental margin as well as the former ocean floor of the lapetus Ocean. Rock types present include Precambrian continental rocks, Caledonian granitoids as well as metasediments such as mica schists and calcite- / dolomite marbles.





It is within the Rødingfjell nappe complex the known mineralisation and deposits (e.g. the Mofjellet Zn-Pb-Cu-Au and the Ørtfjell iron ore deposit) in Rana municipality are found. In Rana, the Rødingfjellet nappe complex is build up by sub-units called the Mofjell group, the Plurdal group and the Ørtfjell group. The Mofjell group in general is dominated by massive grey gneisses with layered amphibolite and aluminous biotite and muscovite gneisses. Regionally, this unit is part of the Rana-Hemnes Zn-Pb-Cu metallogenic area that hosts a number of both larger and smaller deposits. The two largest deposits known to date in the Mofjell group are the Bleikvassli and the Mofjellet deposits. The hosting lithologies are metasedimentary sequences with minor intercalations of mafic and felsic metavolcanic rocks. According to Grenne et al. (1999), most of these sequences were probably deposited on the margin of the Laurentian plate during rifting of Rodinia and development of an Atlantic-type or passive margin.

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 outcropping iron oxide deposits and mineralisation cover an area of about 105 km<sup>2</sup> in the Dunderland valley north of Mo i Rana.

#### 6.2 Local Geology

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.

SGM reviewed the core logging and logging codes used and summarised the geology as follows. To support this, SGM re-logged over 1,000m of core.

#### 6.2.1 Schists

The schists are divided into two separate types: Muscovite-Schist (M-Sch) and Biotite Schist (Bt-Sch). Many different rock codes were used at RG for schists, but Ulrik Søvegjarto divides them into three types: 1) contact mica schist, 2) carbonate mica schist and 3) rusty graphitic mica schist. The M-Sch roughly corresponds to Ulrik's contact mica schist and the Bt-Sch to his carbonate mica schist. No rusty graphitic mica schist was seen in the holes logged by SGM. Unfortunately, many previous geologists have lumped all schists into a single category of 'mica schist'.

#### M-Sch

This is light grey to grey and generally coarse grained (Figure 6-2). The mineral assemblage is Qtz-Fsp-Mu  $\pm$  Bt,Gnt. The modal percentages of Qtz relative to Fsp are unknown. At Stensundtjern, this unit is massive; at Ørtfjell it may be massive or banded with darker bands corresponding to an increase in Bt  $\pm$  Mag. Garnets are present infrequently and tend to occur close to contacts. Garnet crystals vary from sub-mm to 20mm and may be present as euhedral crystals or clusters of small crystals. Calcite is commonly present in low quantities (~1-2%).

#### **Bt-Sch**

This is grey to dark green-grey and medium to coarse grained (Figure 6-2). The mineral assemblage is Qtz-Fsp-Bt  $\pm$  Ca,Am,Mu,Gnt. Proportions of Qtz to Fsp are unknown. The Bt-Sch is commonly interbedded with calcareous meta-sediments, marbles and amphibolites. Gnt intervals are more common relative to the M-Sch and vary from sub-mm to 20mm. Frequently, thin lenses (10-30mm) of compact calcareous meta-sediments are observed. Pyrite is rarely present as clusters parallel to foliation, often replacing magnetite or in proximity to Qtz veins. Disseminated pyrrhotite is rarely observed. Calcite is generally present and in greater quantity than the M-Sch. Banding is infrequent but when present, is defined by higher concentrations of Bt-Am in darker bands.

#### 6.2.2 Banded Iron-Formations

Two banded iron-formations are defined at Dunderland: BIF and BIF-Cal.

#### **Banded Iron Formation**

The Banded Iron Formation hosts the economic mineralisation at Dunderland. It comprises thinly bedded, intercalated lithologies. The most common are fine-grained, blue-grey siliceous meta-sandstones and very fine grained to medium grained, charcoal-coloured, hematite beds. These beds vary from mm-scale to 30-40mm. Beds of calcareous meta-sediments, many epidote-altered, are common. They are generally thicker, from 100's mm to 1.0m. The Banded Iron Formation is generally strongly deformed with isoclinal folding and crenulations. Rare primary sedimentary structures are found. These include fining upward sequences and scoured bases (Figure 6-3). Way-up (younging) criteria are found but folding diminishes their usefulness.

The mineralisation will be discussed further in Section 6.3.

#### Banded Iron Formation-Cal

The Banded Iron Formation described above frequently occurs within, or has intercalations of, banded rocks with much less hematite / magnetite. These instead show very fine-grained, peach- to rose coloured bands, frequently calcareous (Figure 6-3). The bands also contain schists like the M-Sch but poorer in Mu. Ulrik labelled this unit a 'garnet fels' and described the bands as being composed of very fine-grained garnets. Ulrik also mentions that the unit is typically Mn rich (Søvegjarto, 2011). SGM did spot one or two bands that are clearly garnet rich but most of the bands are too fine to discern the mineral composition and SGM suggest some thin section analysis taken from these banded rocks. While spessartine is likely, rhodochrosite or siderite are other possible sources of the lightly coloured banding.



ABOVE - CG025 - Image taken looking NE at pit wall. Marbles are readily apparent in exposure and can be picked out by aerial photography.

ABOVE - BH 257-2014 - 304.1 m - "Marb". Coarse grained calcite marble with foliated, mica-bearing intervals.



ABOVE - BH75-2011 - 159.2 m - Contacts between schists & marbles are frequently sharp but can be gradational as in the image above.



Figure 6-2: Schists and Marbles located outside of the Banded Iron Formations (Source: SGM)

RIGHT - BH 257-2014 -224.9 m - "BIF-Cal". Calcareous bands in BIF.



BELOW - BH 135-2012 - 33.2 m - "BIF". Folded BIF with hematite rich bands.



220.5 m - Scoured bedding and fining upward sequences in BIF. Up direction is downhole.



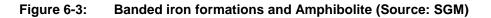
BELOW - 921 - 390.1 m - "BIF-Cal"



LEFT - BH64-2011 - 249.7 m - Ep altered interval, crenulated with low angle to core axis but with abrupt changes on either side.



ABOVE - BH57-2011 - 152.5 m, "Amp". Amphibolite with scattered garnets.



#### 6.2.3 Marbles

Both calcitic and dolomitic marbles are present at Dunderland and a gradual transition between the two is not observed. Rather, stratigraphic packages are either dolomitic or calcitic with sharp contacts between, suggesting an original sedimentary origin.

#### Calcitic marbles (Marb)

Calcitic marbles are light grey to white. They react vigorously with cold HCL. Grain size varies from fine to very coarse grained with calcite crystals approaching 10mm within infrequent, massive intervals. Generally, the marbles show impurities and discolouration's from muscovite and biotite which also define a schistosity (Figure 6-2). Impurities are more frequent close to contacts. Uncommonly, impurities are graphitic rather than micaceous. While Pyrite is rare in the deposit, it is most likely to be found in marbles and aligned as isolated grains within bands / layers.

Ulrik Søvegjarto describes a "stinky" calcitic marble present at Ørtvann and Stensundtjern. When struck with a hammer, a sulphuric odour is emitted. He attributes this to "organic inclusions and some organic sulphur compounds" and references NGT v.57, 1977 No.3 (Søvegjarto, 2011). This reference has not been found but SGM confirm the presence of an odorous marble at Stensundtjern and pyrite may be the source.

#### Dolomitic marbles (Dol)

Dolomitic marbles are grey to white and are a mix of both dolomite (dominant) and calcite. Grain size is medium to coarse with local coarse 'grains' to blebs of translucent quartz defining bands (Figure 6-2). These may be silica-filled voids from earlier dissolution, but it is surprising that they would have survived amphibolite facies metamorphism. Micaceous / graphitic impurities defining schistosity are also common in dolomitic marbles.

#### 6.2.4 Amphibolite (Amp)

SGM logged thin intervals (<5.0m) of amphibolite, mostly in proximity to Bt-Sch (Figure 6-3). Amphibolites are fine to medium grained, dark green and composed of amphibole, feldspar, chlorite and possibly a serpentine mineral (talc?). Logging and mapping by Ulrik Søvegjarto indicate thicker packages of amphibolite west of Ørtfjell.

#### 6.2.5 Tillite

During a visit to Ørtfjell by the NGU, survey geologists identified a metamorphosed tillite (sedimentary rock composed of compacted glacial till) near the open pit (personal communication, Alexander Kuhn). SGM visited this same exposure and saw the rock type underground. It is like the Bt-Sch in composition and contains discontinuous flat lenses of calcareous meta-sediments (dropstones?). The unit is easy to identify in exposure but may be difficult to see in drill core if the lenses are not large enough to appear continuous. SGM did not established a code for meta-tillite with the material probably being logged as Bt-Sch.

#### 6.2.6 SGM log

An example of an SGM log is shown in Figure 6-4.

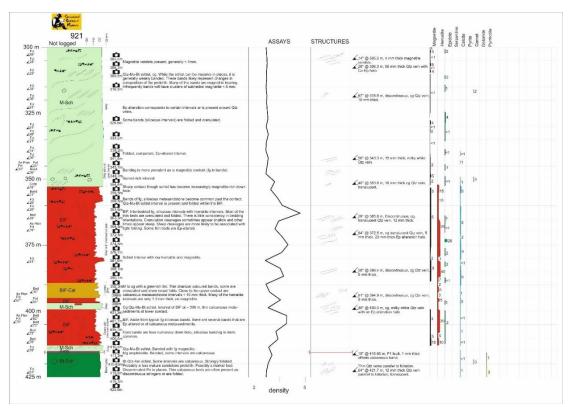


Figure 6-4: SGM log of drillhole 921 (Source: SGM)

#### 6.3 Mineralisation

The iron ore contains an average of 30 to 34% iron in the form of the oxide minerals hematite ( $Fe_2O_3$ ) and magnetite ( $Fe_3O_4$ ). In the Kvannevann ore body, the total oxide content is made up by about 97.5 to 98% hematite, while the remaining 2 to 2.5% are formed up by magnetite. In other ore bodies, e.g. Stensundtjern and Nordmalm RG observe a different distribution between the two iron oxide minerals with magnetite forming up to 15% of the total iron oxide content. Typical gangue minerals are quartz, feldspar, calcite / dolomite, epidote, chlorite, mica, amphibole and apatite.

The main types of ore found can be characterised as sandy hematite, flaky hematite, magnetite / hematite ore and magnetite ore.

The sandy hematite ore is often banded, with alternating layers of hematite and quartz (mmscale, Figure 6-5, and is equigranular in appearance with straight grain boundaries. The average grain size is about 20µm and the hematite crystals show a random orientation in thin section. The quartz rich bands contain some disseminated hematite crystals.

Due to the heavy tectonic and metamorphic overprint RG quite often observe flaky hematite (specularite) ore (Figure 6-5) containing hematite crystals that underline the strongly foliated nature of the ore. The ore is banded with alternating layers containing hematite, quartz and carbonates. Typically, the bands are folded, the ore has an equigranular texture with straight grain boundaries. Compared to the sandy hematite, the hematite occurs as tabular and elongated grains and has larger grain sizes in the range of 40 to 50µm. In general, the hematite is orientated along the folded layering and foliation. However, some hematite grains have grown over these orientated crystals especially in fold axes (Figure 6-6).

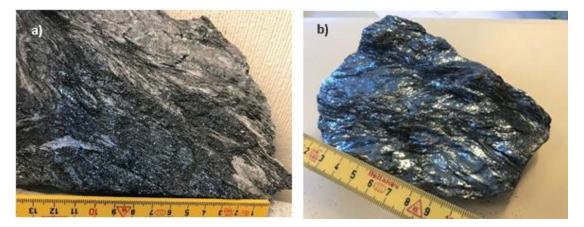
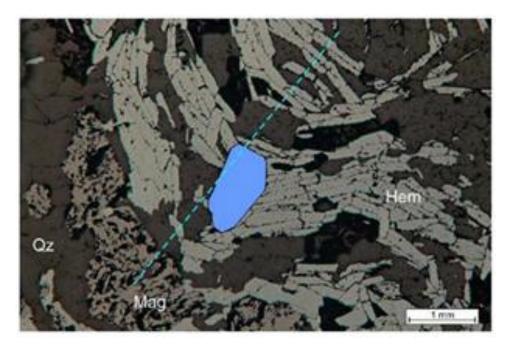


Figure 6-5: (a) Sandy hematite ore, b) Flaky hematite ore (specularite ore) from the Kvannevann ore body. (Source: RG)



# Figure 6-6: Two generations of hematite crystals, folded tabular and elongated hematite overgrown by a second generation of hematite (blue grain) along fold axis (Martinussen 2014). (Source: RG)

Very often the ore contains both hematite and magnetite with hematite being the most prominent oxide mineral. This magnetite-hematite ore is layered and folded quite like the sandy and flaky ore types. The amount of magnetite varies between 1-2% in the Kvannevann ore and 9-10% in the Stensundtjern ore. The hematite is tabular and elongated in shape and is oriented along the prominent foliation and has a typical grain size of 30µm. In contrary, the magnetite has a much larger grain sizes (1mm) and shows no apparent orientation.

The magnetite ore is coarse grained with an average grain size of 0.5cm, grain boundaries are straight to slightly irregular, and magnetite crystals occur rounded while hematite has a tabular shape.

#### 6.3.1 SGM Mineralisation and Alteration Review

#### 6.3.1.1 Banded Iron Formation

Banded Iron Formations are divided into 3 types: 1) Algoma, 2) Lake Superior and 3) Rapitan (Robb 2005). Algoma-type Banded Iron Formations tend to be small, are associated with arc volcanism and generally found within greenstone belts. Most Banded Iron Formations are of Lake Superior-type, formed during the Paleoproterozoic (2.5-1.6 Ga) on stable continental shelves and are responsible for most of the iron production worldwide. Rapitan-type Banded Iron Formations are unusual in occurrence and were deposited during Neoproterozoic glaciations (1.0 - 0.54 Ga).

The Rapitan model explains reducing conditions in the Earth's oceans, like those preoxyatmoinversion (rise of atmospheric oxygen levels from 2.5-2.0 Ga) with near global glaciation that partitioned the oceans from the atmosphere. The oceans hence became enriched in ferrous iron. During periods of glacial melt, the oceans became re-oxygenated resulting in the precipitation of ferric iron.

While thin amphibolites (possibly meta-volcanic) have been logged and discontinuous lenses mapped, they hardly comprise the greenstone belts in which Algoma-type Banded Iron Formations are typically found. The Dunderland valley rocks are also too young to fit the Superior-type model. The Rapitan-type are of the correct age and the Rapitan Group, in the Northwest Territories, Canada, shows very similar stratigraphy: dolostones, limestones, aluminous sediments and glaciogenic rocks (Young, 1976). Neoproterozoic Banded Iron Formations are also less likely to have magnetite as the dominant component (Cox, 2013). The identification of meta-tillites by the NGU supports this interpretation. Dropstones or striated clasts found within the Banded Iron Formation as well as logging / mapping tillites and mixtites would support the Rapitan interpretation.

#### 6.3.1.2 Post-Banded Iron Formation alteration

Banded Iron Formations are originally deposited as interbedded chert and Fe oxides with Fe values ~25-35%. Most economic mineralisation has been 'upgraded'. The processes by which this occurs are debatable but supergene and hypogene alteration (or both) have been invoked to explain the enrichment. Which of these processes is dominant is beyond the scope of this study and as such the alteration will be considered of hydrothermal nature.

#### 6.3.1.3 Magnetite

The clearest evidence for alteration / mobilisation of iron is the magnetite clusters within the Banded Iron Formation and other units. These subhedral crystals often form in hematite- rich intervals, within thin amphibolite horizons and are very common at stratigraphic contacts, as shown in Figure 6-7.



Figure 6-7: BH75-2011, 153 m, Intervals rich in Mag clusters at schist - marble contact (Source: SGM)

SGM did not observe beds or intervals of massive magnetite but did observe many cases where magnetite appears to be derived from hematite. Figure 6-8 was taken through a hand lens and displays a magnetite crystal overprinting a hematite layer (BH57-2011, 12.5 m).



#### Figure 6-8: A magnetite crystal overprinting a hematite layer (Source: SGM)

It does not appear that the system was flooded with hydrothermal fluids from an intrusion or crustal-scale shear zone. In reality, little alteration has been noted. The source may simply have been metamorphic fluid derived from dehydration reactions. Stratigraphic contacts create natural barriers to fluid flow where magnetite would be more likely to precipitate.

#### 6.3.1.4 Hematite

Ulrik defines four types of hematite ore: 1) mixed magnetite-hematite ore 2) specular hematite ore (platy) 3) coarse specular hematite ore (platy) and 4) granular hematite. Ulrik mentions that most of the ore at Ørtfjell is specular hematite with layers of granular hematite (Søvegjarto, 2011). Whether one of these types represents a degree of hematite enrichment by hydrothermal processes is unclear. Lindberg (2014) displays some interesting thin sections from crenulated Banded Iron Formation in which hematite crystals are folded but a few hematite crystals have recrystallised parallel to the axial plane (as in Figure 6-6). This is likely a local remobilisation however.

Other examples from drill core show fine-grained, massive hematite that may be preferred candidates for enrichment (Figure 6-9, BH75-2011, 93.5 m):



Figure 6-9: BH75-2011, 93.5 m. Enriched? Banded Iron Formation. (Source: SGM)

Whatever the case, the elevated iron contents of the Dunderland Banded Iron Formations relative to unaltered Banded Iron Formations suggest an element of enrichment.

#### 6.3.1.5 Epidote

Epidote alteration is common within the Banded Iron Formation and is seen in thin section (Lindberg, 2014). SGM observed epidote in certain intervals in the Banded Iron Formation. Frequently, these are also calcareous, but not always. Lindberg (2014) also described a relationship between epidote and calcite, but also between epidote and magnetite. The protolith is uncertain.

Epidote is less commonly found in calc-silicate (locally termed 'skarn') veining or in alteration halos around quartz veins.

#### 6.3.1.6 Sericite

Muscovite is prevalent in the M-Sch and common in the Bt-Sch. While muscovite is undoubtedly part of the metamorphic mineral assemblage, SGM did note an increased frequency and brilliance to the white mica in proximity to the Banded Iron Formation. It may represent metamorphism of an original sericite hydrothermal alteration.

#### 6.4 Structure

In reviewing the Project, SGM did not undertake a detailed structural study. SGM's objectives were to evaluate the current geological and structural model as it relates to the ongoing resource estimation being completed. Most of the data acquired was digitised structural measurements from historical maps. SGM logged some drill core (alpha angles) and measured structures underground and in the open pits. SGM did not undertake any mapping and only logged a small percentage of the available drill core.

#### 6.4.1 Overview

#### 6.4.1.1 Ulrik Søvegjarto's Model

The only established structural model for the Project is by Ulrik Søvegjarto, the author of the geological map for the district.

Ulrik describes four episodes of deformation. The first episode of thrusting and folding created fold nappes with large fold amplitudes of 10-15km with ongoing sedimentation and appears to be poorly understood, presumably because of overprinting. The second episode is again thrusting and isoclinal folding (including strong folding of the ore), contemporaneous with peak

amphibolite metamorphism. During this episode, isoclinal folds were created with approximately horizontal to sub-horizontal fold limbs and fold axes. Fold amplitude was again on the order of 10-15km. The third episode created open, upright folds, clearly visible on maps. Presumably, the F2 and F3 fold axes are parallel at the end of this stage and impossible to distinguish. Ulrik mentions that the folding is more intense southwards. Figure 6-10 shows an image from Ulriks notes from the mapping project.

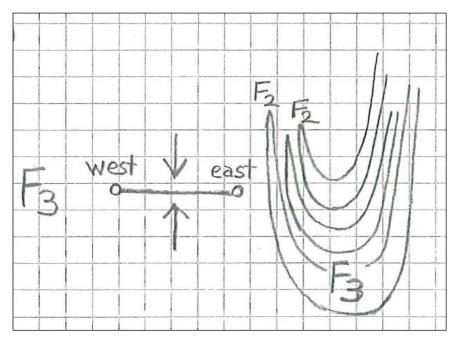


Figure 6-10: Image from Ulrik's notes. (Source: SGM)

The fourth episode is east-verging thrusting and open folding. This gently refolded the folds from the second and third events. Ulrik observed mylonites that may be contemporaneous with this.

Ulrik implies that the Banded Iron Formation that has been mined at different sites is the same horizon, repeated by folding a shown in Figure 6-11

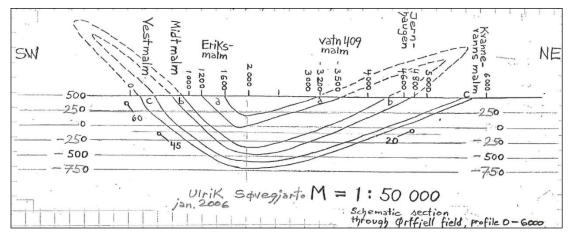


Figure 6-11: Image from Ulrik's notes. (Source: SGM)

#### 6.4.1.2 Strain and Competency

The rocks in the Dunderland valley behaved in a ductile fashion during deformation but the units absorbed strain differently depending on original competence (see Figure 6-12). Quartz and calcite veins (tension gashes) are common and were subsequently deformed. They were probably generated during brief periods of brittle deformation (such as earthquake-related pumping and drops in fluid pressure; of the type common in shear zone deposits). Overall, the Banded Iron Formation absorbs a large share of strain by folding, relative to the schists (Figure 6-12; Banded Iron Formation in red). The thinly interbedded meta-sediments create multiple dislocations and bedding parallel shearing between competent siliceous intervals and less competent hematite intervals. While marbles appear massive (where impurities are not present), much of that is due to retrograde recrystallisation during waning pressure and temperature. During amphibolite metamorphism, these units would have been extremely ductile as is evident underground where interbeds of calcareous meta-sediments are complexly folded, as shown in Figure 6-13.

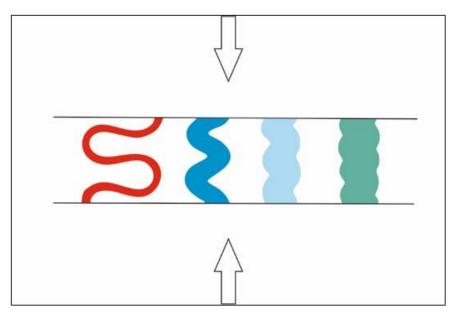


Figure 6-12: Deformation differences due to competency contrast. (Source: SGM)

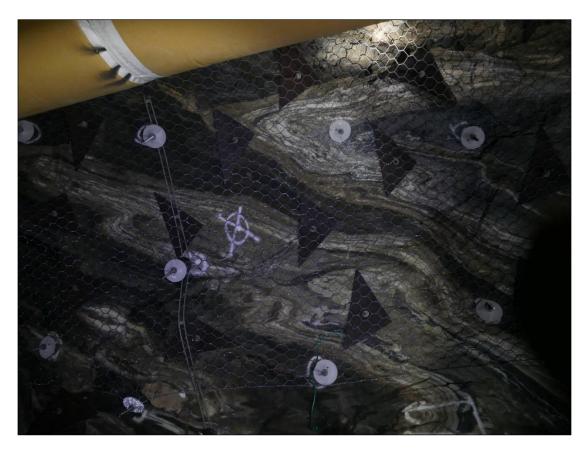


Figure 6-13: Folded intervals of interbedded calcareous meta-sediments and schists. (Source: SGM)

The most competent lithology is the M-Sch and it too displays tight folding where banding or interbeds are present to define it.

#### 6.4.1.3 Alpha Angles

No oriented drill core is available from the Dunderland valley drilling. While oriented drill core provides an exact plane of measurement, non-oriented core produces a range of possible planes. SGM therefore relied on alpha angles from drill core in order to validate geological and mineralisation wireframes. These included foliations (schistosity), bedding / metamorphic banding (they can be difficult to distinguish), crenulation cleavages and contacts. Alpha angles at high angle to the core axis do give useful information since they approximate the true orientation. Figure 6-14 and Figure 6-15 show the alpha angles set against the iron formation model.

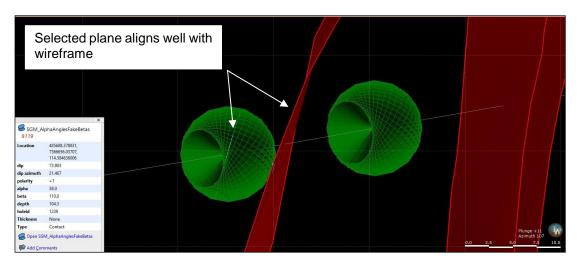


Figure 6-14: Alpha angles of contacts (shown as green cones) measured along drillhole 1239 show a good fit with the mineralisation model. (Source: SGM)

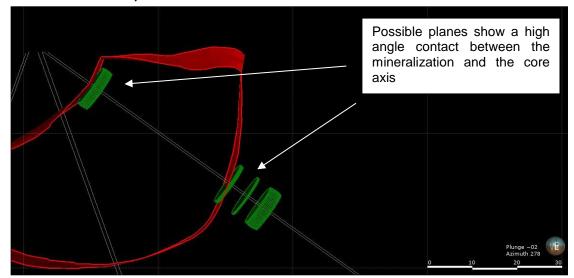


Figure 6-15: Alpha angles of contacts measured along BH 135-2012 fit the model well. (Source: SGM)

#### 6.4.1.4 Structural Measurements

Most structural data was digitised from two geological maps: 1) Ulrik Søvegjarto's Ørtfjell map and 2) a Dunderland valley map that also appears to be authored by Ulrik Søvegjarto. Some data was collected by SGM during a brief visit to the pit. In addition, a Masters student (Fredrik Lie) has also collected structural data. All structural measurements are shown in stereograms in Figure 6-16. Fold axes fit well between all datasets, but the planar data is variable, especially between Ulrik's two maps. On the Ørtfjell map, Ulrik mentions that his planar measurements may refer to banding, foliation or axial planar foliation. As the Ørtfjell dataset fits perfectly as a steep axial planar foliation, that supports his mapping, SGM suggest that any banding that Ulrik measured was likely on fold limbs that were isoclinally folded and parallel to the axial planar foliation. A relatively small number of his structural observations were made from mapped fold hinges. In Ulrik's Dunderland map, his legend indicates that planar data may refer to foliations or axial planar foliation but SGM is convinced that this data includes measurements of contacts and banding as his data fits the trend of the lithologies extremely well and SGM have observed that lithological contacts are often not parallel to foliations (Figure 6-16).

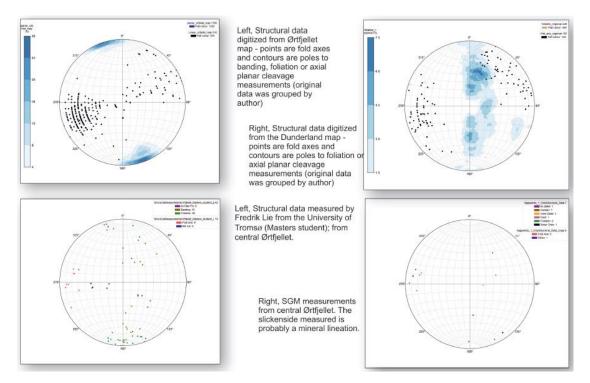


Figure 6-16: Stereograms with planar and linear data from Ørtfjell and Dunderland and stereograms planar and linear data from central Ørtfjell. (Source: SGM)

Both the SGM data and that of Fredrik Lie are taken at similar exposures in central Ørtfjell. SGM's crenulation cleavage seems to correspond with Fredrik's axial planar cleavage. These were measured in a crenulated exposure of Banded Iron Formation where orientations were variable.

#### 6.4.1.5 Foliation (schistosity)

Differentiating bedding from metamorphic banding and schistosity can be difficult in strongly deformed rocks, particularly in the marbles. Bedding is observed in drill core but is uncommon. Banding can be present in all rock types at Dunderland. Frequently, this banding is obviously bedding (common in the Banded Iron Formation, Banded Iron Formation-Cal or Bt-Sch) but the banding in the thick marble sequences may be metamorphic rather than primary bedding. Marble is extremely ductile under greenschist / amphibolite metamorphism and bedding can be transposed into a streaky, metamorphic banding. Therefore, SGM have frequently measured structures as foliation (schistosity) even when compositional changes might suggest bedding. Presumably, Ulrik made the same decision when he grouped all his planar measurements into foliation.

Underground at Ørtfjell, it is evident that the dominant foliation in the exploration drift is steep and axial planar. An example of axial planar foliation related to folding (not from the project area) is shown below in Figure 6-17.



Figure 6-17: Axial planar cleavage in folded rocks

(Source: http://pages.uoregon.edu/millerm/AxPICIv.html)

At Ørtfjell, this schistosity should be axial planar to Ulrik's third episode of deformation (F3). Dislocations are frequently evident along this axial planar schistosity (axial planar shearing).

The relationship of schistosity relative to folding at Ørtvann and Stensundtjern is unknown as these sites were not visited.

#### 6.4.1.6 Folding & Lineation's

Folding is extremely common in drill core, underground and in exposure as shown in Figure 6-18. Unfortunately, the lack of oriented drill core prevents any fold axes from being measured in drill core. There are many exposures in the pits, but the unstable walls are dangerous to approach. Surprisingly, folding is difficult to measure underground, at least within the exploration drive. The folds are easily observed, but it is difficult to find a 3D surface that can be measured. There are opportunities of course, but magnetite disrupts the use of a compass and a Total Station or reference points must be used to take the azimuth reading.

SGM observed a mineral lineation, both in drill core and underground, that appears to be parallel to fold axes nearby (plunging approximately ENE at 75° within exploration drift). While uncommon, it seems to occur in interbeds of calcareous meta-sediments.

Despite the probable existence of a fold axis-parallel-mineral lineation, deformation at Dunderland does not appear to have produced strong linear geometries. Deformation underground within metamorphosed tillites? showed 'pancaked' calcareous stringers (Figure 6-19), rather than the cigar shapes expected from an L-tectonite. S-tectonism seems to have been dominant (Figure 6-20).



Figure 6-18: Axial planar foliations are commonly found around folded competent intervals and lineation's are uncommon (Source: SGM)



Figure 6-19: Pancaked "dropstones" in tillite? (Source: SGM)

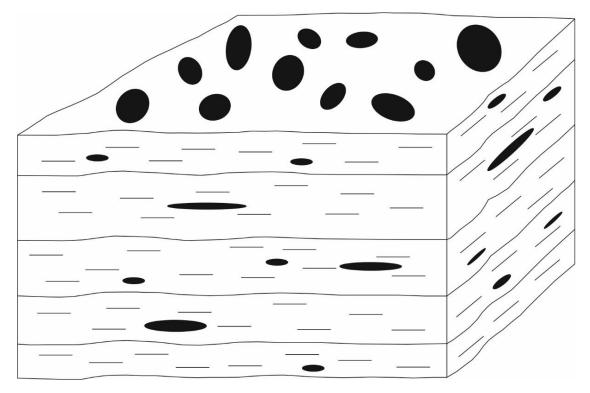


Figure 6-20: S-Tectonite (Source: SGM)

#### 6.4.1.7 Significant Structures

Some intervals in drill core show increased strain relative to surrounding intervals (BH64-2011, 120.5 m) but only one significant shear zone has been identified and that was in the Vestmalmen pit shown in Figure 6-21.



Figure 6-21: Probable shear zone (Source: SGM)

The continuity of this structure or relation to the mineralisation has not been explored by SGM.

#### 6.5 Geology Summary

#### 6.5.1 Stratigraphy and mineralisation

The Dunderland deposits are banded iron-formations and fit the Rapitan (Neoproterozoic glaciogenic) model nicely. The diagenetic model also explains the problematic concentrations of Mn. Like Fe2+, Mn2+ is soluble under reducing conditions while Mn3+ and Mn4+, like Fe3+ precipitate under oxidising and alkaline conditions. Manganese has a higher oxidation potential relative to Fe, meaning that Fe2+ can precipitate while Mn2+ is still in solution. Banded Iron Formations are believed to have formed during a switch from reduced, to oxygenated, oceans. The similarities in chemical behaviour explain why Mn deposits are typically found close to Banded Iron Formations but the differences in oxidation potentials explain why they are found in separate stratigraphic intervals (Robb, 2005). At Dunderland, the bedded Mn is found in the Banded Iron Formation-Cal (Ulrik's 'garnet fels').

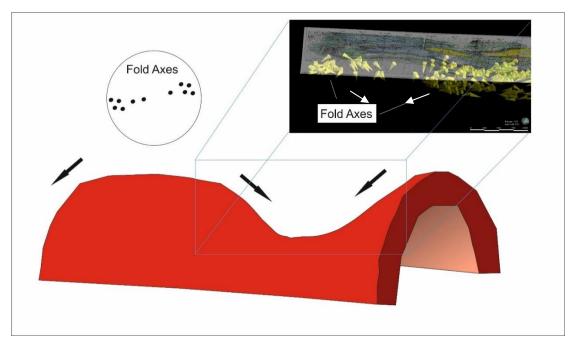
#### 6.5.2 Structure

Ulrik's structural model is plausible although evidence for the first, and arguably second, episode is weak. Key evidence may lay outside the immediate district. The idea of refolded isoclinal folds / nappes is not unique. Similar relationships have been postulated elsewhere in the Caledonides of Norway, including Sulitjelma, about 100km N of Mo i Rana (Boyle et al., 1994).

Ulrik's suggestion that the mineable Banded Iron Formation is a single horizon is plausible. But it does require a significant detachment (shear zone?) between stratigraphic units for the Banded Iron Formation to be repeated without the significant marble interval seen in Ørtfjell's west pit (see below).

SGM instead suggest that the Banded Iron Formation at Ørtfjell represents two stratigraphic horizons. During logging SGM observed that the Banded Iron Formation adjacent to the marble frequently shows sharp contacts both on the marble and schist side. These could either be structural detachments or original sharp sedimentary contacts. The deeper Banded Iron Formation, on the other hand, typically shows gradational contacts, both above and below. Ulrik has traversed much of the area and there is no substitute for having "boots on the ground". Meanwhile, SGM are relying on minimal core logging and geometries often defined by analytical results. Nevertheless, the idea raises the possibility of new targets.

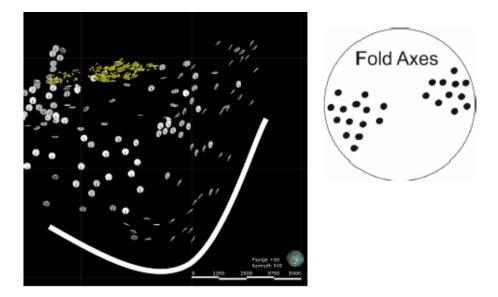
The part of Ulrik's model that remains unclear is the cause of the change in fold axes observed at Ørtfjell. It is possible that Ulrik's third episode of deformation represents an episode of periclinal folding or that Ulrik's fourth episode of deformation folded the fold axes from his F2 and F3 events. SGM is sceptical that the latter would cause the abrupt change in fold axis orientation. Periclinal folding would however explain the stereograms where fold axes plunge in opposing directions as a result of the measurement of parasitic fold axes on opposing sides of a doubly plunging synform, shown below in Figure 6-22.



## Figure 6-22: Periclinal folding with corresponding stereogram. Ulrik's fold axes shown in 3D shown in (top right). (Source: SGM)

Folding at high metamorphic grade is more ductile and increases the likelihood of periclinal (non-cylindrical) folding. This can lead to sheath folds. Historically, structural geologists tended to use multiple deformations to explain periclinal folding. Increasingly, multiple superimposed deformations are being attributed to a single ductile deformation.

Ignoring regional academic studies that might suggest otherwise, it is possible to account for the structure at Ørtfjell with only two episodes of deformation. An episode of periclinal folding that creates tight folds with a steep axial plane as well as fold axes that plunge away from each other (see Figure 6-22). A second episode of gentle folding (equivalent to Ulrik's F4) is then superimposed which results in additional dispersion in the stereograms, shown in Figure 6-23.



#### Figure 6-23: White disks are foliations and axial planar foliations (Source: SGM)

This model has not been tested at Ørtvann and Stensundtjern.

The fold axes define the continuity of the iron deposits at Dunderland and are crucial to understand both for exploration and guiding a resource estimate. This is a significant structural problem that needs investigation.

#### 7 DEPOSIT TYPES

The Dunderland deposits are Banded Iron Formations and fit the Rapitan (Neoproterozoic glaciogenic) model.

#### 8 **EXPLORATION**

#### 8.1 Introduction

This section describes the exploration data collected on the Project most recently by RG. The previous exploration phases are described in Section 5.

A description of the sampling methods, sample quality and the samples collected is set out in Section 10 of this report, on sample preparation, analyses and security.

All available and valid exploration data has been used to generate an updated MRE for the Project, which is fully disclosed in Section 13.

#### 8.2 Geophysical Survey - 2012

In July of 2012, the NGU conducted an airborne geophysical survey at Dunderland over 1,414 line km's with a 100m line spacing and an average terrain clearance of 55m. Line direction was N-S in the west and NW-SE in the east. Magnetics, EM and radiometrics were collected and processed by AR GeoConsulting in Geosoft Oasis Montaj software. The results correspond well with the geological mapping of the area with Figure 8-1 showing flight lines completed and Figure 8-2 showing the aeromagnetics.



Figure 8-1: Flight lines for the 2012 airborne geophysical survey) (Source: RG)

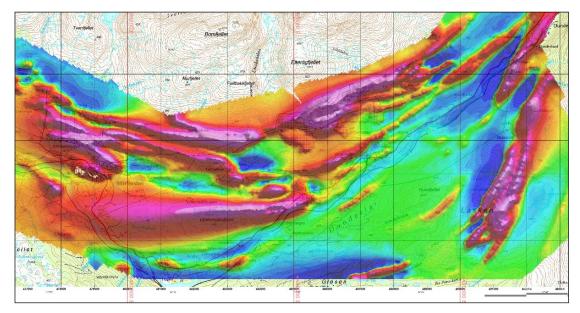
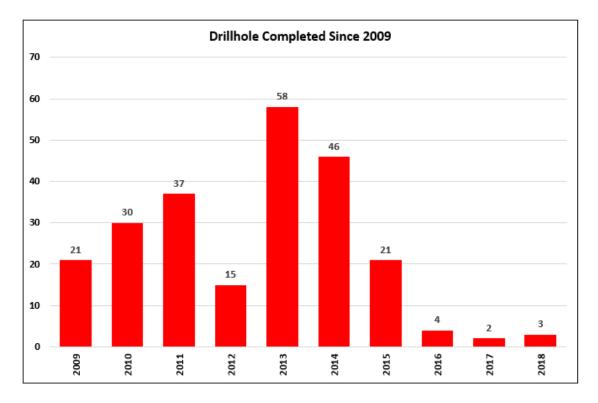


Figure 8-2: Aeromagnetic results from 2012 airborne survey (Source: RG)

#### 8.3 Drilling

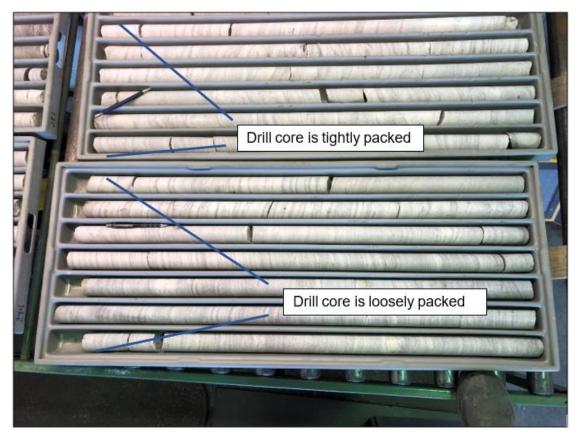
Figure 8-3 summarises the drilling completed between 2009 and 2018 for the Project.



#### Figure 8-3: Diamond Drilling completed by RG between 2009 and 2018 (Source: BGS)

#### 8.4 Core Recovery

Core recovery is not evaluated at Dunderland; neither has it been evaluated historically. A notable shortcoming is that drillers, even during recent drilling, do not indicate the beginning or end of individual runs. Core is placed into boxes at 1.0m intervals but it has been observed that frequently drill core is packed tighter in some boxes relative to others, as shown in Figure 8-4.



# Figure 8-4: Example of drill core being packed tightly in some cases and loosely in others. Drill runs and depths are not recorded by drillers. As whole meters are marked per meter on boxes, it seems unlikely that these number are accurate in the example above (Source: SGM)

Drill core meters are not marked / measured by geologists. It is assumed that drillers were using wireline measurements to place drill core in the correct boxes at the correct meterage but not being able to see individual runs introduces a potential source of error in the event of wireline creep affecting readings at the drill rig. In this scenario, long drillholes may incorrectly report depths with errors at the meter scale. Other common errors, such as drillers accidentally adding or subtracting a run, are unlikely to occur when core is placed into pre-numbered boxes as is the case at RG.

It is noted that rock quality is generally excellent. It appears that no excessive measures have been required to recover core (reaming, re-drilling, triple tube, polymers, etc). No significant intervals of poor rock quality were seen in the SGM logging. Underground workings display uniformly with no obvious areas of extremely poor rock, clay, or fault zones.

Some intervals of core loss are noted in the database. These are generally located near to the surface and are short (median core loss interval is 0.5m). There were indications of core losses on the order of 10-20m (drillhole 1034) but these were determined to be digitisation errors. Unfortunately, it is difficult to assess the cause of core loss as no material is retained (e.g. 106-Ort ~194m; see Figure 8-5 below).



Figure 8-5: Drillhole 106- Ort. Missing core is core loss (Source: SGM)

The core loss in Figure 8-5 above occurs between two lithological units but it is unclear if this is a stratigraphic contact or a fault zone. Generally, intervals of core loss do not correlate well in 3-dimensions, except for western Ørtvann and the SW of Ørtfjell; these areas do seem to show defined zones of weakness.

No known recovery measures have been employed at RG.

The nature of the ore (Banded Iron Formation) lends itself to poorer rock qualities. The many thin bands produce planes of weakness. The surrounding schists and marbles, with less compositional changes, produce less broken core and display better recovery. This observation correlates with a higher incidence of fracturing within the Banded Iron Formation in drill core and may be a geotechnical issue in the pit or underground but does not generally appear to have adversely affected recovery in most of the deposit.

The instances of core loss observed by SGM were within the Banded Iron Formation or at contacts with the Banded Iron Formation. While faulting may be responsible, sections of massive hematite tend to be friable and could be unfavourable for drilling. As such, zones of core loss within the mineralisation are more likely to result in an underestimation of grade rather than an overestimation.

#### 8.5 Drill Spacing

Generally, current and historical drilling occurs along 50m planned section lines. Stensundtjern adheres to the 50m horizontal spacing and while intercept spacing is more variable within sections, the distance is dominantly less than 50m with many drillholes intersecting mineralisation at spacings of less than 25m. Infrequent spacing of 70-85m exist in vertical

sections but mostly at the fringes of the deposit. At Ørtvann, 50m horizontal spacing is maintained but vertical spacing is erratic. Shallower drillholes and drilling in the eastern half of the deposit generally intersect the ore at spacings less than 50m but as the mineralisation plunges westward, drilling is less frequent. Spacings in the western half vary from 50-150m with spacings higher as the mineralisation extends deeper.

Horizontal drillhole spacing at Ørtfjell is mostly at 50m intervals, but there are notable gaps in the western half of the deposit, as shown in Figure 8-6.

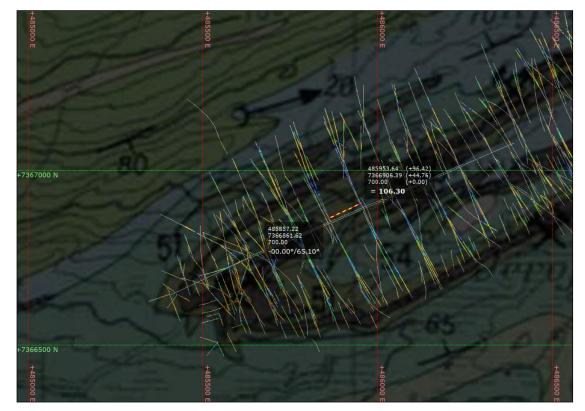
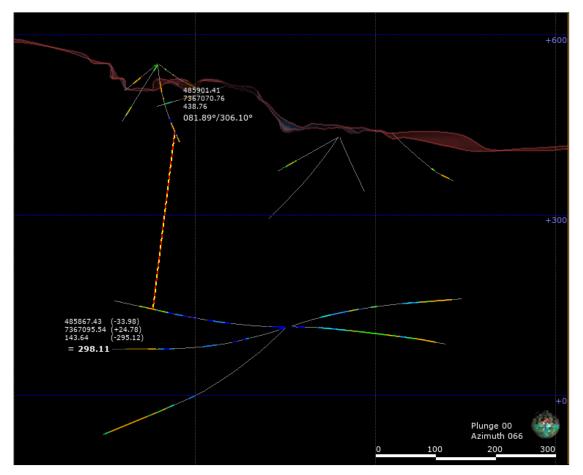


Figure 8-6: Plan view of Ørtfjell. Section spacing is generally 50m but there are exceptions such as the 106m gap above (Source: SGM)

There appear to be three to four profiles missing drilling transects. RG geologists have suggested that this may be a result of missing historical data rather than undrilled transects.

Intercept spacing is highly variable at Ørtfjell in vertical section. Shallow intercepts are tightly spaced but deeper extensions can show intercept spacings of 300m, as shown in Figure 8-7.



# Figure 8-7: Horizontal intercept spacing is generally 50m, although there can be large gaps in vertical sections such as the 300m gap displayed above (Source: SGM)

In general, the southern limb at Ørtfjell is drilled tighter than the northern limb where distances between surface drilling and UG drilling are infrequently 50m or less. Most of the drilling at Dunderland was completed pre-2000 and the intensity of subsequent exploration / infill drilling is relatively poor in comparison. Drilling from 2011 intersected promising intercepts beneath current production that have not been followed up.

Anecdotal accounts from former mining engineers relate that, on some occasions, drifts that were expected to intersect mineralisation instead encountered waste rock. Uncertainty was likely exacerbated by historical drilling that used small core diameters susceptible to deviation, coupled with poor downhole survey techniques and may not be solely attributable to poor drill spacing.

The structural setting of the deposit is well-understood thanks to geological mapping by the NGU as well as mapping by Ulrik Søvegjarto of the Ørtfjell deposit. Stensundtjern and Ørtvann are relatively simple structures but Ørtfjell is tightly folded. Nevertheless, drilling was planned to intersect fold limbs at favourable angles (when possible) and fences have variable directions of drillhole inclination in order to accommodate the folding.

During logging, SGM collected alpha angles from non-oriented drill core. In most cases, mineralisation was cut at a high angle (preferred) to the core axis. In some intervals, banding within the Banded Iron Formation is sub-parallel to core axis; this is probably due to parasitic

folding of the Banded Iron Formation. These intervals showed gradual changes in alpha angles as the fold is cut and are unavoidable during drillhole planning. The drilling orientation is favourable for most of the drilling and will not present a systematic sampling bias.

#### 9 DRILLING SUMMARY

#### 9.1 Geological Logging

All core, up to the present date, has been logged onto paper prior to being converted into digital format. The data is loaded into Microsoft Excel, where it is subsequently entered into different predetermined tabs. The tabs are as follows: Hole-Id, Location, From, To, Lithology & Remarks. This is an easily assessable data set, readily imported into modern modelling software, but there are notable pitfalls. Firstly, there is enormous potential for data to be corrupted accidentally, by cut and paste errors, for example. There may also be multiple versions of the same file. A database such as Access or Datashed is much better and involves import / validation steps to ensure data is formatted correctly. In cases, especially in the comments, not all data has been transferred from paper to its Excel counterpart. In addition, it is cumbersome to manoeuvre through long comments once digitised. Many of the extensive observations taken by previous core loggers are not present in the 'Remarks' section of the Excel file, and remain within the original paper logs. Their digital versions are simplified and significantly shortened.

Future logging is planned directly into Excel but has not yet been implemented due to no recent drilling programs.

Historical logging appears broadly accurate. The most notable issue is the excess of rock codes, quite common in projects with a long history and incorporating pre-computer age data. Many of these rock codes describe the same lithology but are easily grouped together with a good understanding of the stratigraphy. A small number of drillholes is inadequately logged, using "waste rock" or "ore" as descriptors. These drillholes are found in the NW and SE sections of Ørtfjell. Seventy-six drillholes are present with these codes corresponding to 5,280m that were logged as "waste rock". RG personnel indicated that the historical logs for these drillholes do contain descriptions and that digital logs could be created from the originals.

During SGM's logging campaign, no misidentification of the key lithologies (e.g. Banded Iron Formation or marble) were identified. Hematite and magnetite are easily identified, and it is unlikely that Banded Iron Formation was overlooked during logging.

Due to the folded orebodies, structural data is key to understanding potential ore shoots, the shape of the mineralisation and the likely extensions. Despite the lack of oriented core, alpha angles (the angle between structures and the core axis) can be measured. Historical logs contain some alpha angles (which have not been digitised), but they are infrequent. Alpha angle measurements would provide more support for the model and highlight areas that can be improved.

Historical logs measured joints per metre. No real geotechnical logging has been completed at RG (RQD, Q-value, etc) although RG now have some standard procedures for RQG logging that can be used in the future.

Historical core logs contain written descriptions of intervals, each of which has been assigned a rock code. A graphical depiction of the core logs has been coloured into approximated trajectories of the drillholes. Modern core logging is much the same without the graphical aspect. No alteration, mineral assemblages or structures are systematically logged in individual fields to facilitate analysis.

There is no core photography which neds rectifying in future drill campaigns.

#### 9.2 Collar and Downhole Surveying

From the 1950's to approximately 1999, drillhole collar positions were surveyed by triangulation / theodolite using permanent survey control points across the terrain. These control points were maintained and positioned by the state and the municipality. In more remote areas, RG expanded that set of control points for use in surveying.

In 1999, RG introduced the Total Station for surveying, utilising a set of control points set out by the national mapping authorities and the municipality. Again, this set of control points was expanded by RG's surveyors in order to cover more remote areas within the Dunderland valley.

GPS / GNSS instruments (CPOS) were introduced in 2008 and largely replaced the use of Total Stations at the surface.

Survey instruments currently in use are:

- Leica ATX1230 / LeicaRx1250: GPS / GNSS instruments, mobile network / CPOS
   H 10mm +1ppm / V 20mm +1ppm
- Leica TCRP1203 R300 total station
  - Reflectorless: < 3mm +2ppm, Standard measurement: <2mm +2ppm
  - Angular accuracy: 3 degrees (1mgon)

Recent drilling, from 2010 onwards, was surveyed with a Devico Deviflex tool owned by RG This method uses 3 accelerometers and 4 strain gauges to measure inclination and deviation. Gravity vector, temperature and battery capacity are also recorded, and potential erroneous measurements are flagged when the data is exported. Inclination accuracies are listed as  $\pm 0.1^{\circ}$  and azimuth at  $\pm 0.01^{\circ}$  per station (errors accumulate with each station). Surveys conducted with this tool should be the most accurate.

Historical downhole surveying is discussed in Section 5.3.3.

#### 10 SAMPLE PREPARATION, ANALYSIS AND SECURITY

#### **10.1 Sample Security**

One half of the split core is placed in a bucket (the buckets are clearly marked with drillhole ID, section split (from, to and date). The remaining half of the core is placed back in the core box for reference and storage. After finishing a section, the bucket is closed off with a lid. All sections prepared for transport are listed in an Excel file with drillhole ID, section from, to and date. That Excel file is sent by mail to the laboratory as reference to cross-check numbers of samples sent, drillhole ID's and section intervals.

The buckets containing the samples / sections for assaying are then placed in an assigned area in RG's warehouse at Storforshei awaiting transport to the lab at Gullsmedvika. All transport is provided by in-house services. At the laboratory, the samples are stored in an assigned area in the laboratory facilities awaiting further treatment (drying, crushing, milling and assaying).

#### **10.2 Sample Preparation**

All sample preparation and analyses for iron (Fe\_Tot, Fe\_Mag), MnO, TiO<sub>2</sub>, P and S is undertaken by in-house personnel, services and RG's laboratory.

The cores are split by a technical assistant / geologist using a core saw (from 2010 / 2011 onwards using an Almonte fully automated core saw), shown in Figure 10-1.



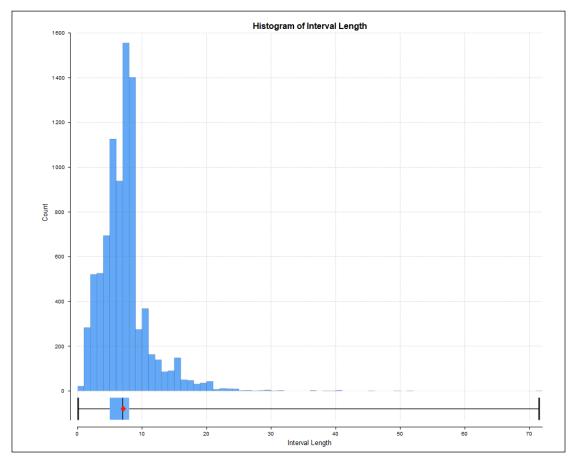
Holes drilled in the period between the 1950s and the 1980's were split using a hydraulic splitter.

Figure 10-1: RG Core Saw (Source: BGS)

#### 10.3 Sampling

Samples are currently and historically taken at 7m intervals. These intervals consider geological contacts and are extended or shortened in order to coincide with them. The Banded Iron Formation does not always have sharp contacts, particularly at its contact with the Qtz-Mu schist; this is instead gradational, due to the gradual cessation of chemical iron sedimentation.

An analysis of all assay intervals shows a mean sample length of 7m. But it also shows some extremely long intervals, with one over 70m (Figure 10-2). That interval yielded a Fe\_Tot grade of 26.9% (drillhole 119). A 50m interval has a result of 36% Fe\_Tot (drillhole 128). Such sample lengths will obscure economically interesting zones.



## Figure 10-2: Histogram of sampling interval length. Note sampling interval over 70m (Source: BGS)

SGM's logging observed that historical drill core (pre-2000) was sampled past hematite / magnetite rich Banded Iron Formation intervals into lightly magnetite-banded schists and well into waste rock. In contrast, sampling of modern drill core terminates at mineralisation boundaries and frequently, slightly within the mineralisation (BH 257-2014, 263.3m) as shown in Figure 10-3.



Figure 10-3: BH 257-2014, 263.3 m. Sampling was frequently observed to end prior to the end of mineralisation (Source: SGM)

Several mineralised intervals were not sampled. This is likely because they are thin and were deemed uneconomic (BH 64-2011, 224-237m) as shown in Figure 10-4.

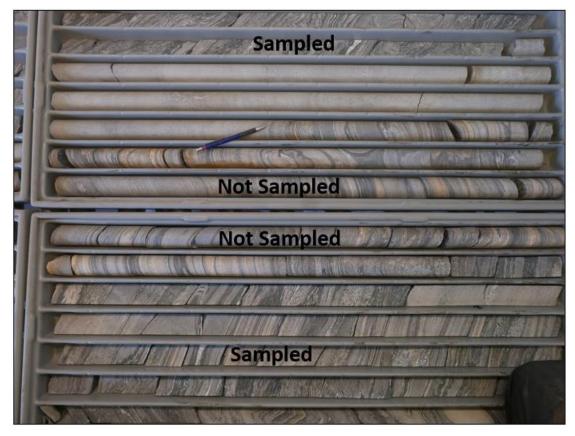


Figure 10-4: BH 64-2011, 224-237m shows a large interval of unsampled Banded Iron Formation (Source: SGM)

The conservative nature of recent sampling can negatively affect the estimation process. Some intervals that should be grouped into the same mineralisation wireframe were not analysed because of the economic assessment of the drill core by the logger. The handling and impact of absent data is discussed further in Section 13.4.4.

# 10.4 Assaying

All assaying is completed on site at RG's laboratory.

The raw material laboratory at RG uses internationally recognised standard procedures for chemical assaying of total iron content, sulphur and MnO for all raw material (rock samples, core samples and operational samples as well as final products) with the following methods employed:

- Total iron content: follows ISO 2597-1: Iron ores- Determination of Total Iron Content, Part
   1: Titrimetric method after tin(II)chlorite reduction / ISO 9607:1990, method 2: Iron oredetermination of total iron content - Titanium(III)chloride reduction methods.
- Fe magnetic: The Outokompo OY Satmagan instrument is used to measure the magnetite content of the iron ore by saturation magnetisation of the samples.
- Sulphur (S): ISO 4689-3 "Iron ores Determination of Sulphur Content, Part 3; Combustion / Infrared method.
- MnO is determined using UV / Vis spectrometric methods (Lambda35 photospectrometer)

The overall process can be summarised as follows:

### Reception:

- Received samples are logged (internal form for extra samples) or for drill core samples logged in own form and on excel sheet found on server.
- Mass of received sample varies, typical <10kg

### Drying:

• Wet samples are dried at 105°C

### Crushing:

- Drill core samples are crushed to a particle size D<5mm using a Jaw crusher
- Pulverisation for analysis, particle size D90 ≈ 70µm

### Splitting:

- The sample is split using a manual splitter following internal procedures.
  - 1 sample for chemical analysis, typical 30 40g
  - 1 sample for archive <300g

### Chemical analysis:

As per Table 10-1.

#### Data storage

- Analysis of samples dressing plant:
  - Laboratory and operations data system
- Analysis of samples from mine:
  - Excel sheet on MS Teams
- Analysis of drill core samples:
- Excel sheet on server, will also be transferred to Teams.
- A back-up of all data servers is completed daily.

### Archive samples

- Archive sample is stored for at least 25 years
- Pulverised sample for analysis is stored for 1 year

BGS undertook a tour of the RG laboratory during the site visit and discussed the processes with the laboratory manager. The laboratory was clean and well managed and whilst considered small with a limited daily throughput capacity, suitable for the analysis being undertaken. However, during exploration campaigns, it is likely that external facilities will be required unless the capacity of the RG laboratory is increased.

# Table 10-1:Chemical Analysis

Element	Method	# of analysis	Sample Size	Measuring range	Calibration	Control standard	Tolerance
Total Fe	ISO 9607:1990, method 2: Iron ores-Determination of total iron content	2	2x ≈ 0,25g	1 - 72,3%	Weekly	JK29A JK 28 IRSID M07-1	±0,2 % (abs)
Fe-Mag	Satmagan	1	≈ 1g	0 – 10%	Yearly	Internal	±10 % (rel)
MnO	ISO 9682-2:2006-Iron ores- Part 2: Periodate spectrophotometric method	1	0,2g	0,15 – 1,25%	Daily	JK 10 BCS 302/1 JK 9 BCS 301/1	Calibration curve correlation: > 0,9999, CRM ±0,05 % (abs)
S	ISO 4689-3 "Iron Ores – Determination of Sulfur Content, Part 3:Combustion/Infrared method	1	≈ 0,2g	20ppm – 15%	Daily	ECISS 606-1	±0,002 %

Many of the drill cores are still available for investigation and are catalogued and stored at RG's core storage facility at Storforshei shown below in Figure 10-5.

Figure 10-5: Core Store (Source: BGS)

Figure 10-6 to Figure 10-9 show various aspects of the laboratory.



Figure 10-6: Sulphur analysis (Source: BGS)



Figure 10-7: Satmagan for Fe\_Mag determination (Source: BGS)



Figure 10-8: Fe\_Tot titration in process (Source: BGS)



Figure 10-9: MnO analysis in process (Source: BGS)

# 10.5 QA/QC

RG have not undertaken in QAQC testwork throughout their most recent drill programmes and no QAQC data exists for the historic programmes.

# 10.5.1 Twin Drilling

RG undertook a twin drilling programme in 2012. The drilling was undertaken at the Stensundtjern deposit and consisted of eight drillholes and totalling 609m. Results were plotted adjacent to historical data & geology in Leapfrog Geo with the location of the drillholes shown in Figure 10-10 and the Leapfrog Geo plots for drillholes 1080 and Bh 133-2101 shown in Figure 10-11.

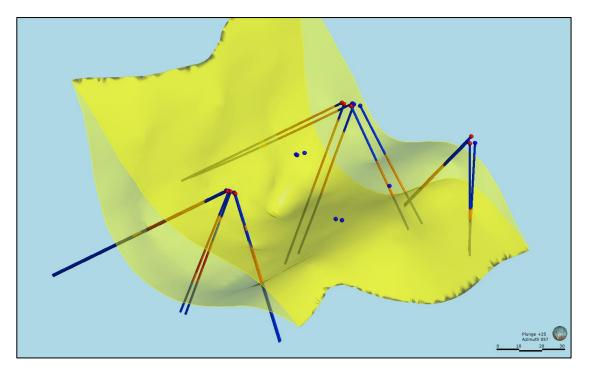
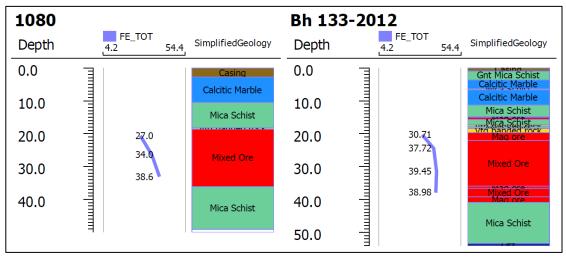


Figure 10-10: Location of twin drillholes at Stensundtjern. Red collars are the 2012 drillholes and the blue collars are the historic drillholes (Source: BGS)



# Figure 10-11: Comparison of total Fe intercepts between twinned holes at Stensundtjern (Source: SGM)

Table 10-2 and Table 10-3 show the length weighted intersection averages for the eight twin drillholes for Fe\_Tot and Fe\_Mag. As shown, for Fe\_Tot, the modern 2012 drilling has an overall 8% positive bias, in that the modern drilling averages 8% higher in Fe\_Tot and Fe\_Mag has an overall 8% negative bias, in that the modern drilling averages 8% lower in Fe\_Mag. Of note, for Fe\_Tot, only one drillhole shows the opposite bias, BH 136-2012 whereas in Fe\_Mag, there is a more erratic difference between the old and new data.

Modern DH	Intercept Average Fe_Tot (%) - Modern	Intercept Average Fe_Tot (%) - Historical	Historical DH	Difference
BH 130-2102	33.15	32.34	1065	2%
BH 131-2102	31.26	29.33	1066	6%
BH 132-2102	35.85	32.73	1067	9%
BH 133-2102	38.21	33.74	1080	12%
BH 134-2102	36.93	27.30	1079	26%
BH 135-2012	31.77	29.69	1068	7%
BH 136-2012	34.00	35.57	1069	-5%
BH 137-2012	36.83	32.87	1070	11%
Average				+8%

Table 10-2:	Twin Drillhole intersection comparison – Fe_Tot
-------------	-------------------------------------------------

 Table 10-3:
 Twin Drillhole intersection comparison – Fe\_Mag

Modern DH	Intercept Average Fe_Mag (%) - Modern	Intercept Average Fe_Mag (%) - Historical	Historical DH	Difference
BH 130-2102	5.50	7.17	1065	-30%
BH 131-2102	4.83	4.41	1066	9%
BH 132-2102	5.57	12.02	1067	-116%
BH 133-2102	10.43	7.33	1080	30%
BH 134-2102	30.22	24.00	1079	21%
BH 135-2012	6.08	5.47	1068	10%
BH 136-2012	15.47	18.39	1069	-19%
BH 137-2012	11.51	8.21	1070	29%
Average				-8%

The twin drilling undertaken by RG is however considered limited and only occurs at the Stensundtjern deposit.

# 10.6 Re-assaying Project

As part of a data verification programme, over 400 existing pulp samples were sent to the independent laboratory ALS Scandinavia AB for full suite XRF analysis. All samples were selected from the Ørtfjell deposit with Figure 10-12 showing the location of the samples tested at ALS. As shown, the selected samples cover a good spread of the deposit and in areas yet to be mined.

Figure 10-13 shows a comparison of the historic and modern Fe\_Tot values. As shown, a very strong correlation exists with an R<sup>2</sup> of 0.9633. The data was also checked, grouped by decade of the original sample to assess a bias over time. Data was grouped in to 1970's, 1980's and 2000's with the R<sup>2</sup> being 0.9678, 0.9551 and 0.9666 respectively for Fe\_Tot. As such, there does not appear to be any form of bias related to the assaying of Fe\_Tot using the titration method and over time.

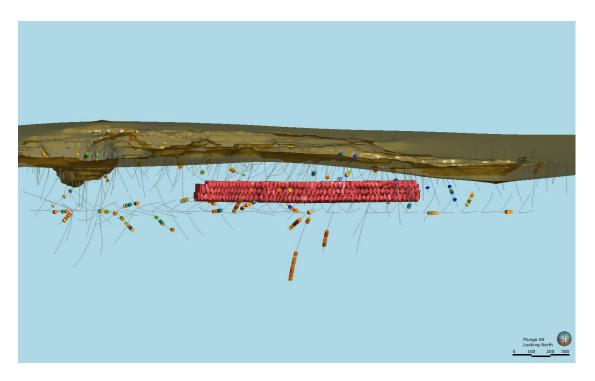
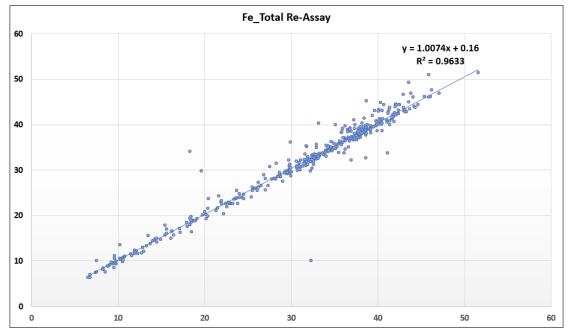


Figure 10-12: Location of check samples





Plots were also generated for S and MnO with no significant bias being observed.

No Fe\_Mag re-assaying has been completed. This work has been recommended and is in progress.

### **10.7 Density Testwork**

SGM conducted a density testwork study that comprised of 554 samples; 454 of which were taken at set intervals during core logging and an additional 100 were taken through the mineralisation and assayed Fe\_Tot, Fe\_Mag and S.

Sampling was conducted using immersion techniques as outlined by Abzalov (2013), test number 2. A preliminary study indicated low porosity amongst the samples; it was then decided that no sample protection would be needed prior to immersion. Samples were selected from eight boreholes logged by SGM. Samples were generally taken at 3m intervals, but 5m was used for longer drillholes. Samples selected were generally ≤100mm in length of either whole or cut core. This differed for the 100 ore samples. Sampling wasn't constrained to a spatial regime, instead samples were selected depending on their perceived ore-grade. Samples, prior to immersion, were cut to quarter core and dried at 110° C. These samples were also accompanied by a small, visual description, commenting on ore minerals present and their estimated percentage. Once a density value was measured, these samples were sent to RG's laboratory, where the samples were analysed.

A density analysis is discussed further in Section 13.4.9.

# **10.8 Mining Production**

RG have been operating the Project for well over 50 years and this provides a measure of the quality of the project and the product that can be expected to be produced. Currently, RG produce a range of hematite and magnetite products with a state-of-the-art operation. BGS visited the mine, process plant and port area and observed the operation, both open pit and underground. Figure 10-14 to Figure 10-23 show various images of the operation.

BGS has not however undertaken a detailed reconciliation review.



Figure 10-14: Kvannevann open pit



Figure 10-15: Truck within the Kvannevann open pit

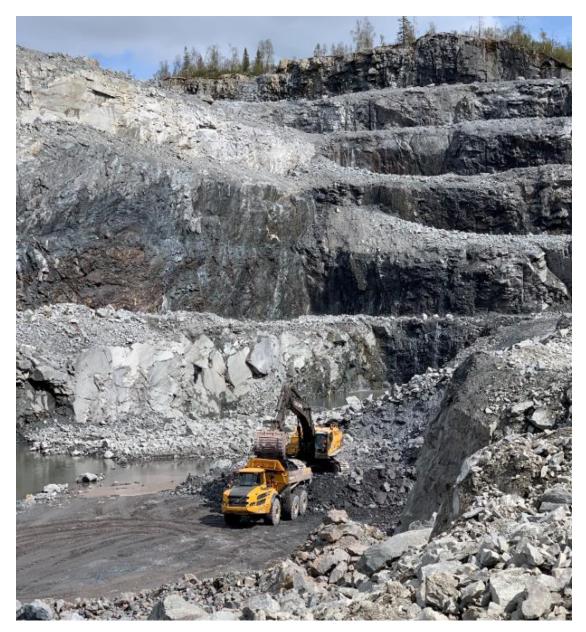


Figure 10-16: Mining in the Kvannevann open pit with the iron formation clearly visible in the pit wall (Source: BGS)

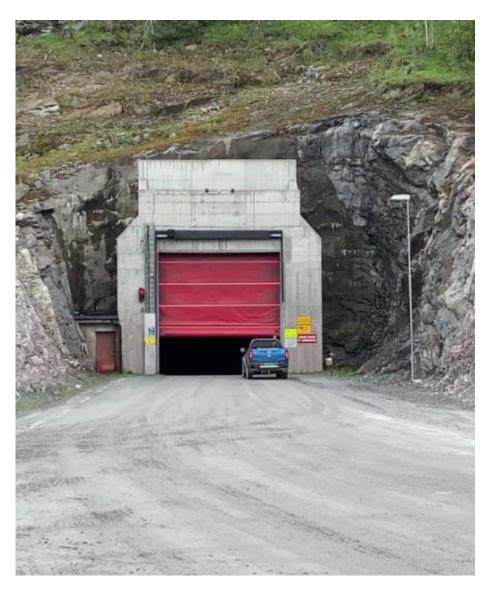


Figure 10-17: Access to the underground operation at Kvannevann (Source: BGS)



Figure 10-18: Underground infrastructure and truck at Kvannevann (Source: BGS)

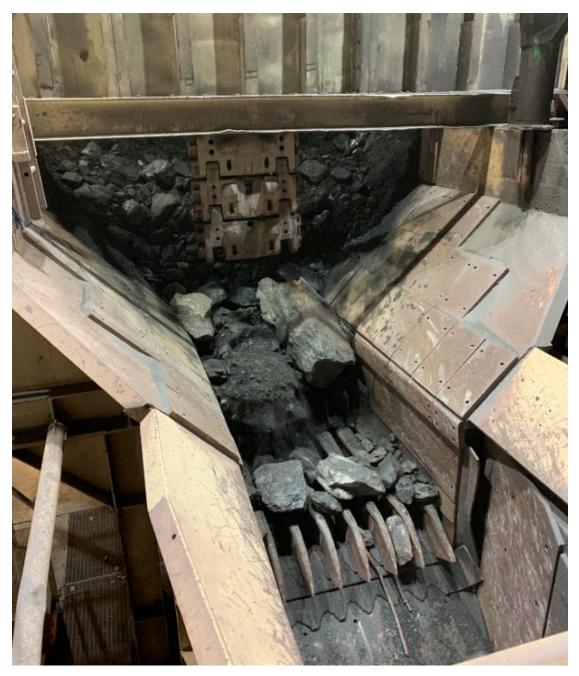


Figure 10-19: Ore crushing underground at Kvannevann (Source: BGS)



Figure 10-20: Train loading station underground at Kvannevann (Source: BGS)



Figure 10-21: Process plant control room (Source: BGS)



Figure 10-22: Process plant located in Mo i Rana (Source: BGS)

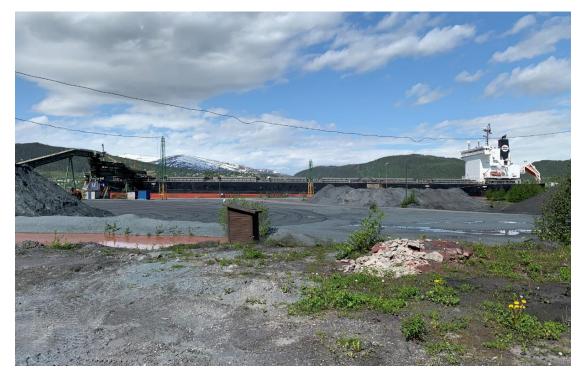


Figure 10-23: Concentrate being loaded on to a vessel at the Port in Mo i Rana (Source: BGS)

# 11 DATA VERIFICATION

BGS was supplied with a database from RG, who were responsible for compiling all new and historical data into a single database. BGS and RG discussed the database requirements during the site visit completed by BGS and worked together in developing the final drillhole database that has been used in the completion of the MRE. Chris Gordon of SGM was also heavily involved in validating the database supplied by RG.

Drillhole data at RG is stored in a Geovia GEMS database. Samples are imported from Microsoft Excel files and the software flags errors such as intervals with depths greater than the maximum depth of the drillhole or intervals where the "To" depth is less than the "From" depth. The software encourages the user to make corrections or prevents the importing of erroneous data. The integrity of the RG drillhole database was further tested during import into Leapfrog Geo for wireframe modelling by BGS and SGM. The data was found to be in good condition with only minor errors encountered. These mostly corresponded to interval data with depths past the maximum depth of the collar table and were easily corrected by searching historical or digital documentation. A few overlapping intervals were flagged but easily corrected.

# 11.1 BGS Comment on Data Quality

After a review of the available data and through the studies completed by RG, SGM and BGS in verifying the historic drill logs, downhole survey data and historic assays results, BGS is confident that the quality of the data provided by RG is suitable for use in the production of a Mineral Resource Estimate.

# 12 MINERAL PROCESSING AND METALLURGICAL TESTING

BGS has not been supplied with the results of any metallurgical testwork that has been completed on the ore. However, given that RG has been in production for over 50 years and currently produces and sell multiple hematite and magnetite products, historic testwork related to the justification that the Banded Iron Formation at RG can produce a saleable concentrate is not required.

BGS has been supplied with the following information related to the various products, which can be divided into three main groups:

- Metallurgical iron ore concentrates. Product types are: H-400 sinter feed with typical 62% Fe and a corresponding Fe<sub>2</sub>O<sub>3</sub> content of 88.6% H-150 pellet feed with typical 63.5% Fe and a corresponding Fe<sub>2</sub>O<sub>3</sub> content of 90.7%
- Magnetite super-concentrate M-40LS for non-metallurgical applications (chemical industry and scrap refinary): Product type is: M-40LS with typical 71.5% Fe and a corresponding Fe<sub>3</sub>O<sub>4</sub> content of 98.7%. The typical amount of SiO<sub>2</sub> is 0.65% and for MnO, 0.25%. Grain size: 50 to 80% passing 63 microns.
- 3.) COLORANA products:

Natural magnetite based products (magnetite powders for technical, pigmentary, magnetic applications and heat management) are: M-150T, M-20T, M-10T, CM-1C, CM-2D, CM-4, CM-4D, CM-5 and CM-5D. The products differ in grain size from 50% passing 63 microns for M-150T to median grain size 300 nanometers for CM-5 or CM-5D.

Calcined hematite products (mainly for pigmentary applications) are: CRM-20D, CRM-50D, CRM-60D, CRM-1075D and CRM-1080D. The grain size varies between 1 micron for CRM-20D to 250 nanometers for CRM-1080D.

Mixed metal oxide iron manganese spinel as a high temperature solid state reaction between natural magnetite and manganese oxide (application within colouring and heat management): Product type is: CBS-1 (high temperature colour resistant black)

# 13 MINERAL RESOURCE ESTIMATE

The supporting geological models used in the MRE were completed in Leapfrog Geo with the block model and grade estimate being completed in Datamine Studio RM after the completion of a statistical and geostatistical study completed in Supervisor.

### 13.1 Deposit Modelling

The following section describes the methodology undertaken for the modelling of the Project. The modelling completed by BGS has been limited to the iron bearing units. A lithological host model was created by SGM and used by BGS.

It should be noted that the iron formation models were created to include those areas previously mined. This enabled all exploration data to be used and allowed a more comprehensive statistical and geostatistical study to be completed. The estimated model used these wireframes with the model being depleted for mining after the block model creation and grade estimation.

### 13.2 Topography

BGS were supplied with two topographic surfaces for the Ørtfjell area; a recent topographic survey of all pits and waste dumps and the original topographic surface for the area. BGS used

the original topographic surface to constrain the mineralisation / geology wireframes and then used the current pit topographic surface to trim the model created to the current surface. BGS also used both surfaces to generate a series of waste dumps. These were created from the areas where the current pit surface lies above the original topographic surface.

Figure 13-1 and Figure 13-2 shows the current topographic surface and the original topographic surface respectively. The waste dumps generated from the two surfaces are also shown in Figure 13-2.

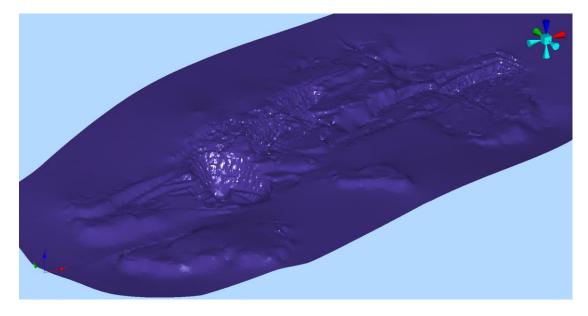


Figure 13-1: Current Ørtfjell topographic surface (Source: BGS)

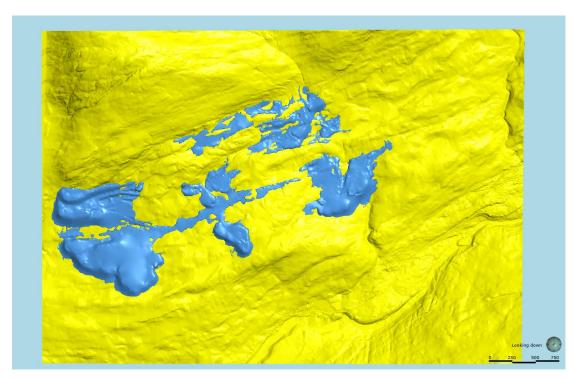


Figure 13-2: Original Ørtfjell topographic surface (yellow) and the waste dunps (blue) generated from the current topographic surface (Source: BGS)

# **13.3** Iron Formation

BGS was supplied with a drillhole database for the Project with RG personnel supplying interpretation wireframes for the various deposits under study. BGS used this data, along with the drillhole data to generate new wireframe models for the iron bearing units.

The modelling was undertaken in Leapfrog Geo software based on an approximate 20% Fe\_Tot cut off or where a sharp boundary between mineralised Banded Iron Formation and non-mineralised host lithology occurs. Figure 13-3 shows a histogram of all Fe\_Tot data where the main population of data lies above an approximate cut off of 20 to 25% Fe\_Tot.

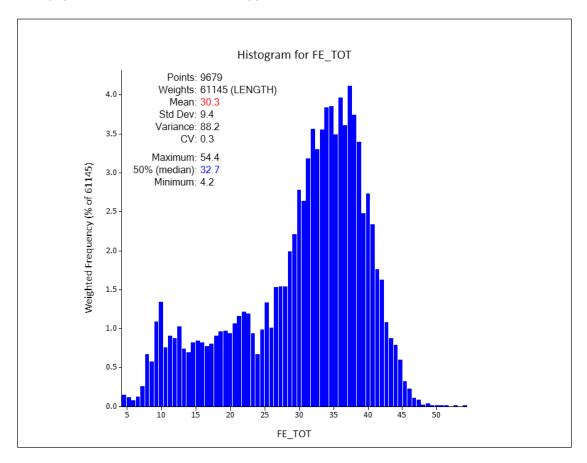


Figure 13-3: Histogram of all Fe\_Tot data (Source: BGS)

Figure 13-4 and Figure 13-5 show example cross sections of the approximate 20% Fe\_Tot cut off applied to the drillhole data during modelling.

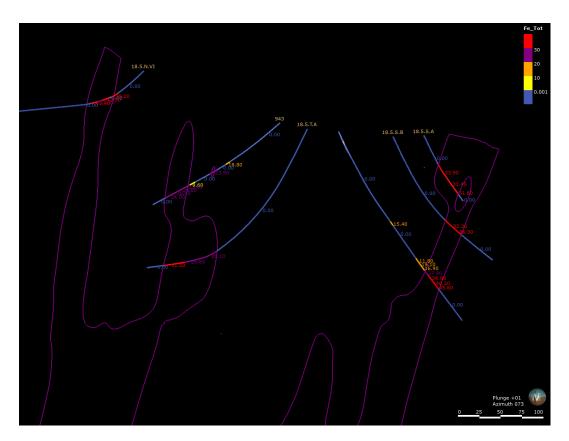


Figure 13-4: Cross section through Ortfjell West showing modelled units corresponding with an approximate cut off of 20% Fe\_Tot (Source: BGS)

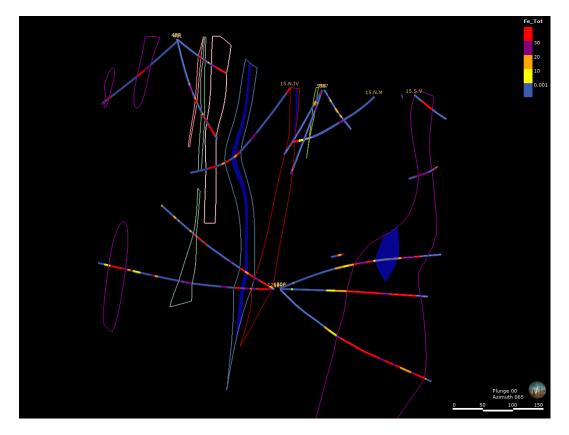


Figure 13-5: Cross section through Ortfjell East showing modelled units corresponding with an approximate cut off of 20% Fe\_Tot (Source: BGS)

The modelled iron formations are shown in Figure 13-6 to Figure 13-13. Additional domains were created within the Ørtfjell deposit based on the observed statistical and geological occurrence of the Fe\_Mag whereby bimodal statistical populations were identified in the assay grades. Hard boundary zones of high / low Fe\_Mag were created. This is shown in Figure 13-14 and discussed further in Section 13.3.2.

As shown in the figures below, folded Banded Iron Formation units occur within the deposit with a complex refolded sequence of plunging iron formation being dominant at the Ørtfjell West portion of the Ørtfjell deposit. This is discussed further in Section 6.4.



Figure 13-6: Location of RG Banded Iron Formation deposits (Source: BGS)

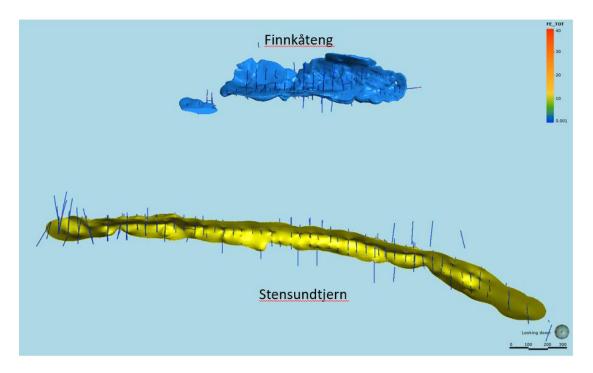


Figure 13-7: Finnkåteng and Stensundtjern Banded Iron Formations (Source: BGS)

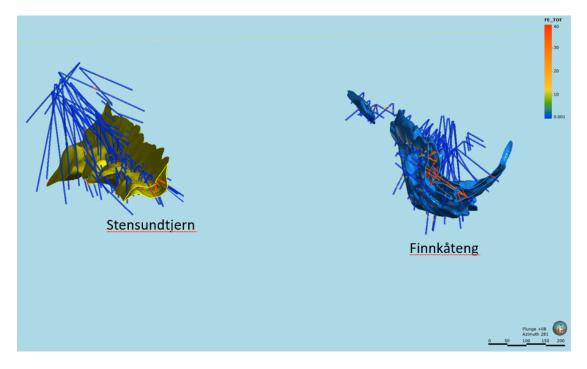


Figure 13-8: Cross section through the Finnkåteng and Stensundtjern Banded Iron Formations (Source: BGS)

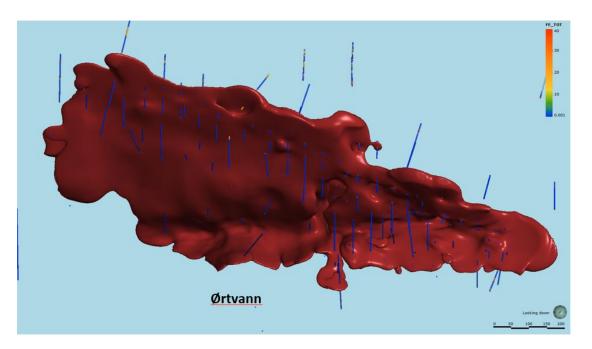


Figure 13-9: Ørtvann Banded Iron Formation (Source: BGS)

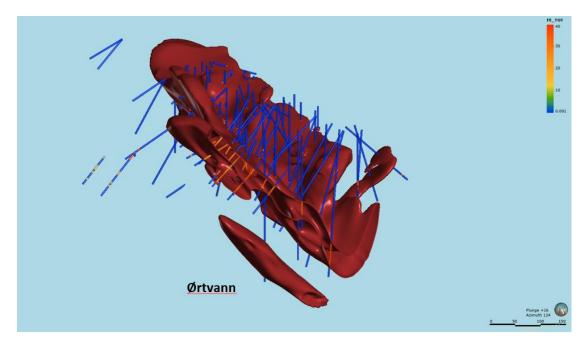


Figure 13-10: Cross section through the Ørtvann Banded Iron Formation (Source: BGS)

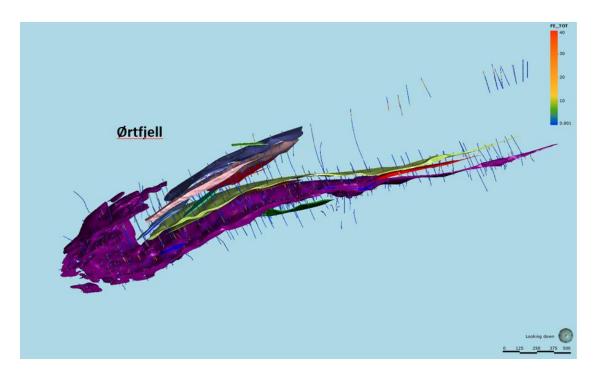


Figure 13-11: Ørtfjell Banded Iron Formations (Source: BGS)

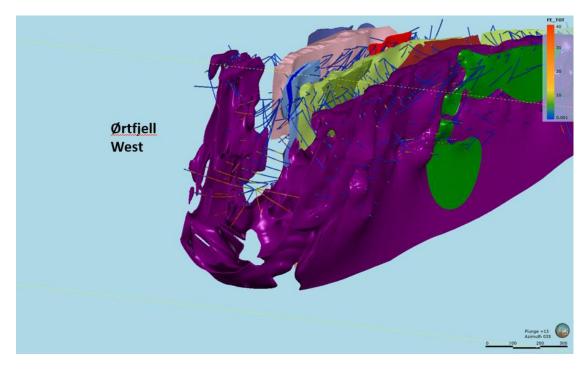


Figure 13-12: Cross section through the Ørtfjell West Banded Iron Formation (Source: BGS)



Figure 13-13: Cross section through the Ørtfjell East Banded Iron Formations (Source: BGS)

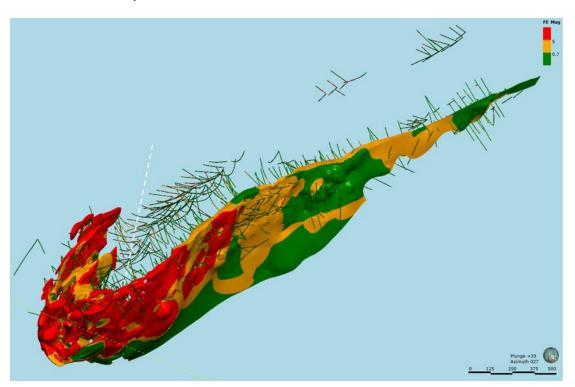


Figure 13-14: Cross section through the Ørtfjell East, Kvannevann and Ørtfjell West Banded Iron Formation and additional Fe\_Mag wireframe domaining. Green <0.7% Fe\_Mag, orange >0.7% Fe\_Mag, red >5% Fe\_Mag. (Source: BGS)

### 13.3.1 Geology Host Model

The geology host model was created by SGM following the relogging exercise including the structural logging as described previously. The model resulted in the generation of the following units:

- Marble (Zone 2000): Blue in Figure 13-15 to Figure 13-17
- Dolomite (Zone 3000): Teal in Figure 13-15 to Figure 13-17
- Schist (Zone 4000): Green in Figure 13-15 to Figure 13-17
- Banded Iron Formation (Zone 1 to 18): Red in Figure 13-15 to Figure 13-17

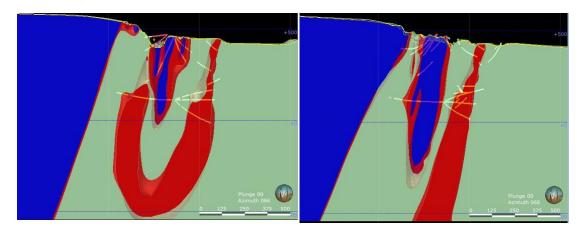


Figure 13-15: Cross section through Ørtfjell West (left) and Kvannevann (right). (Source: SGM)

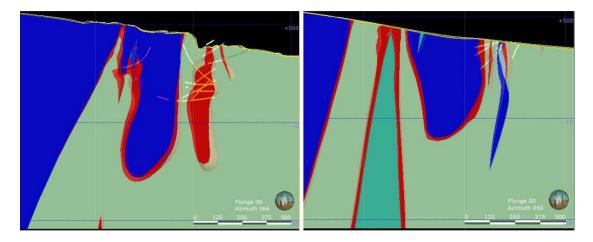


Figure 13-16: Kvannevann and Ortfjell East (Source: SGM)

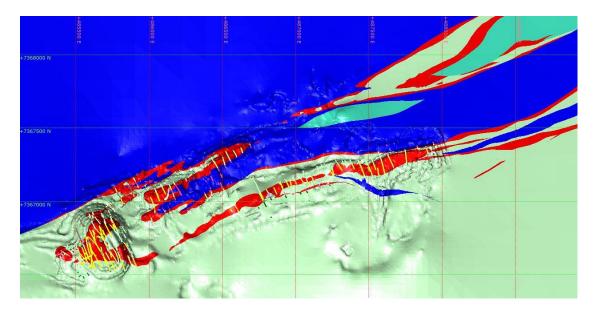


Figure 13-17: Surface map of the Ortfjell deposit (Source: SGM)

# 13.3.2 Domains

The following iron domains were created for the Project:

22

- Ørtfjell: 1 to 18
- Finnkåteng 20
- Stensundtjern: 21
- Ørtvann:
- Nord Dunderland: 23

At Ørtfjell, the Kvannevann deposit, being the current focus of the underground mining activity was modelled into zones 1 and 18 based on the Fe\_Mag split at 0.7%. Zone 3, being Ørtfjell West but essentially a continuation of the Kvannevann deposit was also modelled separately. For estimation purposes, zones, 1, 3 and 18 were combined into a single domain except for the Fe\_Mag estimation which used the Fe\_Mag zones described below. Similarly, from zones 4, 6 and 9 at Ørtfjell, unique estimation domains were created for the estimation of Fe\_Mag, as based on the Fe\_Mag splits shown below.

Fe\_Mag zones were created within the following Banded Iron Formation zones using the following Fe\_Mag grade boundaries:

- Ørtfjell: Zone 1 (0 to 0.7% Fe\_Mag, 0.7 to 5% Fe\_Mag and >5% Fe\_Mag
- Ørtfjell: Zone 4 (0 to 2% Fe\_Mag and >2% Fe\_Mag)
- Ørtfjell: Zone 6 (0 to 4% Fe\_Mag and >4% Fe\_Mag)
- Ørtfjell: Zone 9 (0 to 5% Fe\_Mag and >5% Fe\_Mag)

Internal waste domains were also created within the Ørtfjell zones 1, 4, 6 and 7 with these domains shown in Figure 13-18.

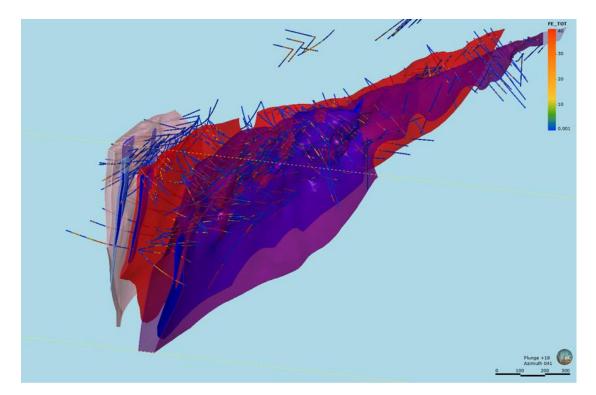


Figure 13-18: Internal waste domains (blue) within zones 1, 4 and 6 (Source: BGS)

Figure 13-19 shows the final Banded Iron Formation model created for Ørtfjell. As shown and discussed in the geology and structure Sections of the report, the overall geometry of the deposit is believed to a double plunging synform, which as yet is untested at depth by drilling. Central to the synform is a series of steeply dipping "limbs" of Banded Iron Formation.

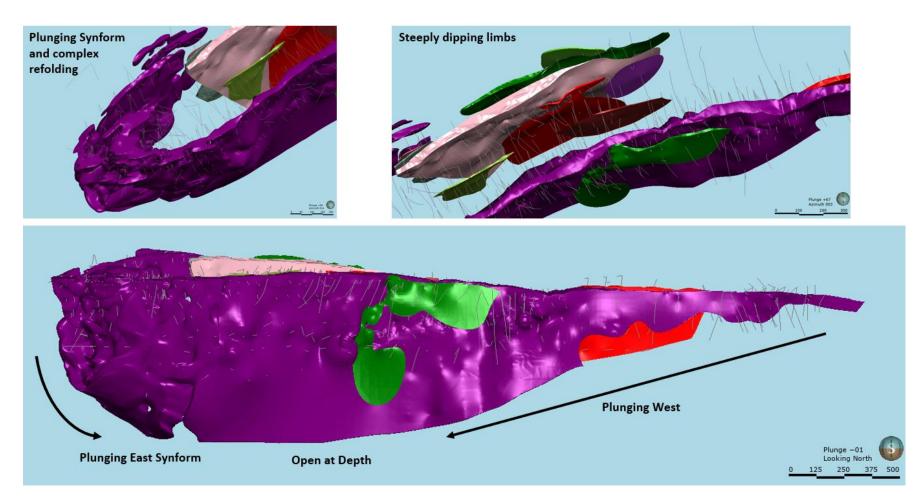


Figure 13-19: Banded Iron Formation Model at Ørtfjell (Source: BGS)

### 13.3.3 Modelling Summary

Based on the work undertaken and the statistical validation steps carried out, BGS is confident that the geological model created honours the understanding of the local scale geology and grade distribution as accurately as possible given the data made available. In addition, certain deposits display complex folding although the risk associated with the interpretation of the folds is mitigated to a certain degree by the close spaced nature of the drilling and the local knowledge through mining activities and observations made in the working pits. That said, BGS does recommend that a more rigorous structural interrogation of the data be undertaken should future exploration and modelling be carried out. Detailed core orientation work and structural logging should be implemented and form part of RG's standard operating procedures throughout exploration.

In addition, the creation of Fe\_Mag domains has added a degree of complexity to the interpretation in terms of the grade distribution with hard boundaries created in areas of complex distribution. The division is most likely due to structural complexities within the deposits and it is recommended that more detailed mineralogical mapping is undertaken on existing core. This would greatly enhance the confidence in the geological interpretation and would assist mine planning / metallurgical studies. That said, the continuity of the hosting iron formation is well defined by the drilling data.

### **13.4 Statistical Analysis**

### 13.4.1 Introduction

This section presents the results of the statistical studies undertaken on all the available assay data sets to determine their suitability for use in the estimation process. The statistical analysis occurs in conjunction with the lithostratigraphic iron formation domain modelling with the statistics being checked as the domains are created and adjusted as required throughout the modelling.

### 13.4.2 Length Analysis

The raw drillhole database was assessed to determine the average length of the sample within each domain modelled. The results show that the average sample length varies from 3m to 11m, presented in Table 13-1, which is atypical in general and is a reflection of the various drilling campaigns throughout the history of the project.

Zone	No. of Samples	Average Length
1,3,18*	5186	6
2	119	5
4	397	5
5	81	5
6	279	8
7	62	7
8	20	5
9	126	8
10	16	6
11	21	6
12	6	3
13	5	5
14	14	6
15	6	5
16	7	5
17	8	6
20	617	6
21	868	6
22	449	11

Table 13-1. Average sample length of all banded from Formation zones	Table 13-1:	Average sample length of all Banded Iron Formation zones
----------------------------------------------------------------------	-------------	----------------------------------------------------------

• Combined zone. Zone 1 and 18 represent the high / low Fe\_Mag domain combined to make zone 1 with zone 3 being the Ørtfjell West zone.

The average sample length from the drilling carried out is considered large and possibly affects the natural variability of the grades within the Banded Iron Formation zones.

Of note, and given the potentially "nuggety" nature of S, an assessment of length versus grade was undertaken and as Figure 13-20 shows, there is an increase in sulphur grade as the length of the sample decreases. This is not the case when observing the grade and sample length of the Fe\_Tot assays, shown in Figure 13-21 and suggests that smaller sample lengths are required to represent the variability of the minor elements such as S and MnO. Isolated high S grade could exist over a short distance but the effect of this is being masked by the long sample length. As such, it is recommended that variability tests are carried out on existing core to assess the actual distribution of the minor elements. This analysis does however also validate the homogenous nature of the Fe\_Tot distribution with the variability existing in the other and generally minor constituents.

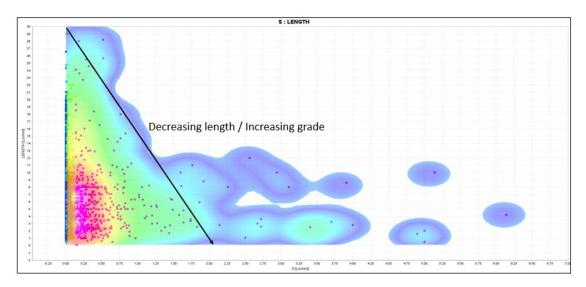


Figure 13-20: Sulphur grade against length of sample (Source: BGS)

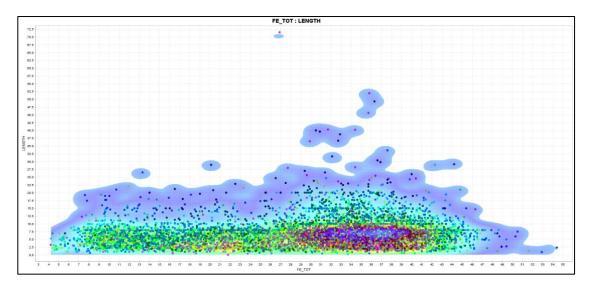


Figure 13-21: Fe\_Tot grade against length of sample (Source: BGS)

It is also recommended that future drilling uses a sample length more appropriate to the variability of the project.

## 13.4.3 Assay Count

Table 13-2 shows the number of assays within each modelled domain. As shown, there are a different number of assays for Fe\_Mag, S, P, MnO and TiO<sub>2</sub> compared to the primary Fe\_Tot assay, with some zones having very few, or no assays of the minor elements and oxides. The effect of the different assay numbers is that there will be a different level of confidence in the final estimate for each analyte. However, in general, there is a similar, if not the same number of assays for Fe\_Mag, P and S compared to Fe\_Tot with the main difference being in the number of MnO and TiO<sub>2</sub> assay results available.

Zone	Count of FE_TOT	Count of FE_MAG	Count of P	Count of S	Count of MNO	Count of TIO2
1	673	641	399	624	349	178
2	119	119	78	119	48	25
3	1309	1309	1248	1213	15	70
4	397	393	236	355	198	107
5	81	81	32	71	59	15
6	279	277	266	248	19	61
7	62	62	56	53	-	7
8	20	20	17	16	-	8
9	104	104	103	82	5	31
10	16	13	13	9	1	1
11	21	21	18	18	-	4
12	6	6	1	6	5	1
13	5	5	5	2	-	2
14	46	46	34	45	11	5
15	6	6	6	6	-	-
16	7	7	7	6	5	6
17	8	8	8	6	-	4
18	1631	1626	1009	1565	764	579
20	617	617	553	438	55	-
21	868	868	636	868	169	-
22	449	420	420	231	48	48

Table 13-2:Number of assays per modelled zone

#### 13.4.4 Absent Data Handling

As discussed in the following section, Banded Iron Formation deposits commonly show a strong correlation between different elements / oxides. This is often displayed in the Fe\_Tot and Silica relationship along with Fe\_Tot and Fe\_Mag. At the RG deposits, there is no assaying for silica and the Fe\_Mag / Fe\_Tot relationship does not appear to follow the same relationship to other Banded Iron Formation projects. As a result of this, the effect on having a different number of assays for those analytes tested is less of an issue when attempting to maintain the total assay value during the grade estimation as it appears that the Fe\_Mag and S in particular are independent or overprint phases of mineralisation as a results of in all likelihood, structural controls. Due to this, there has been no attempt to assign average values or other default values to the absent assays. The result is however that the confidence in the estimation of the various analytes will be different due to the varying number of data points available.

It should however be noted that the majority of the absent Fe\_Mag samples and to a large extent, the absence of the S assays all lie in areas previously mined so have little impact on the areas of the model yet to be mined.

It is however a recommendation that all future drilling campaigns undertake full suite XRF analysis of the core to assess a multi-element / oxide distribution. This would allow an assessment on the impact of a greater range of analytes and their downstream impact on the concentrate products generated.

### 13.4.5 Assay Correlation – Fe\_Tot and Fe\_Mag

Commonly, in banded iron projects, there is a strong correlation between analytes, especially in relation to Fe\_Tot and Fe\_Mag. Figure 13-22 shows the Fe\_Tot / Fe\_Mag scatterplot for all modelled zones and as shown, multiple populations or clusters of data exist that need to be reflected in the modelled domains.

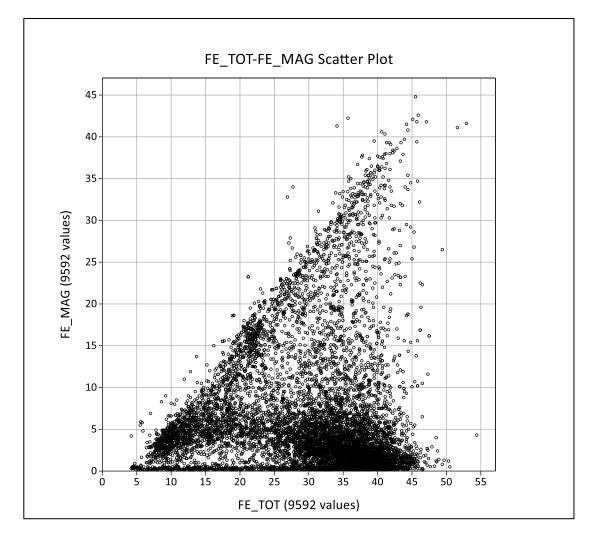


Figure 13-22: Fe\_Tot / Fe\_Mag Scatterplot (Source: BGS)

Breaking the Fe\_Mag data down further shows that the main clusters of data can be split into specific zones. Figure 13-23 shows the Fe\_Tot / Fe\_Mag scatter plot at the combined Ørtfjell West and Kvannevann (zone 1) Banded Iron Formation which is a continuous zone. Here there is a clear break in populations at ~0.7% Fe\_Mag with the Fe\_Mag probability plot showing there is a further sub-division of the Fe\_Mag population at approximately 5%, shown in Figure 13-24. This analysis provided the justification for the modelled domains highlighted in Section 13.1.

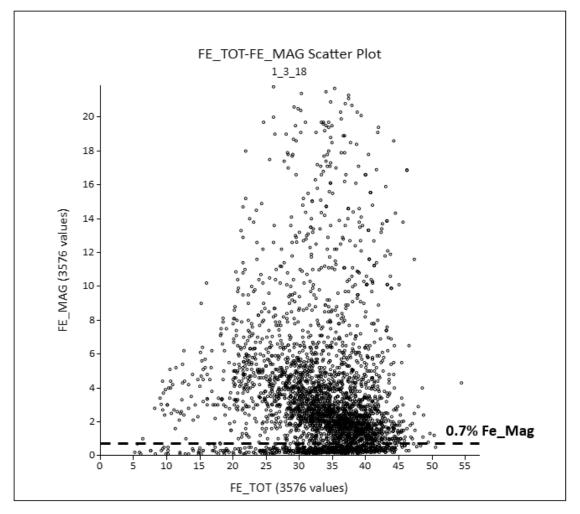


Figure 13-23: Fe\_Tot / Fe\_Mag Scatterplot for Ørtfjell zone 1 and Ørtfjell West (Source: BGS)

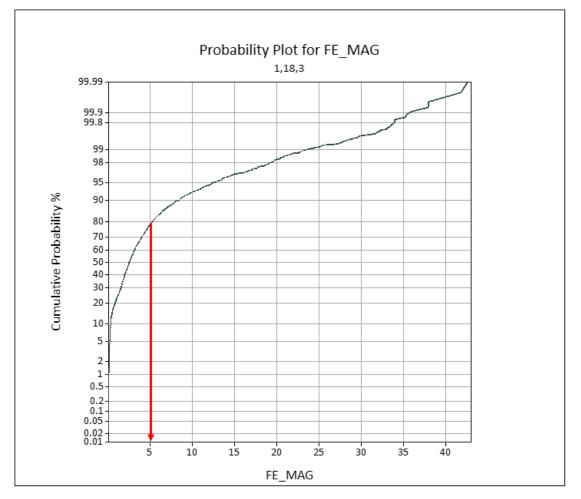


Figure 13-24: Fe\_Mag probability plot for Ørtfjell zone 1 and Ørtfjell West (Source: BGS)

For zones 4, 6 and 9 at Ørtfjell, given the limited data in these zones, the Fe\_Mag sub-divisions discussed previously were undertaken due to poor validation of the estimated domains and a further study of the Fe\_Mag data distribution with histograms and probability plots showing the Fe\_Mag grade domains eventually decided upon.

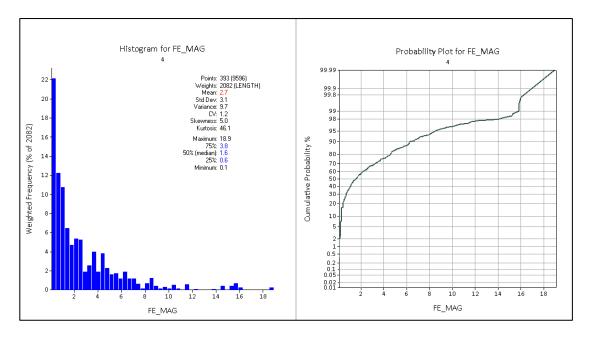


Figure 13-25: Fe\_Mag histogram and probability plot for Ørtfjell zone 4 (Source: BGS)

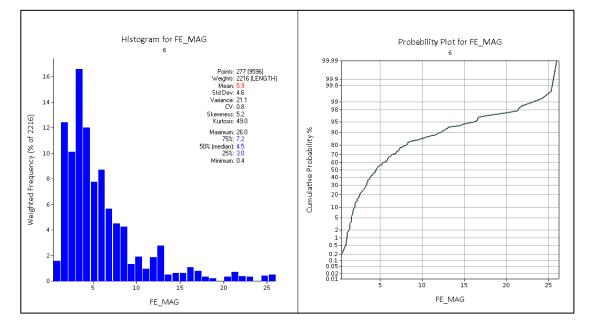
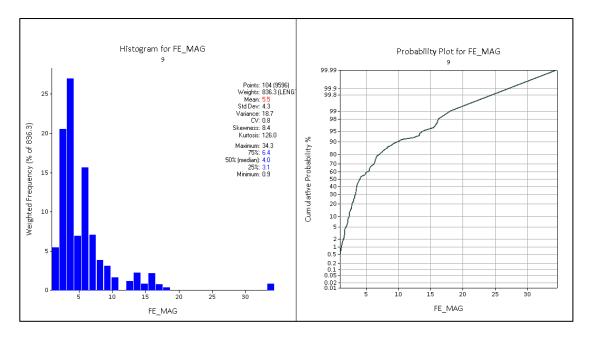


Figure 13-26: Fe\_Mag histogram and probability plot for Ørtfjell zone 6 (Source: BGS)



#### Figure 13-27: Fe\_Mag histogram and probability plot for Ørtfjell zone 9 (Source: BGS)

The final Fe\_Mag domains at Ørtfjell, as previously discussed are as follows.

- Ørtfjell: Zone 1 (0 to 0.7% Fe\_Mag, 0.7 to 5% Fe\_Mag and >5% Fe\_Mag
- Ørtfjell: Zone 4 (0 to 2% Fe\_Mag and >2% Fe\_Mag)
- Ørtfjell: Zone 6 (0 to 4% Fe\_Mag and >4% Fe\_Mag)
- Ørtfjell: Zone 9 (0 to 5% Fe\_Mag and >5% Fe\_Mag)

## 13.4.6 Compositing

Data compositing is undertaken to reduce the inherent variability that exists within the population and to generate samples more appropriate to the scale of the mining operation envisaged. It is also necessary for the estimation process, as all samples are assumed to be of equal weighting and should therefore be of equal length.

It is widespread practice to select a composite length that is half of the block height (5m blocks in this instance, so 2.5m composites), being designed around the anticipated bench height. However, given the large sample lengths previously discussed, a composite length equal to the average sample length by zone was used as it is generally inappropriate to composite down to a smaller sample length. This resulted in different composite lengths per zone.

## 13.4.7 Composite Length Analysis

The estimation process assumes an equivalent weighting per composite. It is therefore necessary to discard or ignore remnant composites that are generated in the downhole compositing process to avoid a bias in the estimation. However, based on the results of a composite length analysis, and using the average sample length as the composite length (by zone) it was decided to use all samples, meaning no shorter lengths were discarded. This was undertaken as there was only a minimal difference between the observed grades should shorter lengths be discarded from the database.

Due to the low variance of the Fe\_Tot data, being the primary driver for the modelling process, it is also the opinion of BGS that all deposits are insensitive to variations in the composite length and the treatment of smaller sample lengths.

## **13.4.8 Composite Zone Statistics**

Table 13-3 shows the Fe\_Tot, Fe\_Mag, S, P, MnO and TiO<sub>2</sub> composite statistics by zone. Sample numbers and the Coefficient of Variation ("CoV") are also shown for each domain. The CoV, being the standard deviation / the mean is a measure of the "erraticness" of the data set and a general rule of thumb is that a CoV less than 1 suggests a clean, normal population of data and anything greater than 1 has a more erratic, log normal distribution.

#### The CoV values are summarised

Table 13-4 and as shown, the Fe\_Mag and S CoV values are generally high with the Fe\_Tot, P and TiO<sub>2</sub> data showing very low values suggesting a homogenous material type. The high CoV values for Fe\_Mag and S suggest some form of secondary alteration with a localised control.

It is also worth pointing out that the number of samples available after the compositing process has increased from the raw data where it is more typical for the sample numbers to decrease. This is because of the large sample length used with samples being larger than the average sample length being split into smaller samples as per the controlling composite length. Whilst not ideal, increasing the composite length to prevent this would result in large samples and a potential over-smoothing of the data.

	00.	3: Composite sample results								
ZONE	FIELD	NSAMPLES	MINIMUM	MAXIMUM	RANGE	MEAN	VARIANCE	STANDDEV	COV	
1	FE_TOT	804	7.60	50.50	42.90	34.15	40.71	6.38	0.19	
1	FE_MAG	748	0.10	16.59	16.49	0.49	1.15	1.07	2.17	
1	Р	564	0.10	0.47	0.37	0.25	0.00	0.05	0.18	
1	S	704	0.00	3.11	3.11	0.02	0.03	0.17	10.51	
1	MNO	322	0.15	9.53	9.38	0.87	1.29	1.13	1.30	
1	TIO2	245	0.10	0.58	0.48	0.26	0.01	0.10	0.37	
2	FE_TOT	143	10.98	46.28	35.30	33.65	66.69	8.17	0.24	
2	FE_MAG	143	0.10	34.04	33.94	3.18	32.68	5.72	1.80	
2	P	116	0.13	0.34	0.21	0.23	0.00	0.04	0.16	
2	S	143	0.00	0.05	0.05	0.00	0.00	0.01	1.52	
2	MNO	37	0.10	5.18	5.08	0.79	1.25	1.12	1.41	
2	TIO2	41	0.15	0.64	0.49	0.29	0.02	0.14	0.47	
3	FE_TOT	1532	12.40	47.45	35.05	32.99	29.98	5.48	0.17	
3	FE_MAG				42.43		32.69			
3	PE_IMAG	1532	0.18	42.60		6.33		5.72	0.90	
		1426	0.06	1.45	1.39	0.18	0.00	0.05	0.29	
3	S	1345	0.00	2.26	2.26	0.03	0.01	0.12	4.66	
3	MNO	19	0.09	0.24	0.15	0.14	0.00	0.04	0.29	
3	TIO2	74	0.11	0.58	0.47	0.31	0.01	0.10	0.34	
4	FE_TOT	495	9.00	46.00	37.00	32.55	48.88	6.99	0.21	
4	FE_MAG	490	0.10	18.90	18.80	2.76	9.55	3.09	1.12	
4	Р	362	0.11	0.39	0.28	0.21	0.00	0.05	0.22	
4	S	405	0.00	0.39	0.39	0.01	0.00	0.03	2.88	
4	MNO	168	0.08	8.30	8.22	0.73	1.14	1.07	1.46	
4	TIO2	161	0.11	0.78	0.67	0.28	0.01	0.11	0.40	
5	FE_TOT	100	20.60	42.10	21.50	33.17	15.61	3.95	0.12	
5	FE_MAG	100	0.43	3.50	3.07	1.56	0.52	0.72	0.46	
5	Р	56	0.16	0.27	0.11	0.21	0.00	0.03	0.14	
5	S	67	0.00	0.02	0.02	0.00	0.00	0.00	0.65	
5	MNO	51	0.21	1.67	1.46	0.53	0.09	0.30	0.57	
5	TIO2	22	0.18	0.45	0.27	0.29	0.01	0.08	0.28	
6	FE_TOT	325	16.94	44.42	27.48	33.21	15.73	3.97	0.12	
6	FE_MAG	321	1.00	24.19	23.19	6.13	19.15	4.38	0.71	
6	P	313	0.11	0.35	0.24	0.22	0.00	0.05	0.21	
6	S	268	0.00	0.47	0.47	0.02	0.00	0.04	2.49	
6	MNO	13	0.07	1.50	1.43	0.56	0.24	0.49	0.88	
6	TIO2	67	0.12	0.59	0.47	0.28	0.01	0.10	0.35	
7		80		42.43	29.43	32.07				
	FE_TOT		13.00		29.43		31.58 22.23	5.62	0.18	
7 7	FE_MAG P	80	0.70	26.70		6.00		4.71	0.79	
		71	0.12	0.24	0.12	0.18	0.00	0.03	0.16	
7	S	64	0.00	2.67	2.67	0.05	0.11	0.33	6.45	
7	MNO	0	-	-	-	-	-	-	0.00	
7	TIO2	7	0.20	0.66	0.46	0.32	0.02	0.14	0.45	
8	FE_TOT	33	23.40	40.80	17.40	31.54	21.76	4.67	0.15	
8	FE_MAG	33	1.30	19.20	17.90	8.31	20.62	4.54	0.55	
8	Р	29	0.14	0.26	0.12	0.20	0.00	0.03	0.16	
8	S	26	0.00	0.04	0.04	0.02	0.00	0.01	0.76	
8	MNO	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	TIO2	12	0.17	0.26	0.09	0.22	0.00	0.04	0.16	
9	FE_TOT	120	11.70	43.90	32.20	31.55	31.73	5.63	0.18	
9	FE_MAG	120	1.60	34.30	32.70	5.77	17.56	4.19	0.73	
9	Р	119	0.12	0.28	0.16	0.20	0.00	0.03	0.17	
9	S	87	0.00	0.16	0.16	0.01	0.00	0.02	1.76	
9	MNO	5	0.20	0.49	0.29	0.28	0.01	0.11	0.39	
9	TIO2	38	0.16	0.74	0.58	0.35	0.01	0.11	0.31	
10	FE_TOT	24	23.80	38.60	14.80	31.70	13.76	3.71	0.12	
10	FE_MAG	21	1.00	16.30	15.30	3.69	10.42	3.23	0.87	
10	P	21	0.13	0.34	0.21	0.22	0.00	0.06	0.25	
10	S	13	0.00	0.00	0.21	0.22	0.00	0.00	0.25	
10	5	15	0.00	0.00	0.00	0.00	0.00	0.00	0.31	

 Table 13-3:
 Composite sample results

10	MNO	2	1.19	1.19	0.00	1.19	-	-	0.00
10	TIO2	2	0.33	0.33	0.00	0.33	-	-	0.00
11	FE_TOT	31	14.70	42.10	27.40	31.03	70.80	8.41	0.27
11	FE_MAG	31	0.10	23.60	23.50	4.65	32.59	5.71	1.23
11	Р	25	0.14	0.27	0.13	0.19	0.00	0.03	0.17
11	S	25	0.00	0.01	0.01	0.00	0.00	0.00	1.02
11	MNO	0	-	-	-	-	-	-	0.00
11	TIO2	7	0.19	0.85	0.66	0.49	0.06	0.25	0.51
12	FE_TOT	7	34.40	42.96	8.56	38.04	12.71	3.56	0.09
12	FE_MAG	7	6.11	11.60	5.49	9.38	5.78	2.40	0.26
12	 P	3	0.17	0.17	0.00	0.17	-	-	0.00
12	S	7	0.00	0.01	0.01	0.01	0.00	0.00	0.87
12	MNO	4	0.22	0.25	0.03	0.24	0.00	0.02	0.07
12	TIO2	3	0.25	0.25	0.00	0.25	-	-	0.00
13	FE_TOT	7	25.90	33.20	7.30	29.81	7.04	2.65	0.09
13	FE_MAG	7	5.40	11.80	6.40	6.74	4.39	2.00	0.31
13	P	7	0.16	0.22	0.40	0.14	0.00	0.02	0.11
13	S	4							
13	MNO		0.00	0.01	0.00	0.00	0.00	0.00	0.43
	TIO2	0 4							0.00 0.14
13			0.33	0.44	0.11	0.39	0.00	0.06	
14	FE_TOT	53	7.40	40.50	33.10	30.16	61.90	7.87	0.26
14	FE_MAG	53	0.30	12.08	11.78	3.67	6.62	2.57	0.70
14	Р	46	0.11	0.27	0.16	0.19	0.00	0.04	0.21
14	S	51	0.00	0.09	0.09	0.01	0.00	0.02	1.45
14	MNO	5	0.07	0.25	0.18	0.16	0.00	0.07	0.42
14	TIO2	5	0.31	0.37	0.06	0.34	0.00	0.02	0.06
15	FE_TOT	8	26.19	33.40	7.21	31.72	5.03	2.24	0.07
15	FE_MAG	8	3.40	8.63	5.23	5.82	2.53	1.59	0.27
15	Р	8	0.14	0.22	0.08	0.18	0.00	0.03	0.16
15	S	8	0.00	0.08	0.08	0.02	0.00	0.03	1.48
15	MNO	0	-	-	-	-	-	-	0.00
15	TIO2	0	-	-	-	-	-	-	0.00
16	FE_TOT	8	27.10	40.40	13.30	32.97	24.86	4.99	0.15
16	FE_MAG	8	3.24	12.80	9.56	7.57	13.73	3.71	0.49
16	Р	8	0.15	0.24	0.09	0.18	0.00	0.03	0.14
16	S	7	0.01	0.04	0.03	0.02	0.00	0.01	0.50
16	MNO	5	0.15	1.60	1.45	0.63	0.29	0.54	0.86
16	TIO2	7	0.20	0.34	0.14	0.27	0.00	0.05	0.17
17	FE_TOT	12	15.30	37.10	21.80	28.94	42.36	6.51	0.22
17	FE_MAG	12	1.90	36.70	34.80	9.84	96.38	9.82	1.00
17	Р	12	0.14	0.26	0.12	0.19	0.00	0.04	0.20
17	S	8	0.00	0.07	0.06	0.01	0.00	0.02	1.50
17	MNO	0	-	-	-	-	-	-	0.00
17	TIO2	5	0.24	0.73	0.49	0.48	0.04	0.20	0.41
18	FE_TOT	2112	8.90	50.30	41.40	34.10	39.84	6.31	0.19
18	FE_MAG	2098	0.10	36.00	35.90	3.28	10.91	3.30	1.01
18	Р	1620	0.08	0.59	0.51	0.21	0.00	0.04	0.21
18	S	1952	0.00	0.50	0.50	0.01	0.00	0.03	3.42
18	MNO	691	0.04	2.23	2.19	0.23	0.04	0.20	0.85
18	TIO2	930	0.07	0.88	0.81	0.27	0.01	0.11	0.40
20	FE_TOT	785	14.08	47.23	33.15	37.03	27.12	5.21	0.14
20	FE_MAG	785	0.10	40.60	40.50	4.73	31.72	5.63	1.19
20	Р	741	0.05	0.51	0.46	0.22	0.00	0.05	0.25
20	S	594	0.00	1.38	1.38	0.02	0.01	0.08	3.37
20	MNO	32	0.05	2.63	2.58	0.52	0.38	0.62	1.18
20	TIO2	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	FE_TOT	948	11.20	47.49	36.29	33.61	30.51	5.52	0.16
21	FE_MAG	948	0.30	44.80	44.50	9.44	69.07	8.31	0.88
21	Р	807	0.10	0.81	0.71	0.19	0.00	0.05	0.26
21	S	948	0.00	1.83	1.83	0.05	0.02	0.16	3.07
21	MNO	113	0.11	4.20	4.09	0.50	0.26	0.51	1.01

21	TIO2	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	FE_TOT	532	20.50	46.30	25.80	33.13	19.38	4.40	0.13
22	FE_MAG	487	0.40	41.30	40.90	19.13	100.47	10.02	0.52
22	Р	487	0.11	0.32	0.21	0.19	0.00	0.04	0.18
22	S	278	0.01	5.21	5.20	0.29	0.31	0.55	1.88
22	MNO	112	0.08	1.73	1.65	0.46	0.07	0.26	0.56
22	TIO2	112	0.22	0.58	0.36	0.35	0.01	0.09	0.25

Table 13-4:

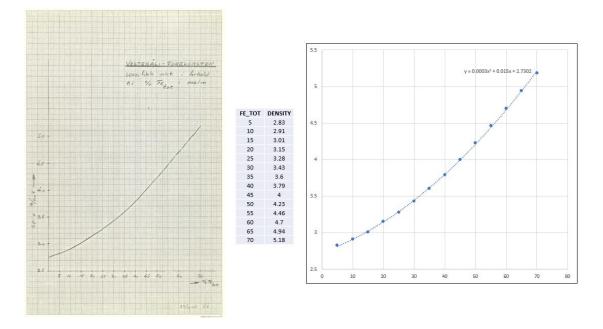
Composite sample results – CoV data

ZONE	FIELD	COV	ZONE	FIELD	COV	ZONE	FIELD	COV
1		2.17	1		10.51	1		1.30
2		1.80	2		1.52	2		1.41
3		0.90	3		4.66	3		0.29
4		1.12	4		2.88	4		1.46
5		0.46	5		0.65	5		0.57
6		0.71	6		2.49	6		0.88
7		0.79	7		6.45	7		
8		0.55	8		0.76	8		
9		0.73	9		1.76	9		0.39
10		0.87	10		0.31	10		
11	Fe_Mag	1.23	11	S	1.02	11	MnO	
12		0.26	12		0.87	12		0.07
13		0.31	13		0.43	13		
14		0.70	14		1.45	14		0.42
15		0.27	15		1.48	15		
16		0.49	16		0.50	16		0.86
17		1.00	17		1.50	17		
18		1.01	18		3.42	18		0.85
20		1.19	20		3.37	20		1.18
21		0.88	21		3.07	21		1.01
22		0.52	22		1.88	22		0.56
1		0.19	1		0.18	1		0.37
2		0.24	2		0.16	2		0.47
3		0.17	3		0.29	3		0.34
4		0.21	4		0.22	4		0.40
5		0.12	5		0.14	5		0.28
6		0.12	6		0.21	6		0.35
7		0.18	7		0.16	7		0.45
8		0.15	8		0.16	8		0.16
9		0.18	9		0.17	9		0.31
10		0.12	10	_	0.25	10		
11	Fe_Tot	0.27	11	Р	0.17	11	TiO₂	0.51
12		0.09	12			12		
13		0.09	13		0.11	13		0.14
14		0.26	14		0.21	14		0.06
15		0.07	15		0.16	15		
16		0.15	16		0.14	16		0.17
17		0.22	17		0.20	17		0.41
18		0.19	18		0.21	18		0.40
20		0.14	20		0.25	20		
21		0.16	21		0.26	21		a
22		0.13	22		0.18	22		0.25

#### 13.4.9 Density Analysis

RG provided historic density charts for the project and SGM implemented a density testwork programme with the sampling and assaying of 100 samples with each assayed sample also being tested for density. This discussed in Section 10.7.

Figure 13-28 shows the original density plot from 1968 with the data duplicated in excel.



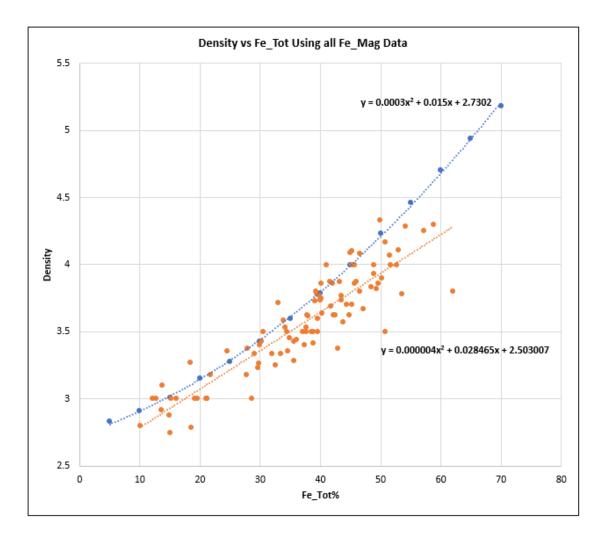
# Figure 13-28: Historic (1968) density data (left) with the data duplicated in excel (right) (Source: BGS)

Figure 13-29 shows the results of new testwork plotted against the historic chart. In analysing the new density data, various cut-offs of Fe\_Mag content were tested to see if this affected the density value, given that magnetite has a higher density than hematite. The effect was considered minimal and all density data was used to generate the new regression curve of Fe\_Tot against density.

In general, the new data corresponds well with the historic density although there is a clear negative bias observed. However, at the approximate average deposit grade of 30% Fe\_Tot, the new and old density results are most comparable. BGS were however anticipating a lower spread of density values at each given Fe\_Tot grade but do consider the new data to be more reliable than the historic data. Unfortunately, RG are unable to provide a mine related density value based on survey volumes and mined tonnages.

As a result of the new density testwork, BGS utilised the regression curve shown in Figure 13-29 for the assignment of density to the iron formation units. The regression formula used is:

DENFE=((0.000004\*pow (FE\_TOT,2))+0.028465\*FE\_TOT + 2.503007)





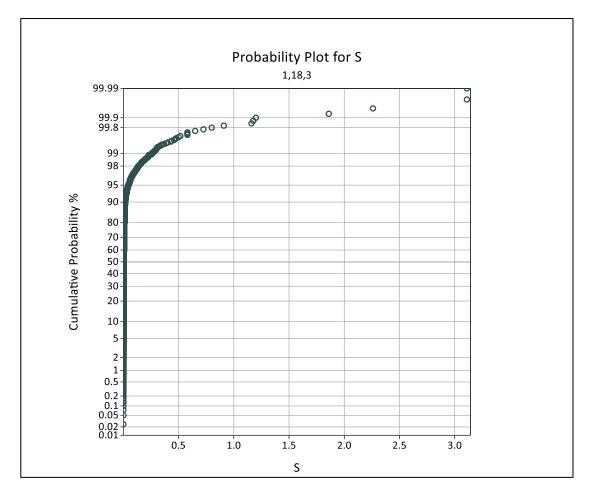
SGM also implemented density testwork in the host lithologies, shown in Table 13-5. These were applied to the host geology model provided.

Table 13-5:	Waste Density
-------------	---------------

Lithology	Density (g/cm <sup>3</sup> )
Amp	3.04
BIF-Cal	3.40
Bt-Sch	2.84
Dol	2.82
Marb	2.71
M-Sch	2.78

# 13.5 Top Cutting

Due to the high CoV observed in the S values at Ørtfjell, top-cutting of the S values was investigated. This was undertaken after the initial estimation and validation of the grade estimate. S was subsequently top-cut within zones 1 (1,3,18 combined), 6 and 9. Figure 13-30 shows the S probability plot for zone 1 where a top-cut of 1% was applied. As previously discussed however, further S variability tests are required on smaller length core.





2

After completing the initial grade estimate, it was also decided to top-cut the MnO data in zone 4. Here the MnO was top cut to 2%.

%)

Table 13-6:	Top-Cut Values	
Zone	Top Cut (S%)	Top Cut (MnO
1_3_18	1	

0.06

0.025

Table 13-6 shows the	top cuts	applied.
----------------------	----------	----------

13.6	Geostatistical Study

6

9

4

Variography was successfully undertaken on the zone coded composite database for all modelled domains. That said, where limited data was available, certain domains were grouped to improve the quality of the variogram structures. Variograms were only completed on the major iron domains and not the individual Fe\_Mag domains created. This was due to the limited sample data in these individual domains.

Due to the homogenous nature of the deposits, BGS created downhole variograms to fix the nugget followed by either directional or omnidirectional variograms depending on the quality of the variograms and the ranges observed. This was considered appropriate as test directional

variograms in certain zones showed similar variogram ranges in all directions tested.

For Ørtfjell West, unfolding of the drill data was considered. However, given the multiple folding events that have taken place at Ørtfjell West, the unfolding process was deemed problematic. BGS tested this with the implementation of dynamic anisotropy and considered the quality of the estimate to be suitable.

Variograms were produced for all analytes where possible but in cases where sample quantity was too low, the Fe\_Tot variogram was used.

In most cases, the variograms produced show reasonable structure, allowing reliable variogram models to be produced. The nugget and ranges are easily generated, providing an appropriate level of confidence in terms of both the short scale and longer-range grade continuity.

At Ørtfjell, individual variograms were produced for zones 1,2,4,6 and 9 and the data was combined for the remaining zones. Zone 1,3 and 18 were combined into a single Kvannevann domain at Ørtfjell.

Figure 13-31 and Figure 13-32 show the Fe\_Tot and Fe\_Mag variograms from the combined Ørtfjell Kvannevann zones (1,3 and 18) and Figure 13-33 and Figure 13-34 show the Fe\_Tot and Fe\_Mag variograms from the remaining combined Ørtfjell zones.

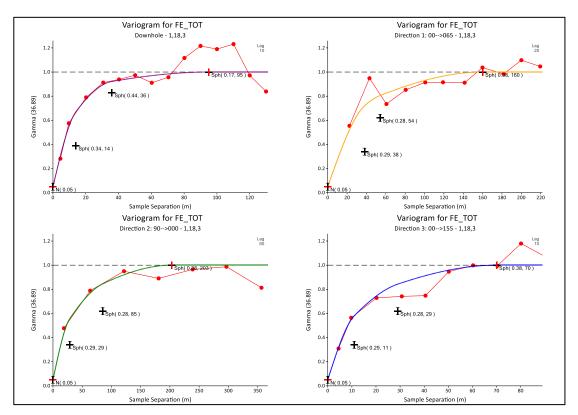


Figure 13-31: Ørtfjell Fe\_Tot directional variograms for zones 1,3,18 combined (Source: BGS)

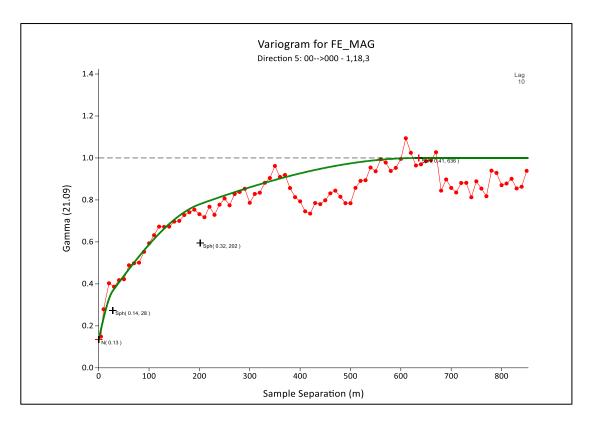


Figure 13-32: Ørtfjell Fe\_Mag omni-directional variograms for zones 1,3,18 combined (Source: BGS)

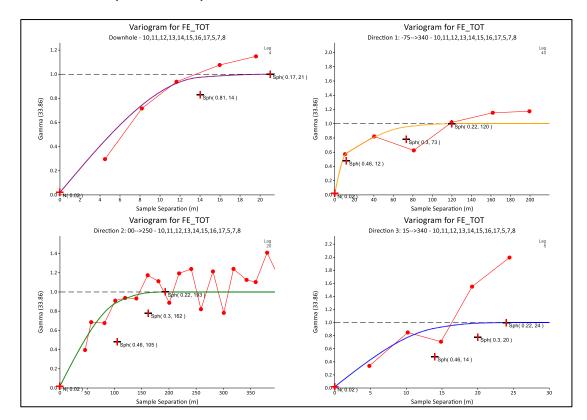
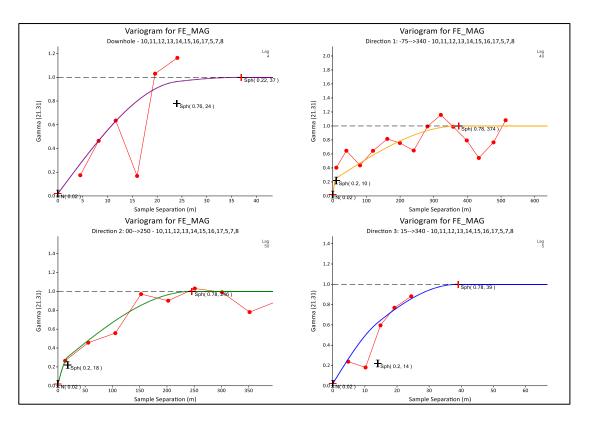


Figure 13-33: Ørtfjell Fe\_Tot directional variograms for the combined zones (Source: BGS)



# Figure 13-34: Ørtfjell Fe\_Mag directional variograms for the combined zones (Source: BGS)

All variograms are in Appendix B.

#### 13.6.1 Summary

The variogram models produced allowed the generation of suitably reliable interpolation parameters.

The results of the variography are used in the interpolation to assign the appropriate weighting to the sample pairs utilised to calculate the block model grade.

The total ranges modelled are also incorporated to help define the optimum search parameters and the search ellipse radii dimensions used in the interpolation. Ideally, sample pairs that fall within the range of the variogram (where a strong covariance exists between the sample pairs) should be utilised if the data allows.

The results of variography suggest that Ordinary Kriging ("OK") is an appropriate interpolation technique.

## 13.6.2 Quantitative Kriging Neighbourhood Analysis (QKNA)

#### 13.6.2.1 QKNA Process

To better define the ideal search parameters used in the interpolation, Quantitative Kriging Neighbourhood Analysis ("QKNA") was also undertaken on the data.

QKNA, as presented by Vann et al (2003), is used to refine the search parameters in the interpolation process to help ensure 'conditional unbiasedness' in the resulting estimates. 'Conditional unbiasedness' is defined by David (1977) as "...on average, all blocks Z which are

estimated to have a grade equal to Zo will have that grade". The criteria considered when evaluating a search area through QKNA, in order of priority, are (Vann et al 2003):

- the slope of regression of the 'true' block grade on the 'estimated' block grade;
- the weight of the mean for a simple kriging;
- the distribution of kriging weights, and proportion of negative weights; and
- the kriging variance.

Under the assumption that the variogram is valid, and the regression is linear, the regression between the 'true' and 'estimated' blocks can be calculated. The actual scatter plot can never be demonstrated, as the 'true' grades are never known, but the covariance between 'true' and 'estimated' blocks can be calculated. The slope of regression should be as close to one as possible, implying conditional unbiasedness. If the slope of regression equals one, the estimated block grade will approximately equate to the unknown 'true' block grades (Vann et al 2003).

During OK, the sum of the kriging weights is equal to one. When Simple Kriging ("SK") is used, the sum of kriging weights is not constrained to add up to one, with the remaining kriging weight being allocated to the mean grade of the input data. Therefore, not only the data within the search area is used to krige the block grade, but the mean grade of the input data also influences the final block grade. The kriging weight assigned to the input data mean grade is termed "the weight of the mean". The weight of the mean of a SK is a good indication of the search area as it shows the influence of the Screen Effect. A sample is 'screened' if another sample lies between it and the point being estimated, causing the weight of the screened sample to be reduced. The Screen Effect is stronger when there are high levels of continuity denoted by the variogram. A high nugget effect (low continuity) will allow weights to be spread far from a block in order to reduce bias (Vann et al 2003).

The weight of the mean for an SK demonstrates the strength of the Screen Effect the larger the weight of the mean, the weaker the Screen Effect will be. The general rule is that the weight of the mean should be as close to zero as possible. QKNA is a balancing act between maximising the slope of regression and minimising the weight of the mean for a SK (Vann et al 2003). The margins of an optimised search will contain samples with very small or slightly negative weights. Visual checks of the search area should be made in order to verify this. The proportion of negative weights in the search area should be less than 5% (Vann et al 2003).

QKNA provides a useful technique that uses mathematically sound tools to optimise a search area. It is an invaluable step in determining the correct search area for any estimation or simulation exercise.

#### **13.6.3 Interpolation Parameters**

Multiple neighbourhood scenarios were run on the various zones created (search distances, number of samples, etc.) to determine the most appropriate interpolation parameters for the project.

All zones used a search ellipse generated from the results of the variography. The number of blocks filled in the neighbourhood run was checked to ensure that an adequate number of blocks were filled ensuring that meaningful results were generated.

The QKNA process was run to generate the slope of regression results using the chosen search parameters.

Table 13-7 shows the final search ellipse dimensions and sample numbers used for the first pass interpolation, that were selected based on the QKNA studies. Traditional dips and dip directions of the ellipse are not shown for some zones due to the use of dynamic anisotropy in the interpolation (Section: 13.4.2). Individual Fe\_Mag zones have not been shown as these zones use the parent iron formation zone parameters. With the exception of the top-cut S value in zone 1, which used maximum of 10 samples, all other analytes and estimates used a maximum number of samples of 14.

Deposit	Zone	Ellipse range X	Ellipse range Y	Ellipse range Z	Angle 1	Angle 2	Angle 3	Min Samples	Max Samples	Max Samples per Drillhole
	1,3,18	100	135	20	Dyna	amic Anisc	otropy	4	14	2
	2	100	200	20	Dyna	amic Anisc	otropy	4	14	2
	4	100	200	20	Dyna	amic Anisc	otropy	4	14	2
	5	100	200	20	-10	85	-90	4	14	2
	6	100	200	20	-25	80	-90	4	14	2
	7	100	200	20	-35	85	-90	4	14	2
<u>Ørtfjell</u> Fe Tot	8	100	200	20	-25	80	-90	4	14	2
Fe_Mag S	9	100	200	20	-20	80	-90	4	14	2
Р	10	100	200	20	-15	85	-90	4	14	2
MnO TiO₂	11	100	200	20	-25	85	-90	4	14	2
	12	100	200	20	-25	85	-90	4	14	2
	13	100	200	20	0	85	-90	4	14	2
	14	100	200	20	-30	80	-90	4	14	2
	15	100	200	20	-25	80	-90	4	14	2
	16	100	200	20	-25	85	-90	4	14	2
	17	100	200	20	Dyna	amic Anisc	otropy	4	14	2
Ørtfjell S	1,3,18	100	135	20	Dyna	amic Aniso	otropy	4	10	2

#### Table 13-7: Ørtfjell Post QKNA Interpolation Parameters

# **13.7 Resource Estimation**

#### **13.7.1 Block Model Parameters**

A single model prototype was created using block sizes of 25 mX by 10 mY by 5 mZ. A minimum subcell size of 5 mX by 2 mY by 1 mZ was used to honour the geological contacts with a high degree of accuracy.

Table 13-8 summarises the block model parameters and Figure 13-35 shows example cross sections through the final zone coded block models. The existing pit topographic surface is also shown. The blue and green units represent the iron formations and the red units represent the modelled internal waste units.

Table 13-8: Block Model Framework

	ORIGIN	SIZE	BLOCKS
Х	473000	25	660
Υ	7365000	10	353
Ζ	-400	5	230

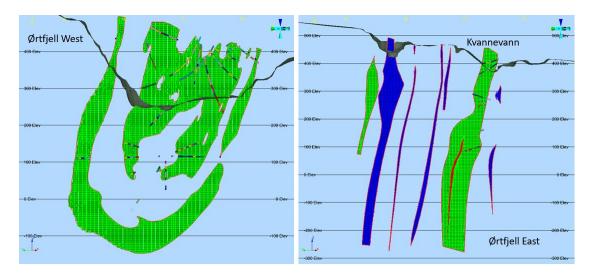


Figure 13-35: Zone coded empty block model at Ørtfjell West and Ørtfjell East. (Source: BGS)

#### 13.7.2 Search Ellipse Parameters and Dynamic Anisotropy

The search ellipse parameters were determined through the QKNA tests undertaken. The dip and rotation of the ellipse mirrors the overall dip and strike of the individual zones. That said, to provide a continuous estimation and honour the geological structure and gentle along strike changes in strike orientation observed, it was decided to use dynamic anisotropy in the estimation process for certain zones. Dynamic anisotropy uses angle data generated from the mineralisation wireframe to assign dip and dip direction to every block in the model. The search ellipse is rotated upon estimation of the block by honouring the associated dip and dip direction of that block.

Three estimation runs have been undertaken. The first pass used the parameters determined through the QKNA testwork. The second run doubled the search ellipse and the final run multiplied the first pass search by 10. The final pass was designed to estimate any blocks not

estimated in the first two passes.

Prior to the interpolation, and for those zones not requiring dynamic anisotropy or unfolding, the ellipse was visually validated to ensure that the correct dip, dip direction and search radii were applied. The search ellipses used are shown in Figure 13-36.

Visually validating the search ellipse also acts as a useful validation tool in terms of sample support and classification in that an assessment of the quality of the grade estimate can quickly be determined when observing the ellipse dimensions, being based on the geostatistical study and the quantity of supporting samples that fall within the ellipse dimensions.

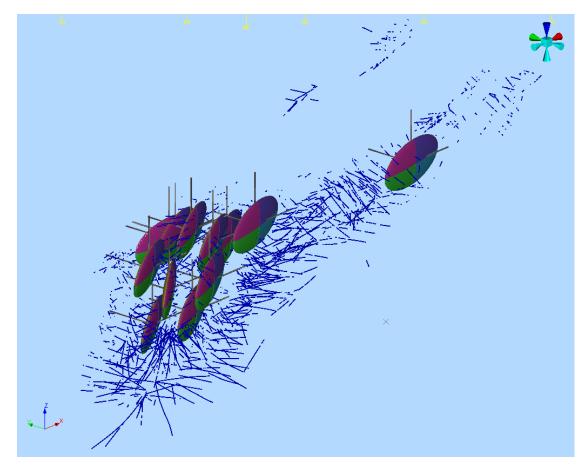


Figure 13-36: Search ellipse orientation validation (Source: BGS)

#### 13.7.3 Grade Interpolation

Grades of Fe\_Tot, Fe\_Mag, S, P, MnO and TiO<sub>2</sub> were interpolated into the empty block model using OK and being based on the interpolation parameters listed and the results of geostatistical study. Fe\_Tot, S, P, MnO and TiO<sub>2</sub> were interpolated into the parent domains with Fe\_Mag being interpolated into the Fe\_Mag sub-division domains.

Post estimation processes calculated the Slope of Regression to enable an assessment of the quality of the estimate.

#### 13.7.4 Blocks Filled

After running the estimates, the model was validated by assessing the number of blocks estimated in each estimation run. Ideally, the first pass estimation, being based on the optimum interpolation parameters should fill a high number of blocks. Failure to achieve this may indicate a lack of sample support or inappropriate estimation techniques.

Table 13-9 shows the number of blocks estimated in estimation pass 1 for each analyte for the various zones. The zones with separate Fe\_Mag domains have been combined into the single parent zone.

As shown, a high number of blocks have been estimated in pass 1 for Fe\_Tot, Fe\_Mag, S and P with a decrease in estimation pass 1 blocks filled for MnO and TiO<sub>2</sub> which is to be expected due to the reduction in available samples. Overall, the quantity of available data has resulted in reasonable estimation parameters to be selected that has allowed a high proportion of blocks to be estimated using the optimum parameters selected.

ZONE	Estimation Pass	% of Blocks Filled (Fe_Tot)	% of Blocks Filled (Fe_Mag)	% of Blocks Filled (S)	% of Blocks Filled (P)	% of Blocks Filled (MnO)	% of Blocks Filled (TiO <sub>2</sub> )
1,3,18	1	58	53	57	55	19	24
2	1	83	83	83	70	31	51
4	1	65	57	62	57	23	35
5	1	95	95	86	88	63	39
6	1	60	52	59	58	-	24
7	1	94	94	91	93	-	-
8	1	73	43	33	34	-	29
9	1	85	78	80	85	-	39
10	1	82	81	69	81	-	-
11	1	84	84	80	61	-	28
12	1	77	77	77	-	-	-
13	1	49	49	12	49	-	12
14	1	66	66	64	57	-	-
15	1	86	86	86	86	-	-
16	1	67	67	66	67	-	66
17	1	65	65	-	65	-	-

Table 13-9: Ørtfjell Percentage of Blocks Filled

### 13.7.5 Blocks Model Validation

The block model has been validated using the following techniques:

- visual inspection of block grades in plan and section and comparison with drillhole grades;
- comparison of global mean block grades and sample grades within mineralised zones;
- a review of the slope of regression.

# 13.7.5.1 Visual Validation

Figure 13-37 and Figure 13-38 show examples of the visual validation checks and highlight the correspondence between the block Fe\_Tot grades and the sample Fe\_Tot grades. The grades can also be seen to follow the orientation of the search ellipse and the fold structures at Ørtfjell as governed by the dynamic anisotropy process used.

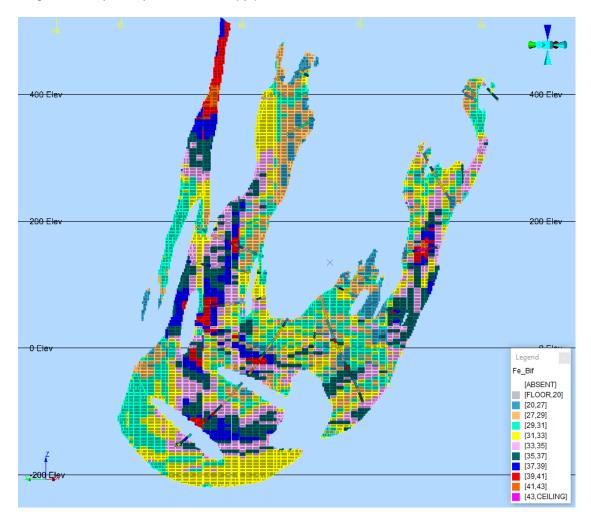


Figure 13-37: Ørtfjell West cross section showing visual validation of Fe\_Tot block grades and sample grades (Source: BGS)

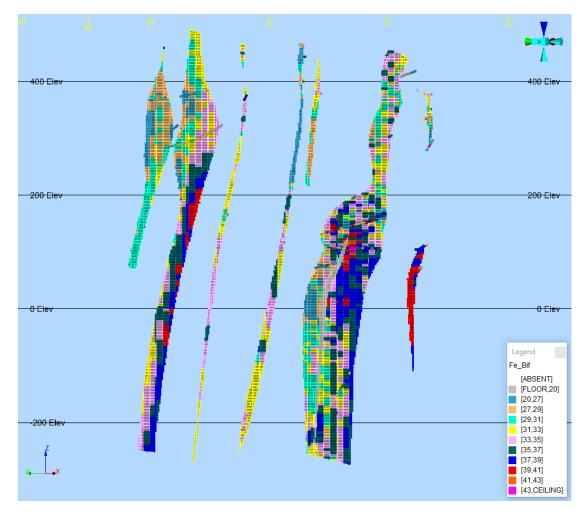


Figure 13-38: Ørtfjell East cross section showing visual validation of Fe\_Tot block grades and sample grades (Source: BGS)

#### 13.7.5.2 Global Mean Comparison

The global block means have been compared with the sample means of all estimated elements and oxides. See Table 13-10 for the key results from the zones.

Whilst there are some discrepancies in percentage terms, in particular S and MnO, these relate to cases where the values themselves are low or where there are a low number of samples in the zone being estimated. Certainly, the absolute differences in the Fe\_Tot across all zones is very low and, overall, BGS is confident that the interpolated grades are a reasonable reflection of the available sample data.

However, differences observed in some of the Fe\_Mag and MnO values are cause for concern and follow up work is required to assess the actual distribution of this data, primarily from a geological control perspective and it is strongly recommended that zones where fluctuating grades are present or a high CoV is prevalent, follow-up logging / core inspection is required.

Zone	Field	Sample Mean (%)	Block Mean (%)	Differenc
	FE_TOT	33.57	33.61	0.13
	FE_MAG	4.28	4.16	-2.79
4 2 4 0	Р	0.203	0.202	-0.42
1,3,18	S	0.019	0.017	-10.86
	MNO	0.579	0.275	-52.50
	TIO2	0.277	0.305	10.10
	FE_TOT	33.65	34.53	2.62
	FE_MAG	3.18	2.47	-22.38
	_ P	0.228	0.229	0.67
2	S	0.005	0.006	16.99
	MNO	0.795	0.716	-9.88
	TIO2	0.291	0.287	-1.58
	FE_TOT	32.83	33.62	2.43
	FE_MAG	2.85	2.73	-4.18
	P	0.212	0.214	-4.10
4				
	S	0.011	0.014	35.90
	MNO	0.605	0.892	47.4
	TIO2	0.284	0.276	-2.90
	FE_TOT	33.17	33.25	0.24
	FE_MAG	1.56	1.64	5.07
5	Р	0.213	0.208	-2.35
-	S	0.005	0.004	-20.58
	MNO	0.528	0.551	4.35
	TIO2	0.287	0.295	2.89
	FE_TOT	33.35	34.58	3.68
	FE_MAG	6.60	5.42	-17.90
6	Р	0.215	0.206	-4.55
U	S	0.014	0.018	32.10
	MNO	0.560	0.441	-21.20
	TIO2	0.276	0.265	-4.10
	FE_TOT	32.07	31.68	-1.22
	FE_MAG	6.00	6.20	3.35
	P	0.179	0.180	0.82
7	S	0.051	0.042	-18.75
	MNO	-	-	-
	TIO2	0.323	0.388	20.25
	FE_TOT	31.54	33.09	4.92
	FE_MAG	8.31	6.08	-26.91
	P	0.198	0.189	-4.38
8	S	0.016	0.019	22.45
	MNO	-	0.019	- 22.45
	TIO2			-0.39
		0.218	0.217	
	FE_TOT	31.55	32.17	1.97
	FE_MAG	5.58	5.63	0.78
9	P	0.197	0.191	-3.26
	S	0.009	0.011	20.08
	MNO	0.279	0.279	0.00
	TIO2	346.000	0.339	-2.19
	FE_TOT	31.70	30.74	-3.04
	FE_MAG	3.69	3.96	7.35
10	Р	0.220	0.212	-3.89
10	S	0.001	0.001	9.86
	MNO	-	-	-
	TIO2			

Table 13-10:	Ørtfjell comparison of block and sample mean grades	
--------------	-----------------------------------------------------	--

	FE_TOT	31.03	32.94	6.17
	FE_MAG	4.65	4.58	-1.43
44	Р	0.187	0.185	-0.73
11	S	0.004	0.004	-1.26
	MNO	-	-	-
	TIO2	0.494	0.566	14.50
	FE_TOT	38.04	37.78	-0.68
	FE_MAG	9.38	9.58	2.12
40	Р	-	-	-
12	S	-	-	-
	MNO	-	-	-
	TIO2	-	-	-
	FE_TOT	29.81	29.45	-1.23
	FE_MAG	6.74	6.99	3.65
	Р	-	-	-
13	S	-	-	-
	MNO	-	-	-
	TIO2	-	-	-
	FE_TOT	30.16	28.86	-4.32
	FE MAG	3.67	3.34	-9.08
	P	0.194	0.207	6.39
14	S	0.011	0.014	27.91
	MNO	-	-	-
	TIO2	-	-	-
	FE_TOT	31.72	31.33	-1.23
	FE MAG	5.82	6.10	4.93
	P	0.183	0.179	-2.20
15	S	0.022	0.021	-5.67
	MNO	-	-	-
	TIO2	-	-	-
	FE_TOT	32.97	31.29	-5.07
	FE_MAG	7.57	7.54	-0.36
	Р	0.183	0.178	-3.14
16	S	0.020	0.021	7.66
	MNO	0.631	0.631	0.00
	TIO2	0.274	0.274	-0.08
	FE_TOT	28.94	29.88	3.22
	FE_MAG	9.84	11.43	16.11
	 P	0.192	0.192	-0.40
17	S	0.013	0.015	13.88
	MNO	-		
	TIO2	0.479	0.479	0.00
		0.170	0.110	0.00

## 13.7.5.3 Swath Plots

For a further assessment of the grade estimate, SWATH plots were generated comparing the composite input grades and the output block model grades using defined distances in the X, Y and Z directions. Figure 13-39 shows the SWATH plots for Fe\_Tot for zone 1 at Ørtfjell. The black line represents the block model grade with the red line representing the composite grade. Plots were generated comparing the block and composite grades within 25m slices in the X direction and 10m in the Y direction and 5m in the Z direction. Ideally, the block model grade should be smoothed through the composite values, as is the case in Figure 13-39. The histogram charts on each plot shows the number of samples. This is useful and enables an assessment of the estimation quality of the slice as based on the degree of sample support.

Figure 13-40 shows the Fe\_Mag SWATH plot for zone 1.

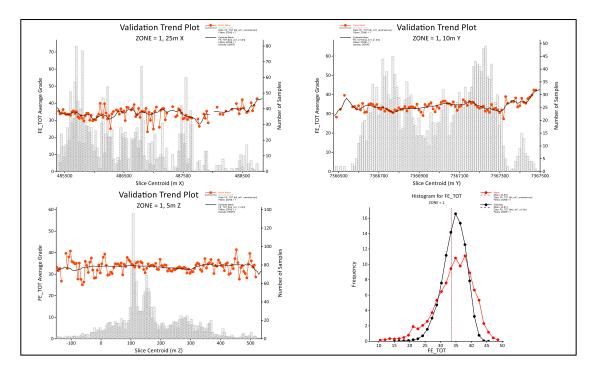


Figure 13-39: Ørtfjell Fe\_Tot SWATH plot for zone 1 (Source: BGS)

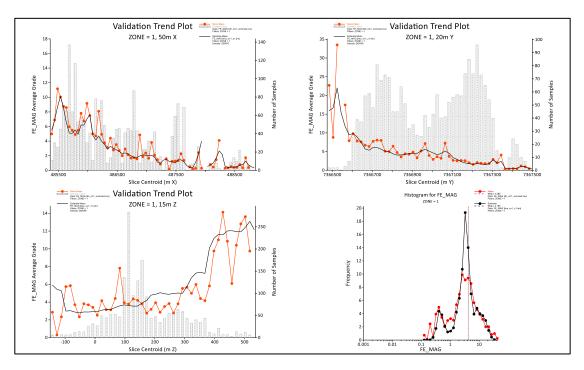


Figure 13-40: Ørtfjell Fe\_Mag SWATH plot for zone 1 (Source: BGS)

## 13.7.5.4 Slope of Regression

The slope of regression is used as a guide to assess the quality of the grade estimate with a slope of regression value approaching a value of 1 being deemed a high-quality estimate. Table 13-11 shows the mean slope of regression values for the various zones. Only the parent zones are shown with the data being restricted to those blocks estimated in the first pass search ellipse, being based on the optimum set of estimation parameters chosen.

As shown, the mean values of the more populated zones show a reasonably high relative slope of regression with Figure 13-41 showing an example of the distribution of blocks coloured by the slope of regression and where it is clear that more continuous zones of higher slope of regression values occur around areas well supported by data.

		• •	0	<u> </u>
ZONE	FIELD	MINIMUM	MAXIMUM	MEAN
1	FE_SL	0.0	1.0	0.7
2	FE_SL	0.0	0.9	0.6
4	FE_SL	0.0	1.0	0.6
5	FE_SL	0.0	1.0	0.5
6	FE_SL	0.0	1.0	0.7
7	FE_SL	0.0	1.0	0.4
8	FE_SL	0.0	1.0	0.4
9	FE_SL	0.0	1.0	0.8
10	FE_SL	0.0	1.0	0.5
11	FE_SL	0.0	1.0	0.6
12	FE_SL	0.0	0.9	0.4
13	FE_SL	0.0	0.9	0.2
14	FE_SL	0.0	1.0	0.3
15	FE_SL	0.1	0.9	0.6
16	FE_SL	0.0	0.9	0.3
17	FE_SL	0.1	0.9	0.4

 Table 13-11:
 Ørtfjell slope of regression by zone

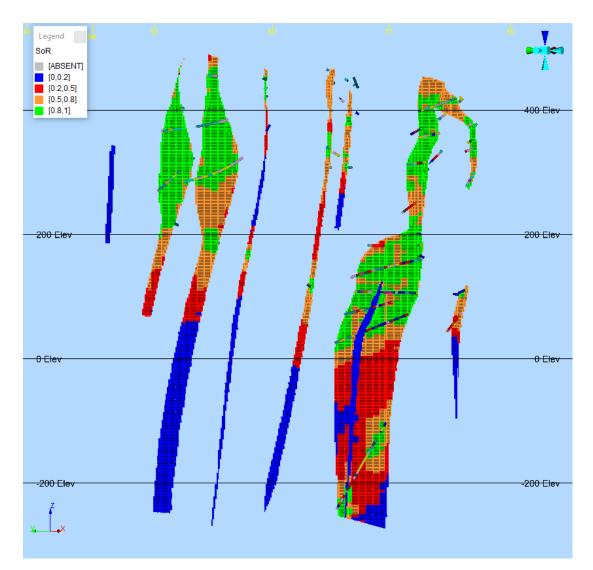


Figure 13-41: Slope of Regression (Source: BGS)

# 13.8 Mine Depletion and Sterilisation

The modelling undertaken used all data, including data above the current pit floor and material within the underground mined out stopes. This enabled all data to support the estimation and to help improve the statistical and geostatistical studies completed.

The final estimated model was however coded to the current topographic surface and used the existing stopes from the underground mining at Kvannevann to deplete the model and also to sterilise the model above the underground workings as it is assumed that no open mining can occur in this area. A "MINED" field was added to the model with a code of 1 representing material that has been mined or is sterilised and a code of 0 meaning the material remains insitu and can be mined in the future.

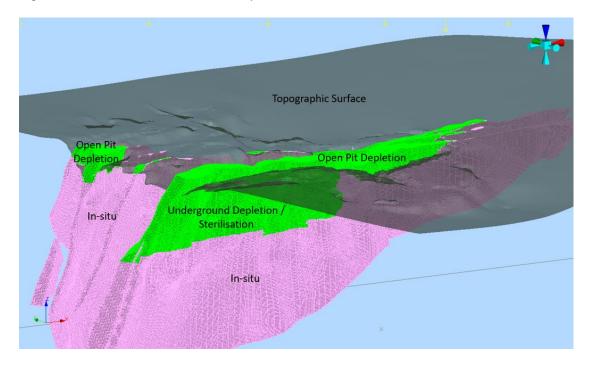


Figure 13-42 shows the model coded by the MINED field.

Figure 13-42: Depleted Model. "MINED" material is coloured green. (Source: BGS)

# 13.9 Waste Dumps

A unique domain has been created for a series of waste dumps that lie within the modelled area. The domain was created using the original topographic surface for Ørtfjell and the current topographic surface supplied by RG.

Figure 13-43 and Figure 13-44 show the location of the waste dumps and the modelled domain. All waste dumps have been assigned a density of  $2g/cm^3$ .

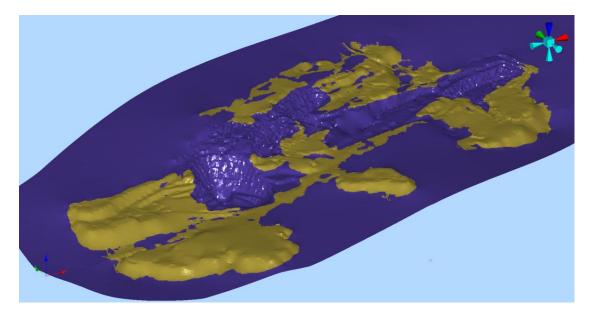


Figure 13-43: Waste dump locations. (Source: BGS)

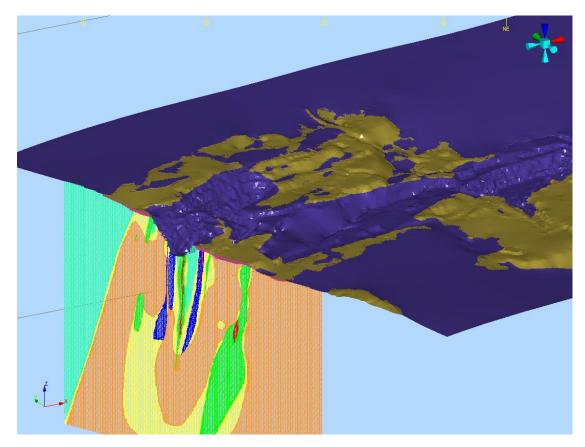


Figure 13-44: Modelled waste dump domain (pink). (Source: BGS)

# **13.10 Mineral Resource Classification**

The definitions given in the following section are taken from the 2014 Canadian Institute of Mining Standing Committee on Reserve Definitions' guidelines on Mineral Resources and Reserves, to comply with NI 43-101.

## 13.10.1 CIM Definitions

### 13.10.1.1 Mineral Resource

Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilised organic material including base and precious metals, coal, and industrial minerals.

The term Mineral Resource covers mineralisation and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors. The phrase 'reasonable prospects for eventual economic extraction' implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. The Qualified Person should consider and clearly state the basis for determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cut-off grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing and general and administrative costs. The Qualified Person should state if the assessment is based on any direct evidence and testing.

Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time.

## 13.10.1.2 Inferred Mineral Resource

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drillholes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade / quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

## 13.10.1.3 Indicated Mineral Resource

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralisation may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralisation. The Qualified Person must recognise the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated MRE is of sufficient quality to support a Pre-Feasibility Study which can serve as the basis for major development decisions.

## 13.10.1.4 Measured Mineral Resource

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineralisation or other natural material of economic interest may be classified as a Measured

Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralisation can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

## 13.11 Classification

## 13.11.1 Introduction

To classify the RG deposits, the following key indicators were used:

- Geological complexity
- Quality and quantity of data used in the estimation
  - o QAQC data
  - o Density Data
  - o Results of the geostatistical analysis, namely the Variography and QKNA results, and
- Quality of the estimated block model

## 13.11.2 Geological Complexity

Due to the amount of drilling across the RG deposits, along with the mining and detailed knowledge of the various deposits, the risks associated with the geological interpretation have been mitigated to allow continuous iron formation units to be modelled. In addition, a statistical analysis shows a simple and homogeneous series of iron formations that has allowed continuous and clean populations of data to be created based on the assayed Fe\_Tot assays. Complexities lie in the distribution of the minor elements, being S, MnO, TiO<sub>2</sub> and also Fe\_Mag. Additional domaining has been carried out within some of the host iron formation units to control the Fe\_Mag distribution but further work is required to assess the distribution of S and MnO in particular. MnO distribution is hindered by the limited data for this analyte and overall, S levels appear to be low. Large sample intervals do however mask the actual distribution of the S and more geological understanding is required to fully assess the non-Fe\_Tot assays.

In addition, it is the recommendation of BGS that further mineralogical assessments are carried out to determine the deportment of the minor element mineral phases and to determine if the distribution is a result of the geological and structural controls that can be modelled effectively.

Ørtfjell West is also a highly folded unit and although the modelling undertaken appears to honour the mapping in this area, a greater degree of structural modelling is no doubt required.

BGS does however consider the geological risk to be low overall with the distribution of the iron bearing lithologies being well constrained by drilling and the knowledge from mining activities.

# 13.11.3 Quality of data used in the estimation

No quality control data exists for the Project and as such, SGM implemented a programme of check assaying. The results of this programme showed that very little bias exists between the old and new data and as such, BGS is confident that the data used in the grade estimation is fit for purpose.

It is however the opinion of BGS that a risk still exists in utilising the historic data in areas of

unmined material. As such it is advised that thorough QAQC protocols are implemented in future exploration drilling campaigns. Additionally, it is strongly recommended that RG continue to undertake check assaying of existing core for areas that lie within the near term mine plan.

BGS also comments that RG have undertaken recent density testwork that has allowed standard regression-based density algorithms to be developed based on the iron grade. As such the density and tonnage estimate is considered robust although further density testwork should be implemented.

## 13.11.4 Results of the geostatistical study

The data used in the geostatistical analysis resulted in suitably reliable downhole variograms for all zones that allowed the nugget variance to be fixed with robust directional and omni directional variograms being created.

QKNA studies were undertaken using the variograms and suitable estimation parameters were selected through testing alternative sample support and search ellipse scenarios. The slope of regression was calculated for all zones giving an indication of the quality of the estimated grade.

## 13.11.5 Model Validation

BGS employed numerous validation techniques and is confident that the estimated block grades are a reasonable reflection of the input sample data. BGS acknowledges that the Fe\_Tot, Fe\_Mag, S and P estimated grades are likely to be more reliable than the MnO and TiO<sub>2</sub> grades due to the greater number of assays being available. BGS also acknowledges that additional investigation is required on the minor element distribution to assess if additional geological domaining is required.

#### 13.11.6 Classification

The Project has been classified as containing Measured, Indicated and Inferred Mineral Resources.

Measured Mineral Resource have been assigned based on the following criteria:

- Material lying directly below and to the west of the current underground mining area and where the underground mining target maintains a thickness and geometry like the current underground operation.
- Where the Fe\_Tot search volume = 1 and displays an elevated and continuous Fe\_Tot Slope of Regression being a statistical measure of the accuracy of the estimate.

Indicated Mineral Resource have been assigned based on the following criteria:

• Where the Fe\_Tot search volume = 1 and displays an elevated and continuous Fe\_Tot Slope of Regression greater than 0.3.

Inferred Mineral Resource have been assigned to zones with a low sample count and in zones of geological uncertainty. It should be noted that limited Inferred Mineral Resources have been assigned to the project. At depth this is because most of the drilling terminates at a similar depth with very few drillholes to test the down-dip extensions to the mineralisation.

Figure 13-45 shows the Classified Mineral Resources at Ørtfjell West and Ørtfjell East with Figure 13-46 showing a series of slices through the model with all zones shown. The green

material in both figures is the Measured Mineral Resource, orange the Indicated Mineral Resources and red the Inferred Mineral Resources. The pink shaded material is unclassified and represents potential modelled down-dip extensions to the mineralisation. The mined out / sterilised material has been removed from the images.

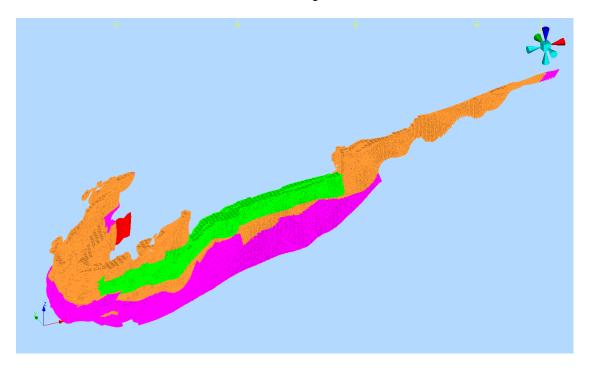
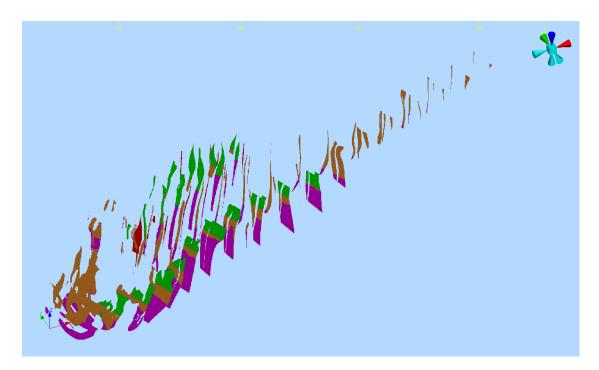


Figure 13-45: Classified Mineral Resources at Ørtfjell (Source: BGS)



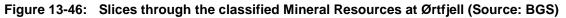


Figure 13-47 shows the classified model set against the composite drillhole file. All nonclassified material coloured pink in the above figures has been filtered out to show that the drilling terminates at a similar depth elevation across the deposit and as such the classification grades from Indicated to unclassified without an Inferred transition zone.

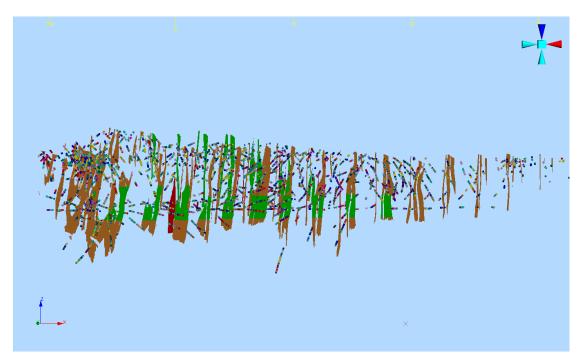


Figure 13-47: Composite drillholes set against all classified material. Non-classified material has been filtered out (Source: BGS)

#### **13.12 Exploitation Rights Boundary**

As described in Section 3, a small portion of the Ørtfjell deposit lies outside of the existing exploitation rights boundary. As such, all resource reported have been trimmed to the boundary.

#### 13.13 Global Classified Tonnage

Using the full classified model, with all mined material filtered out, the Ørtfjell deposit contains the Mineral Resources quoted in Table 13-12. <u>This is not considered the final Mineral Resource</u> <u>Statement</u> but rather an indication of the total classified material at the Ørtfjell deposit.

	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Measured	120.0	3.5	33.6	4.5	0.018
Indicated	232.6	3.5	33.4	4.4	0.021
Sub-Total	352.3	3.5	33.5	4.5	0.020
Inferred	20.3	3.4	30.1	4.8	0.013

 Table 13-12:
 Ørtfjell Global Classified Tonnage at a 0% Fe\_Tot cut-off

Notes:

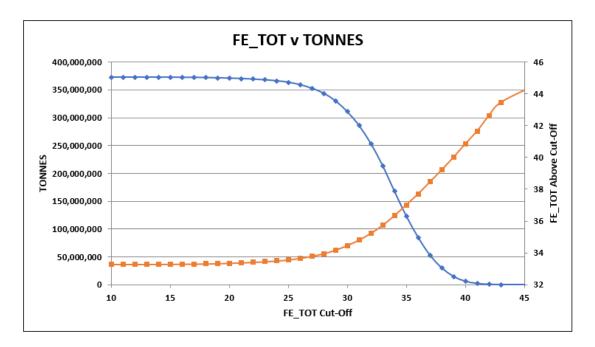
(1) Depleted for mined / sterilised material

(2) Only reports material within the exploitation rights boundary

In total, BGS has derived a global Measured Mineral Resource of 120.0Mt grading 33.6% Fe\_Tot, 4.5% Fe\_Mag and 0.018% S, an Indicated Mineral Resource of 232.6Mt grading 33.4% Fe\_Tot, 4.4% Fe\_Mag and 0.021% S and an Inferred Mineral Resource of 20.3Mt grading

30.1% Fe\_Tot, 4.8% Fe\_Mag and 0.013% S.

Figure 13-48 shows the associated grade tonnage curve for the global classified Mineral Resources. As shown, the deposit is very insensitive to cut-off grade with tonnage only starting to deplete above an approximate cut-off of 25% Fe\_Tot. The grade tonnage curve contains all Inferred Resources in this example.



# Figure 13-48: Global Grade Tonnage curve – <u>Includes</u> all Inferred Material (Source: BGS)

As described in Section 13.10.1, a Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. To demonstrate this, it is common practise to undertake an optimisation study using optimistic parameters, such as an elevated metal price, to determine the material that could be extracted by suitable mining methods.

In the case of RG, both open pit and underground mining currently takes place with both operations occurring in relatively close proximity to one another. The underground mining will have the impact of sterilising certain portions of the resource that as a result, cannot be mined by open pit methods nor underground methods, due to the thickness and general geometry of the mineralised unit in question.

It is however evident that due to the extensive underground operation at RG, that extensions to the underground operation are clearly feasible, given the continuation of the Kvannevann ore body that has been demonstrated to exist through exploration drilling and the modelling and estimation described in this report. Table 13-13 shows the Measured Mineral Resources that lie directly below and to the west of the current underground operation with this being shown in Figure 13-49.

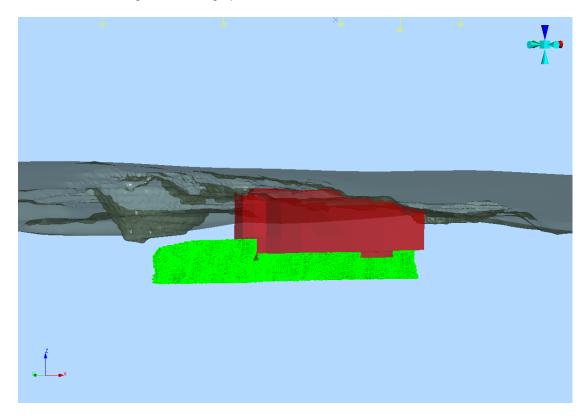
# Table 13-13: Measured Mineral Resources below the current underground mining operation at Ørtfjell - 0% Fe\_Tot cut-off grade applied

	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Measured	75.9	3.5	33.7	3.7	0.020
Notes:					

(1) Depleted for mined / sterilised material

(2) Only reports material within the exploitation rights boundary

In total, BGS has derived a Measured Mineral Resource of 75.9Mt grading 33.7% Fe\_Tot, 3.7% Fe\_Mag and 0.020% S for the material within Ørtfjell that could reasonably form a continuation to the current underground mining operation.



# Figure 13-49: Measured Mineral Resources below and to the west of the current underground operation (Source: BGS)

In terms of open pit potential, RG are currently exploiting three open pit areas with the open pit located to the east of Kvannevann planned to be mined to approximately 150m in depth from the original topographic surface. Using this depth as a guide, an open pit resource has been calculated across the Ørtfjell deposit, as shown in Table 13-14.

Table 13-14:	Open Pit Resources, being 150m in depth from the natural ground level
	and at a 0% Fe_Tot cut-off

	Million Tonnes	Density	Fe_Tot %	Fe_Mag %	S %
Measured	10.0	3.4	32.7	6.6	0.007
Indicated	45.2	3.4	32.8	5.1	0.019
Sub-Total	55.2	3.4	32.7	5.3	0.017
Inferred	2.2	3.4	32.3	5.1	0.005

Notes:

(1) Depleted for mined / sterilised material

#### (2) Only reports material within the exploitation rights boundary

In total, BGS has derived an open pit Measured Mineral Resource of 10.0Mt grading 32.7% Fe\_Tot, 6.6% Fe\_Mag and 0.007% S, an Indicated Mineral Resource of 45.2Mt grading 32.8% Fe\_Tot, 5.1% Fe\_Mag and 0.019% S and an Inferred Mineral Resource of 2.2Mt grading 32.3% Fe\_Tot, 5.1% Fe\_Mag and 0.005% S.

Figure 13-50 shows the location of the material within 150m of the natural surface at Ørtfjell. Figure 13-50 also shows the location of the existing underground stopes with the resource above this area being sterilised and not included in the open pit resources. Zone 2, which lies just south of the Kvannevann development has also been removed due to the underground development sterilising this zone for open pit potential.

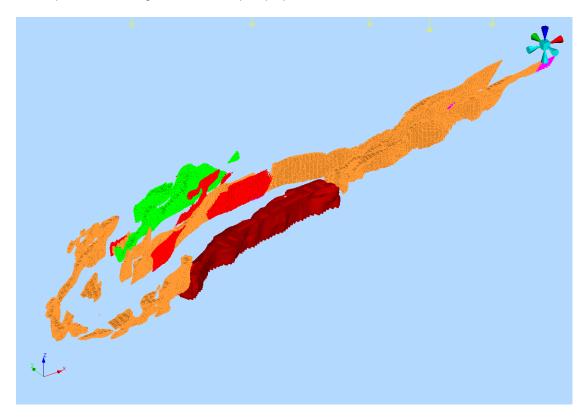


Figure 13-50: Open pit resources, being 150m in depth from the natural surface. Existing underground stopes shown in red. (Source: BGS)

#### **13.14 Mineral Resource Statement**

In generating the final Mineral Resource Statement for the Project, BGS has used the Measured Mineral Resources quoted that could form extensions to the current underground operation and those resources that fall within 150m of the natural surface as potential open pit resources. Both mining methods are currently being applied at the RG operation with 3mtpa being extracted from the underground operation and 2mtpa being extracted from the open pit operations. All material is crushed and transported to the processing facility in Mo i Rana and multiple product type are currently being produced and sold to the open market. As such, BGS is confident that the resources defined herein meet the criteria to demonstrate reasonable prospects for eventual economic extraction. Furthermore, additional classified resources lie below the quoted underground Measured Mineral Resources and there is clear potential to extend the classified resource base through further drilling at depth that could support the

underground operation. For example, drillhole Bh62-2011, shown in Figure 13-51, shows an intersection with a true thickness of approximately 90m and being approximately 200m below the base of the Measured Mineral Resources that make up the underground Mineral Resource Statement.

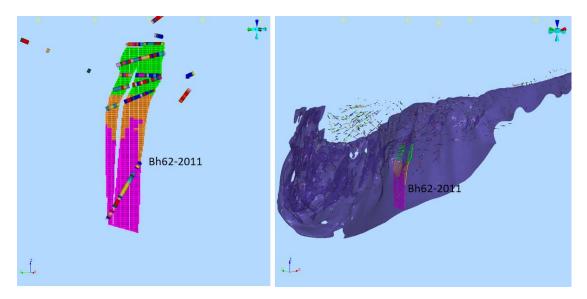


Figure 13-51: Drillhole Bh62-2011 that shows the potential depth extension to the Ørtfjell deposit. (Source: BGS)

As defined by the CIM guidelines, the interpretation of the word 'eventual' in this context relates to a bulk commodity where it is reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years, a time period which RG have currently exceeded from the various deposits in the region.

No cut-off grade has been applied to the final Mineral Resource Statement due to the lack of sensitivity previously demonstrated and all material mined up until the end of May 2019 has been excluded from the statement. In addition, BGS has excluded all data that falls outside of the exploitation rights boundary, as described in Section 3.4. This represents the material considered by BGS to have reasonable prospects for eventual economic extraction potential.

Table 13-15 shows the resulting Mineral Resource Statement for the Rana Gruber Project. The statement has been restricted to Fe\_Tot, Fe\_Mag and S due to these analytes being the focus of most of the drill programmes completed since 1949.

The statements have been classified by Qualified Person, Howard Baker (FAusIMM(CP)) in accordance with the Guidelines of NI 43-101 and accompanying documents 43-101.F1 and 43-101.CP. It has an effective date of 28 June 2019. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability. BGS and RG are not aware of any factors (environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors) that have materially affected the Mineral Resource Estimate.

The quantity and grade of reported Inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource; and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.

Classification Category	Mining Method	Million Tonnes	Density	Fe_Tot	Fe_Mag	S
Measured	Underground	75.9	3.5	33.7	3.7	0.020
Measured	Open Pit	10.0	3.4	32.7	6.6	0.007
Indicated	Open Pit	45.2	3.4	32.8	5.1	0.019
Sub-Total	OP + UG	131.0	3.5	33.3	4.4	0.019
Inferred	Open Pit	2.2	3.4	32.3	5.1	0.005

Table 13-15: Mineral Resource Statement at a 0% Fe\_Tot cut-off grade

Notes:

(1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability

(2) The effective date of the Mineral Resource is 28 June 2019

(3) The MRE was constrained within lithological and grade-based solids with the open pit resources being restricted to a depth of 150m from the original topographic surface and all underground resources limited to areas that lie directly below and to the west of the current underground operation.

(4) Mineral Resources have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines (2014)" by Howard Baker (FAusIMM(CP)), an independent Qualified Person as defined in NI 43-101.

(5) Depleted for mined / sterilised material

(6) Only reports material within the exploitation rights boundary

In total, BGS has derived an underground Measured Mineral Resource of 75.9Mt grading 33.7% Fe\_Tot, 3.7% Fe\_Mag and 0.020% S. BGS has derived an open pit Measured Mineral Resource of 10.0Mt grading 32.7% Fe\_Tot, 6.6% Fe\_Mag and 0.007% S, an open pit Indicated Mineral Resource of 45.2Mt grading 32.8% Fe\_Tot, 5.1% Fe\_Mag and 0.019% S and an open pit Inferred Mineral Resource of 2.2Mt grading 32.3% Fe\_Tot, 5.1% Fe\_Mag and 0.005% S.

#### 13.15 Grade Tonnage Curves

Grade – tonnage curve for the Measured and Indicated material are shown in Figure 13-52 and Figure 13-53. The curves show the relationship between the modelled tonnage and grade at increasing Fe cut-offs.

As shown, the Measured and Indicated portion of the deposit is very insensitive to cut-off grade with tonnage only starting to deplete above an approximate cut-off of 25% Fe\_Tot.

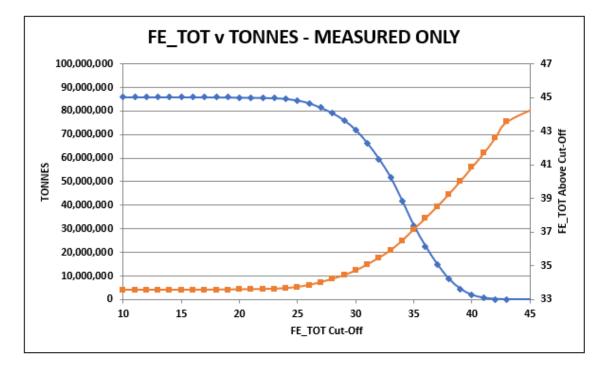
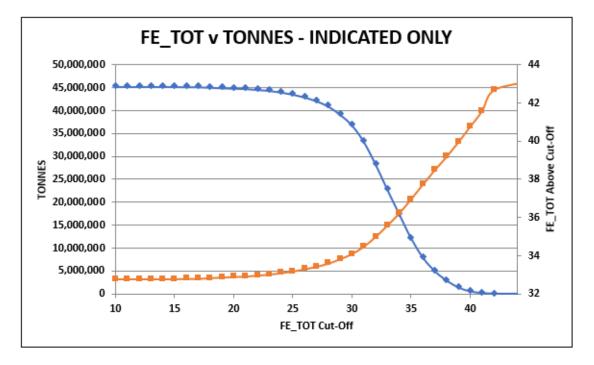
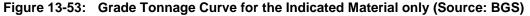


Figure 13-52: Grade Tonnage Curve for the Measured Material only (Source: BGS)





#### **13.16 Resource Potential**

As previously discussed, BGS believes that there is significant resource potential to extend the resource base at depth and below the current classified underground resources. Additionally, a full optimisation study may show the potential to maximise the open pit resources.

There is also significant upside resource potential for the inclusion of the remaining deposits, listed below and it is strongly recommended that these resources be included in the updated Mineral Resource Statement and included in all on-going technical feasibility studies to be

carried out by the Company.

- Finnkåteng
- Stensundtjern
- Ørtvann
- Nord Dunderland

## 14 OTHER RELEVANT DATA ANDE INFORMATION

### 14.1 Block Model Variables

The following is a list of variables included in the estimated block models.

BLOCK FIELD	DESCRIPTION
	1 to 17 = Ørtfjell
	20 = Finnkåteng
	21 = Stensundtjern
	22 = Ørtvann
ZONE	1000 = Internal waste
ZONE	2000 = Marble
	3000 = Dolomite
	4000 = Schist
	5000 = Banded Iron Formation
	6000 = Waste Dumps
DENFE	DENSITY
TRDIPDIR	TRUE DIP DIRECTION OF ORE (BIF) UNIT - USED IN THE ESTIMATION TO CONTROL SEARCH ELLIPSE ORIENTATION
TRDIP	DIP OF ORE (BIF) UNIT - USED IN THE ESTIMATION TO CONTROL SEARCH ELLIPSE ORIENTATION
FE_TOT	IRON TOTAL ASSAY GRADE (%)
FE_MAG	MAGNETITE CONTENT ASSAY GRADE (%)
S	SULPHUR ASSAY GRADE (%)
Р	PHOSPHOROUS ASSAY GRADE (%)
MNO	MANGANESE OXIDE ASSAY GRADE (%)
TIO2	TITANIUM DIOXIDE ASSAY GRADE (%)
FE_NS	IRON TOTAL NUMBER OF SAMPLES USED TO ESTIMATE BLOCK GRADE
FE_SV	IRON TOTAL SEARCH VOLUME USED TO ESTIMATE BLOCK GRADE
FE_KV	IRON TOTAL KRIGING VARIANCE
FEM_NS	MAGNETITE CONTENT NUMBER OF SAMPLES USED TO ESTIMATE BLOCK GRADE
FEM_SV	MAGNETITE CONTENT SEARCH VOLUME USED TO ESTIMATE BLOCK GRADE
FEM_KV	MAGNETITE CONTENT TOTAL KRIGING VARIANCE
S_NS	SULPHUR NUMBER OF SAMPLES USED TO ESTIMATE BLOCK GRADE
S_SV	SULPHUR SEARCH VOLUME USED TO ESTIMATE BLOCK GRADE
S_KV	SULPHUR KRIGING VARIANCE
P_NS	PHOSPHOROUS NUMBER OF SAMPLES USED TO ESTIMATE BLOCK GRADE
P_SV	PHOSPHOROUS SEARCH VOLUME USED TO ESTIMATE BLOCK GRADE
P_KV	PHOSPHOROUS KRIGING VARIANCE
MNO_NS	MANGANESE OXIDE NUMBER OF SAMPLES USED TO ESTIMATE BLOCK GRADE

BLOCK FIELD	DESCRIPTION
MNO_SV	MANGANESE OXIDE SEARCH VOLUME USED TO ESTIMATE BLOCK GRADE
MNO_KV	MANGANESE OXIDE KRIGING VARIANCE
TIO2_NS	TITANIUM DIOXIDE NUMBER OF SAMPLES USED TO ESTIMATE BLOCK GRADE
TIO2_SV	TITANIUM DIOXIDE SEARCH VOLUME USED TO ESTIMATE BLOCK GRADE
TIO2_KV	TITANIUM DIOXIDE KRIGING VARIANCE
FE_SL	IRON TOTAL SLOPE OF REGRESSION
MINED	1=MINED, 0=UNMINED
LICENCE	1=INSIDE EXPLOITATION RIGHTS, 0=OUTSIDE EXPLOITATION RIGHTS
VOLUME	BLOCK VOLUME
TONNES	BLOCK TONNAGE
SAMCONF	SAMPLE CONFIDENCE
CLASS	CLASSIFICATION FIELD. 1 = MEASURED, 2 = INDICATED, 3 = INFERRED, 4 = UNCLASSIFIFIED
ORE	1 = MODELLED BANDED IRON FORMATION, 0 = HOST UNITS

### 15 INTERPRETATION AND CONCLUSIONS

The primary aim of this report was to generate an independent MRE for the Project, using all available and valid data. Qualified Person Howard Baker (FAusIMM(CP)) believes the aim has been achieved and that the Project has met the original objectives.

It is the opinion of BGS that the quantity and quality of available data is sufficient to generate Measured, Indicated and Inferred Mineral Resources and that the Mineral Resource Statement has been classified in accordance with the Guidelines of NI 43-101 and accompanying documents 43-101.F1 and 43-101.CP. It has an effective date of 28 June 2019.

In total, BGS has derived an underground Measured Mineral Resource of 75.9Mt grading 33.7% Fe\_Tot, 3.7% Fe\_Mag and 0.020% S. BGS has derived an open pit Measured Mineral Resource of 10.0Mt grading 32.7% Fe\_Tot, 6.6% Fe\_Mag and 0.007% S, an open pit Indicated Mineral Resource of 45.2Mt grading 32.8% Fe\_Tot, 5.1% Fe\_Mag and 0.019% S and an open pit Inferred Mineral Resource of 2.2Mt grading 32.3% Fe\_Tot, 5.1% Fe\_Mag and 0.005% S.

### 16 **RECOMENDATIONS**

The following recommendations are made:

BGS recommends that a more rigorous structural interrogation of the data be undertaken should future exploration and modelling be carried out. Detailed core orientation work and structural logging should be implemented and form part of RG's standard operating procedures throughout exploration. RG should continue to relog existing core and update the geology and resource model accordingly.

The creation of Fe\_Mag domains has added a degree of complexity to the interpretation in terms of the grade distribution with hard boundaries created in areas of complex distribution. The division is most likely due to structural complexities within the deposits and it is recommended that more detailed mineralogical mapping be undertaken on existing core. This would greatly enhance the confidence in the geological interpretation and would assist mine planning / metallurgical studies.

Due to the large sample length historically employed, it is recommended that variability tests be carried out on existing core to assess the actual distribution and variability of the minor elements. It is also recommended that future drilling uses a sample length more appropriate to the variability of the project.

It is recommended that all future drilling campaigns undertake full suite XRF analysis of the core to assess a multi-element / oxide distribution. This would allow an assessment on the impact of a greater range of analytes and their downstream impact on the concentrate products generated.

It is strongly recommended that zones where fluctuating grades are present or a high CoV is prevalent, that follow-up logging / core inspection is required. This will help to assess the geological controls in relation to the high variability elements / oxides.

It is however the opinion of BGS that a risk still exists in utilising the historic data in areas of unmined material. As such it is advised that thorough QAQC protocols are implemented in future exploration drilling campaigns. Additionally, it is strongly recommended that RG continue to undertake check assaying of existing core for areas that lie within the near term mine plan.

There is also significant upside resource potential for the inclusion of the remaining deposits, listed below and it is strongly recommended that these resources be included in an updated Mineral Resource Statement and included in all on-going technical feasibility studies to be carried out by the Company.

- Finnkåteng
- Stensundtjern
- Ørtvann
- Nord Dunderland

A full and integrated open pit / underground optimisation study is recommended to assess the full resource potential of the deposits, including those listed above that are currently not included in the resource statement.

Based on the studies completed by SGM, the following recommendations are made which are supported by BGS.

Sampling – Samples taken from drill core should be labelled on the core box, on remaining drill core, or on labels left behind in the core box. Currently, the only indication of sampling is from handwritten pages or Excel files and if that information is lost or unavailable there is no way in which to reference a sample back to the drill core.

Sampling – Samples should be continued past ore boundaries in order to demonstrate that the entire mineralisation interval has indeed been sampled.

Drilling – The drillers must indicate the start and end of each run within the core box. Not having this information prevents any analysis of the accuracy of the drilling. Any slip along the wireline resulting in inaccurate depth measurements would be unknown to the geologists. In addition, RQD is generally measured relative to each drill run, which is impossible if the run is not marked. Although rock quality is high at Dunderland, drillers should mark any core loss or gain on each run.

Drilling – Drillers must not discard poorly recovered drill core (chips, broken rock). Identification of geotechnical hazards or fault zones often rely on finding clays, slickensides surfaces or gouge in broken / poorly recovered zones.

Density - Considering the amount of drilling, there is very little density data available. Systematic density sampling should be conducted in the future. Due of the effect of iron content on density, special focus should be placed on the mineralisation. While density sampling outside of the Banded Iron Formation can be periodic, it is recommended that the entire mineralisation interval be sampled for density in future drilling until a statistically sound number is attained. If no drilling is planned for the future, historical drill core should continue to undergo a density sampling campaign.

Structure - Drilling oriented core is strongly recommended. Extensions at depth are tied directly to the plunges of fold axes which are bountiful in drill core. Furthermore, understanding the relationship between Ørtfjell, Stensundtjern and Ørtvann requires a strong structural model. Measuring fold axes, mineral lineation's, axial planar foliation and bedding is crucial to understanding lateral and potentially blind continuations / targets of mineralisation at Dunderland.

Structure – Once data has been collected from oriented drill core, a structural study should be conducted with the aim of tying known mineralisation throughout Dunderland to a single stratigraphic / structural model. It is believed that there is great potential to expand resources in Dunderland and a regional model may uncover new targets. The best intercepts in folded iron ore deposits are generally the hinges. A structural study may uncover targets where antiforms have not breached the surface.

Logging – All drill core logged as "waste rock" vs "ore" should be relogged (5,280 m of "waste rock").

Logging – Historical logging at RG, even when the "waste rock" code is not employed, lumps stratigraphic units together. It is believed Ulrik was correct in separating his calcareous schist (Bt-Sch) as a separate unit. His maps and logs suggest that this is a lithology that is continuous and may be important as a marker horizon in developing a structural / stratigraphic model. Unfortunately, it is not defined in historical logs. Whether it is a tillite or an immature sediment should be explored against the M-Sch via thin section and / or whole rock geochemistry.

Logging – "Good ore", "poor ore" and related terminology should be discontinued. These all have economical connotations and intervals of BIF-Cal where MnO concentrations are likely to be high, will be lost. In exploration, one should consider the continuation of the mineralised unit an important phenomenon and a label of "poor ore" diminishes its interest.

Logging – Core photography is strongly recommended for all future drilling. Photos should be taken of individual boxes from a fixed camera where lighting conditions are static.

Mapping – Geological mapping of the pit walls should be regularly conducted. Contacts and structures could be mapped with a Total Station and easily added to support the current geological model. Mapping of the ore body per mining level is a greater endeavour. While multiple string files defining the shape of the ore body over multiple levels would certainly improve the geological understanding of the deposit, it must be weighed against the increased cost of employing the personnel to undergo the work.

Mapping – Many geological contacts can be defined from drone photography. This data should be digitised and incorporated into the model.

Mapping – Geological mapping should be conducted underground, and structures should be measured using surveying instruments (magnetism prevents the use of a compass). Geological contacts will improve the model as will fold axes measurements.

Assaying – Control samples should be systematically inserted into batches sent for analysis. Duplicates should be field duplicates rather than pulp re-assays. Three or four samples are preferred over a multitude as a large number of analyses of the same sample is required for statistical analysis. Control samples should also contain variable concentrations of S and MnO.

Geotech – Despite good core recovery, geotechnical logging should be periodically conducted, especially if zones of poor rock quality are discovered.

Exploration – Many sections show long, vertical gaps between drillhole intercepts. Exploration drilling should target these gaps.

Exploration – RG has many obvious drilling targets at Ørtfjell, Ørtvann and Stensundtjern mostly targeting vertical or lateral extensions. Ørtfjell in particular shows significant potential for expanding the resource. The geological model created shows a synform but its depth of closure is a "best guess" defined by projecting the structure below the surface using Ulrik's structural measurements. It is possible that the ore body extends much deeper than the current projection. Nevertheless, the synform does define the maximum depth of the Banded Iron Formation at Ørtfjell and while exploration drilling should be planned with the aim of expanding the resource, efforts should also be made to define the bottom of the synform in order to prevent disagreeable surprises in the future. The synform plunges rather steeply to the east from the western pit but eventually swings upward at approximately the middle of the deposit and drilling oriented core will greatly assist in determining where the fold changes orientation.

### 17 CERTIFICATE

To accompany the report dated 28 June 2019 entitled "Independent Mineral Resource Estimate for the Rana Gruber AS Iron Ore Deposits, Norway, June 2019" (the "Technical Report").

I, Howard Baker, MSc, FAusIMM(CP) hereby certify that:

1. I am the Managing Director of Baker Geological Services Ltd, 54 Llanedeyrn Road, Penylan, Cardiff, CF23 9DY, Wales, UK

2. This certificate applies to the Technical Report for Rana Gruber AS with the effective date 28 June 2019;

3. I graduated with a degree in Applied Geology from Oxford Brookes University in 1994. In addition, I have obtained a Master's degree (MSc) in Mineral Resources from Cardiff University, UK in 1995;

4. I am a Chartered Professional Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM(CP));

5. I have worked as a geologist for a total of 25 years since my graduation from university;

6. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Project or securities in Rana Gruber AS.

7. I have read National Instrument 43-101, Form 43-101F1 and the Technical Report and by reason of my education and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101. This Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;

8. I, as a Qualified Person, am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;

9. I am the author and take responsibility for all sections of the Technical Report;

10. I took part in a site visit of the project site in June 2019, as part of this Technical Report;

11. As at the effective date of this Technical Report, to the best of my knowledge, information and belief, for Sections 1 through 17 of this Independent Technical Report contains all scientific and technical information that is required to be disclosed to make the for Sections 1 through 17 inclusive of the Technical Report not misleading;

12. I consent to the use of my name and to the public filing of the Technical Report by Rana Gruber AS.

Dated 28 June 2019

1R

Howard Baker, MSc, FAusIMM(CP)

### For and on behalf of Baker Geological Services Ltd

HB.

Mr Howard Baker (FAusIMM(CP))

Managing Director

28/06/2019

## APPENDIX

## **A** STATISTICS

## APPENDIX

## **B** VARIOGRAMS

# SWATH PLOTS

С

# APPENDIX