Dannemora DFS

Executive Summary

Dannemora Iron AB

Prepared by:

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Revision: Final

Making Sustainability Happen

Revision Record

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Basis of Report

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Disclaimer

This document was prepared by SLR Consulting Limited ("SLR") and contains the expressions of professional opinions of the authors based on (i) information available at the time of preparation, (ii) data supplied by Dannemora Iron AB ("DIAB / Dannemora") and others, and (iii) the assumptions, conditions, and qualifications set forth in this document. Much of the work carried out as part of this updated Definitive Feasibility Study (DFS) is based on information/data, knowledge and inputs provided by key individuals (previously part of the PFS and FS teams) who worked at Dannemora during the 2012-2015 period. These individuals will continue to provide inputs as the Project develops.

SLR has relied on the work of other consultants identified in this document without verifying the accuracy or completeness of that work including, without limitation, the Mineral Resource Estimate which was compiled under the supervision of Mr. Thomas Lindholm of GeoVista AB. The Ore Reserve was calculated by Mr. John Walker of SLR based on the Mineral Resource Estimate provided by GeoVista AB. In terms of processing, Bo Arvidson (PhD) of Arvidson Consulting LLC was responsible for metallurgy and process flowsheet design, and the Dannemora team designed the process and plant which Mr. Chris Stinton of Zenito Ltd reviewed.

Several modifications to the process flowsheet were developed for the previous FS, and tested in a pilot plant for the DFS, with testwork indicating that enhanced efficiencies in the pre-concentration stage and substantially reduced sulphur content for difficult ore types could be achieved.

The quality of information, conclusions, and estimates contained herein are consistent with the stated levels of accuracy as well as the circumstances and constraints under which the mandate was performed. This report is intended to be used solely by Dannemora, subject to the terms and conditions of its contract with SLR. SLR has consented to Dannemora publishing this document. Except for the purposes legislated under the law, any use of this report by any third party is at that party's sole risk.

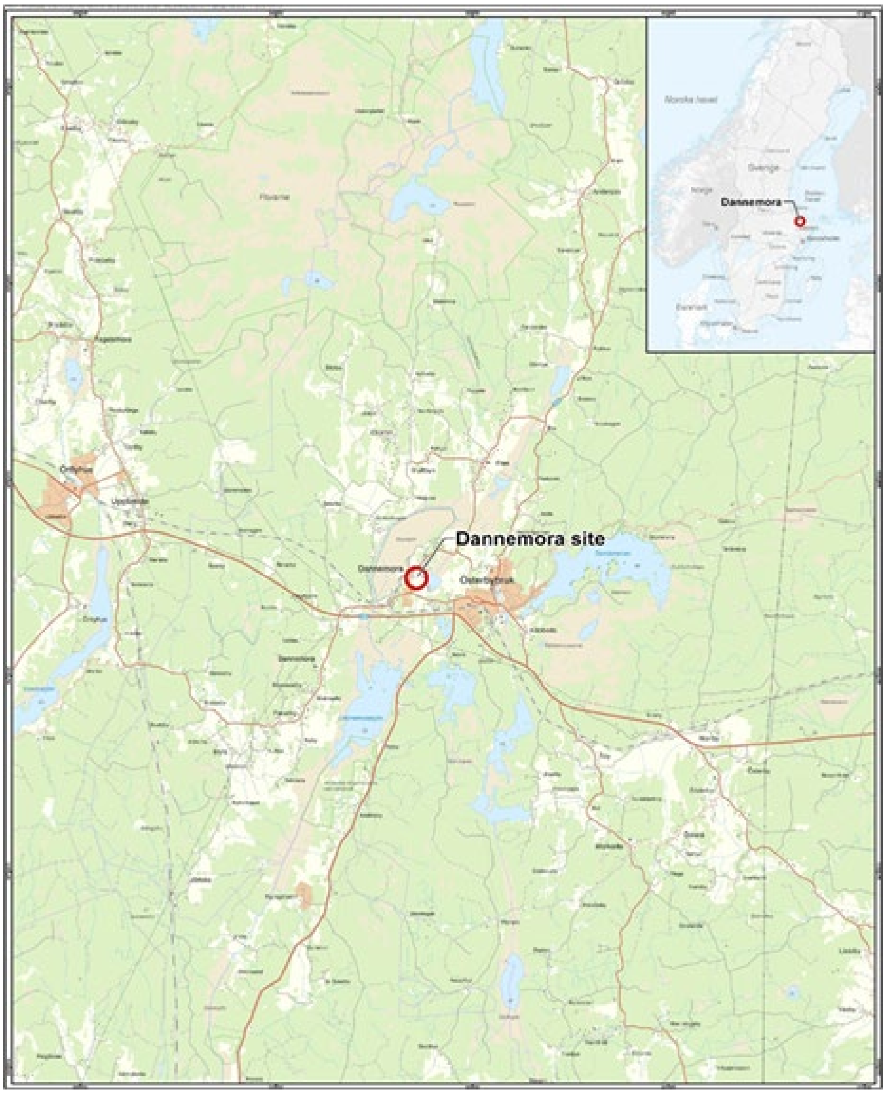
1.0 Introduction & Project Description

Following completion of the March 2023 Feasibility Study[1] ("FS") for the Dannemora Project, Dannemora Iron AB ("DIAB") retained SLR to continue to work on the project, culminating in the delivery of a revised Definitive Feasibility Study ("DFS") in June 2024.

The Dannemora Mine is located near Österbybruk, in the municipality of Östhammar, in Uppland County, some 105 km northeast of Stockholm (Figure 1).

An important part of the updated DFS was to focus on the potential for the Project to reduce its carbon footprint by producing a high grade, high value product for use in the production of Green Steel.

Figure 1: Location of the Dannemora Site



[1] FS: A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study (JORC 2012).

Dannemora Iron AB ("DIAB") was acquired by Grängesberg Exploration AB in August 2020. Grängesberg Exploration AB was subsequently acquired by Metallvärlden I Sverige AB in November 2020, and later changed its name to Grängesberg Exploration Holding AB ("GRANGEX"). In December 2020/January 2021, the new Grängesberg Exploration Holding AB raised MSEK 47 to restructure the business of the company and to exercise a study with the objective to restart the Dannemora Mine, as well as completing a Scoping Study (SS) for the production of apatite from an old tailings facility in Grängesberg.

Mining in Dannemora has a long tradition and may have commenced as early as the 13th Century. Throughout its life, the mine was one of the most important employers in the area. The first concentrator at Dannemora was built in the beginning of the last century. During the last active period (2012 to 2015), when the mine was operated by Dannemora Magnetit AB (DMAB), the mine and plant provided employment for ca. 117 employees and ca. 110 contractors.

It is GRANGEX's intention to recommence mining at Dannemora using a sublevel open stoping mining method with backfill, and to utilise the backfill to provide stability to the underground workings. Pre-production works (including dewatering of the workings) are envisaged to take about 28 months, with a ramp-up to an average full production of about 3.2 million tonnes ("Mt") Run of Mine ("ROM") per year, equating to ca. 1.085 million DMT/yr (dry metric tonnes) of saleable Magnetite iron ore concentrate (ca. 68.1 % Fe), over a ca. 10 year life-of-mine ("LOM"). The LOM is based on a current Ore Reserve Estimate of **ca. 30.95 Mt @ 30.62% Fe, 1.76% Mn and 0.21% S** as of 19th April 2024, which follows the guidelines of the JORC Code[2], 2012 edition. Also included in the ore reserve estimate is ca. 2.0 Mt of tailings @ 22.5% Fe, 2.50% Mn and 0.19% S. The tailings included in the ore reserve estimate are based on tailings historically placed as backfill in a number of the stopes in the Konstäng and Kruthus orebodies, in the south of the Dannemora Mine.

Subject to access agreements and the necessary approvals, Dannemora has access to a rail line, with connection to the Port of Oxelösund ca. 220 km to the south.

Re-establishing production will require about a 28 month capital programme, including dewatering of the mine, refurbishment of the existing ore hoisting mechanism from underground, implementation of a new dry and wet process to concentrate the ore, and refurbishment of the material handling system at the port. The recommencement of mining at Dannemora looks to minimise environmental impacts by making use of the existing infrastructure available to the Project.

The Dannemora Mine is covered by a valid exploitation concession/permit titled 'Dannemora' (Figure 2), which allows for the extraction of iron, lead, zinc, copper, gold, silver and manganese. The concession was granted in 2007 and remains valid for 25 years (until 1st January 2032), with the possibility for extension if required for the duration of production under the condition of approval by the mining inspectorate. If mining activities are still on-going at

[2] JORC: The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code') is a professional code of practice that sets minimum standards for Public Reporting of minerals Exploration Results, Mineral Resources and Ore Reserves. The JORC Code provides a mandatory system for the classification of minerals Exploration Results, Mineral Resources and Ore Reserves according to the levels of confidence in geological knowledge and technical and economic considerations in Public Reports.

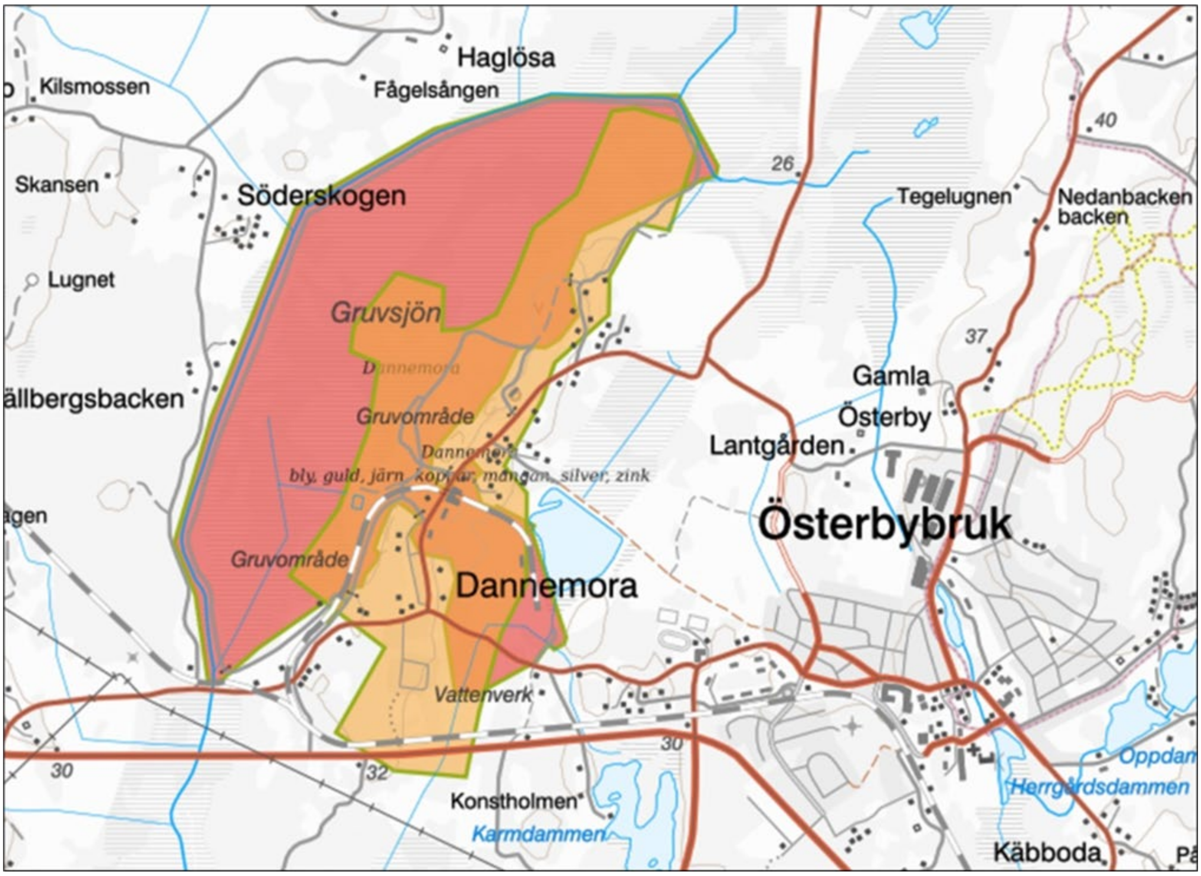
Public Reports prepared in accordance with the JORC Code are reports prepared for the purpose of informing investors or potential investors and their advisors. They include, but are not limited to, annual and quarterly company reports, press releases, information memoranda, technical papers, website postings and public presentations of Exploration Results, Mineral Resources and Ore Reserves estimates.

The JORC Committee is a member of and works closely with CRIRSCO, the Committee for Mineral Reserves International Reporting Standards to ensure international consistency in the development of reporting standards and the promotion of best practice in implementation of the relevant standards and codes. Any Public Reporting of Exploration Results, Mineral Resources or Ore Reserves must be based on and fairly reflect documentation prepared by a Competent Person in accordance with the JORC Code.

the time the permit expires, it can be extended in 10-year periods, without the need for a new application.

On 22nd June 2023, the Land and Environmental Court in Nacka approved the EIA and gave Dannemora a permit for mining and water related activities in accordance with Swedish Environmental Code Chapter 9 and Chapter 11.

Figure 2: Mining concession area (orange) and mine infrastructure land allocation (red) at Dannemora



(Source: SGU, August 2013)

2.0 Project Status

Based on the successful outcome of a Scoping Study completed by Golder (May 2021), a PFS also completed by Golder (February 2022), and a FS completed by SLR (March 2023) DIAB commissioned SLR[3] to undertake an update to the March 2023 FS for the Dannemora Project as the next step in the process of reopening the Dannemora Mine. This updated FS has involved completing the following key tasks:

- An update of the Mineral Resource Estimate for the Project (in accordance with JORC) to take account of additional sampling of core not previously analysed.
- Using the mine plan from the March 2023 FS as a basis of an updated Life of Mine (LOM) plan, with areas previously planned and/or development being utilised to reduce initial start-up Capex.
- Building on the metallurgical testwork completed for the Scoping Study, PFS and previous FS, as well as further complimentary work carried out as part of the updated FS test programme, to confirm that the Fe-concentrate product produced would be of a quality that meets the needs of the steel producers now focusing on and investing in “Green Steel”. This FS builds on the metallurgical testwork completed during the Scoping Study, PFS, and previous FS, as well as further work undertaken in this FS programme, which indicated that there is a good opportunity to produce a Fe-concentrate grade of around 68% Fe with low impurities, which would further enhance the viability and sustainability of the Project.
- Developing a Cashflow Model with an accuracy of +/- 10 - 15% on Opex and Capex inputs.

[3] Key members of the SLR team for the DFS were part of the same team that executed the Scoping Study, Preliminary Feasibility Study and Feasibility Study for the project.

3.0 Regulatory & Approvals

The Swedish Environmental Code (SFS 1998:808) provides the legal environmental framework for environmental matters. The first step in the Swedish permitting process, consultation with the County Administration Board ("CAB"), the Local Environmental Department ("LED") and other stakeholders, was formally initiated in October 2021.

Consultation was also carried out on 2nd February 2022 with the CAB and LED, and on 16th and 17th March 2022 with local stakeholders. Prior to the consultation, Dannemora prepared a consultation document that covered the planned locations for the activities, the extent of the planned operations, preliminary designs, and foreseen environmental impacts from activities *("Dannemora Samrådshandling"* 2021-12-06").

Consultation was also carried out with other national authorities, municipalities, environmental organisations such as Non-Governmental Organisations ("NGOs"). Public consultation letters were sent out on 7th March 2022. The purpose of the consultation was to obtain viewpoints to consider in the Environmental Impact Assessment ("EIA") work. Guidance from CAB was also considered in planning and executing the EIA.

After finalising the EIA Report and the technical description of the activities and facilities, a formal permit application (legal) was prepared. All reports, drawings and documents were submitted to the permitting authority (Land and Environmental Court in Nacka) on 29th June 2022. The EIA is a statement of the effects, if any, which the proposed Project, if carried out, would have on the environment.

The Official Notification of the application was made on 2nd November 2022 by the Land and Environmental Court in Nacka, and the final date for receipt of comments/observations from stakeholders was set as 12th December 2022.

On 22nd June 2023, the Land and Environmental Court in Nacka approved the EIA and gave Dannemora a permit for mining and water related activities in accordance with Swedish Environmental Code Chapter 9 and Chapter 11.

4.0 DFS Team and Competent/Qualified Persons (CP/QP)

The DFS has been compiled by SLR using client-supplied data and information. As such, the report draws upon information presented in previous reports, by external parties. Information has been utilised by the project team, comprising predominantly Dannemora technical staff, with some input from specialist sub-contractors.

The Mineral Resource and Ore Reserve in this Feasibility Study have been estimated in compliance with the principles as set out in JORC-2012. According to JORC, a competent person ("CP") must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking. The CP must also be a Member or Fellow of the Australasian Institute of Mining and Metallurgy, or of the Australian Institute of Geoscientists, or of a "Recognised Professional Organisation ("RPO")". Any Public Reporting of Exploration Results, Mineral Resources or Ore Reserves must be based on, and fairly reflect documentation prepared by a Competent Person in accordance with the JORC Code.

Competent Person for Mineral Resources: Mr. Thomas Lindholm, GeoVista AB, who is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), is the Competent Person responsible for the Mineral Resource estimate for Dannemora based on his training and experience in exploration, mining and mineral resource estimation of iron ore, base and precious metals. The Mineral Resources are reported following the guidelines of the JORC Code, 2012 edition. Thomas is regularly involved in Resource Estimation for Scoping Studies through to full Feasibility Study, site supervision and exploration drill programme design.

Competent Person for Ore Reserves: Mr. John Walker (FGS, FIMMM, FIQ) Principal Mining Engineer with SLR Consulting UK Ltd, is the Competent Person as defined by JORC (2012) responsible for the estimation of the Ore Reserves following the guidelines of the JORC Code, 2012 edition.

Competent Person for Mineral Processing: Mr. Bo Arvidson (PhD) of Bo Arvidson Consulting LLC, is the Competent Person defined under JORC (2012) based on being a Qualified Person (QP) under NI 43-101, responsible for metallurgical test work and process flowsheet design.

Competent Person for Process Plant Engineering: Mr. Chris Stinton (C.Eng.), Zenito, is the Competent Person for the process plant engineering.

5.0 The Iron Ore Market

The global steel industry is by far the single largest driver of global iron ore demand. Crude steel production is partly based on virgin iron units (iron ore products), and partly recycled iron and steel units (scrap).

The supply of iron ore products is dominated by the “big four” iron ore companies of the world. They are, in size order: (1) Vale (Brazil), (2) BHP (Australia), (3) Rio Tinto (UK) and (4) FMG (Australia), and together they account for about 69% of the global seaborne iron ore trade.

DIAB have commissioned RMG Consulting to carry out a study on ‘The market for high grade green iron ore in Europe’. Based on their price forecast up to 2030 and an anticipated slight price reduction from 2031 and onwards the average price FOB Oxelösund for LOM has been estimated to be USD 151 per DMT. The findings of their report are summarised below.

Steel is a fundamental building block for all societies in the world, with the demand for steel being particularly strong in early industrialization of a country. A growing global population, an increased standard of living and the green energy transition, will guarantee a continued strong demand for steel.

National undertakings together with many steel companies’ voluntary commitments to meet the demands for a reduction of CO_2 emissions have created a strong push towards the establishment of green steel production technologies and a reduction in CO_2 emissions from existing blast furnaces. Also, important steel customers such as the auto industry, have made similar commitments which will increase the demand for green steel.

In the short- to mid-term the only viable technology for green steel production is direct reduction using hydrogen gas. This will increase demand for DR-grade pellets and high-grade iron ores from plants using this new technology. In 2030 the demand for DR pellets will be in the order of magnitude of 50 Mt in the EU. Assuming that the existing pellet producers of LKAB and Tata Ijmuiden will produce as much DR pellets as theoretically possible, there will be a gap between supply and demand in the EU of more than 10 Mt (perhaps as much as 20 Mt) by 2030.

Iron ores containing between 65 % and 68.5 % Fe are highly sought-after as feed material to make high-grade pellets suitable for DR iron-making processes. Such concentrates are often based on magnetite ores like Dannemora.

Iron ore prices (62% Fe) have swung from below USD 60 per DMT to over USD 200 per DMT during the past five years. There is a higher price paid for high grade Fe concentrates suitable for DR pellet production. The difference between these two prices has varied between 5-40 USD per DMT in the past 5 years.

The market for high grade ores will be affected in two ways by increasing demand: (i) more iron ore of high quality will need to be produced, and (ii) most probably there will be a deficit of high-grade iron ores. Both of these factors are expected to increase the price of high-grade ores.

The high quality Dannemora iron ore is anticipated to command a premium over high grade (65 %) iron ores currently available on the market today, because of a number of factors, including fossil fuel free mine production, magnetite ore, a very high Fe-level, low shipping costs and the growing market gap for high grade iron ore in Europe.

5.1 Recent Iron Ore Price

During the past two years, the steel industry has somewhat slowed down in China and the overall demand for iron ore has dropped, largely due to the effects of the pandemic. The prices for 62% and 65% Fe products have fallen from a level of USD 230 per DMT and USD 255 per DMT in June 2021, to a level of USD 95 per DMT and USD 110 per DMT respectively in

November 2022. The average prices have, over the last 5-year period, been at the level of USD 109 per DMT and USD 127 per DMT respectively, with an average Fe premium of USD 6 per Fe-unit for every Fe-unit above 62% (according to Platts IODEX).

6.0 Dannemora High Grade Concentrate & Its Markets

There are primarily two different geographical market areas that are of interest to, and with an interest in, the Dannemora high grade concentrate:

- The European Steel Industry due to freight cost advantages and low carbon footprint; and
- Merchant pelletising companies in the MENA[4] region, due to the very high grade of the concentrate.

The European Steel Industry, with very large companies like Tata Steel, Thyssen Krupp and Arcelor Mittal, are increasingly focusing on finding ways to reduce their carbon footprint to face the growing demand for "green steel", primarily from the car industry. "Green steel" requires the introduction of more environmentally friendly steel making technology, e.g., DR/EAF[5] instead of BF/BoF[6], which requires, among other things, as high-grade an iron ore as possible. It also requires as low a carbon footprint as possible throughout the supply chain, which is one good reason for local or regional sourcing instead of sourcing from overseas.

In the MENA region there are a number of merchant DR[7] pellet producers currently sourcing their feedstock to a very large degree from Brazil and Canada. European supply, which is within shorter shipping distances is currently quite limited and pellet producers like e.g., Bahrain Steel (Bahrain) and Tosyali (Algeria), are actively looking for additional supply from current and future producers of high-grade concentrate from more nearby locations than South- and North America, e.g., Scandinavian iron ore producers.

With a planned average annual output of about ca. 1.085 million DMT/yr of product based on the LOM schedule, the Dannemora concentrate is expected to be in greater demand than what the company will be able to deliver. Potential customers, all of which Dannemora representatives have been in contact with, are Tata Steel, Arcelor Mittal, Thyssen Krupp, Saltzgitter, Rogesa, Voestalpine, Bahrain Steel and Tosyali.

However, changing market dynamics, with a higher appreciation of products contributing to lowering of CO_2 emissions, may result in additional premiums for such products. Taking these conditions into account it could be assumed that these high-grade products are and will likely continue to be for quite some time, in short supply, and therefore an increase in premiums is likely.

The pricing methodology prevailing on the European market as well as in the MENA region is based on a netback calculation where the benchmark is FOB[8] Tubarao (Brazil). To determine the FOB price Tubarao, the CFR[9] price China is reduced with the Baltic Exchange's freight rate for a capsize vessel from Tubarao to Qingdao (C3). For shipments into Europe and MENA the freight cost difference between shipments from Tubarao and port of discharge (C2 for ARAG-area, i.e., Amsterdam-Rotterdam-Antwerp-Ghent) and actual port of loading to port of discharge, is used to calculate price neutrality for the buyer.

Current indices for high-grade concentrate (MB65 or Platts IODEX65) are expected to be at an average level of USD 150 per DMT, which is about USD 20 above the 62% Fe index (i.e. with an additional USD 6-7 per extra Fe-unit above 62%). Applying the same Fe-premium up to 68% will result in USD 170 per DMT for the Dannemora product CFR China. To that, it is

[4] MENA = Middle East and North Africa.

[5] DR/EAF = Direct Reduction/Electric Arc Furnace.

[6] BF/BoF = Blast Furnace/Basic Oxygen Furnace.

[7] DR = iron ore pellet that has a typical Fe content above 66%.

[8] FOB = Free on Board ore costs.

[9] CFR = Cost and freight.

expected that there will be another USD 1 per DMT for the very low levels of impurities and USD 1 per DMT as a “Green Premium”. In order to establish the FOB price long-term freight rates from Brazil to China, freight rates from Brazil to Dannemora’s customers and freight rates from the Port of Oxelösund are applied, resulting in a long-term average price for the Dannemora product of about USD 151 per DMT.

7.0 The Green Transition

Climate change is a fact and a global emergency that requires international cooperation and coordinated solutions at all levels. The Paris agreement was concluded in 2015 and since then many initiatives have started globally. In the EU, the European Green Deal was presented in 2019, with the objective of reducing greenhouse gas emissions by at least 55% by 2030, and to have no net emissions by 2050. Since then, a large number of laws, regulations and other initiatives has been launched to drive the change. Politicians and business leaders around the world have realized the need for a change.

The steel industry is a major contributor to greenhouse gas emissions in Europe, representing 5% of total emissions[10]. Globally the corresponding number is 7%. The industry and its customers have during the last few years started focusing on reducing its carbon footprint throughout the entire value-chain, from mining through to manufacturing and use of its end products. Car manufacturers not only make cars that will run on fossil free fuel, but they also demand that the steel (and other products) they buy have a low carbon footprint. This has resulted in the start of large-scale projects in Sweden alone; Hybrit (a collaboration between LKAB, SSAB and Vattenfall) and H2 Green Steel, both projects with ambitions to become fossil free steel producers. Other steel companies in Europe, e.g., Tata Steel Ijmuiden in the Netherlands and Voestalpine in Austria are in different phases of planning similar changes to their future steel production processes.

The shift towards production of fossil free steel requires a high-quality ore concentrate with > 65 % iron content, but preferably > 67 %. The major iron ore producers in the world, e.g. in Australia, currently supply relatively low-grade products of around 62% iron content. Reports show that there will be an increase in demand for high-grade Fe concentrates to be used in direct reduced iron production processes[11]. This puts producers of high-grade ore concentrates in a favourable position when negotiating prices with their customers.

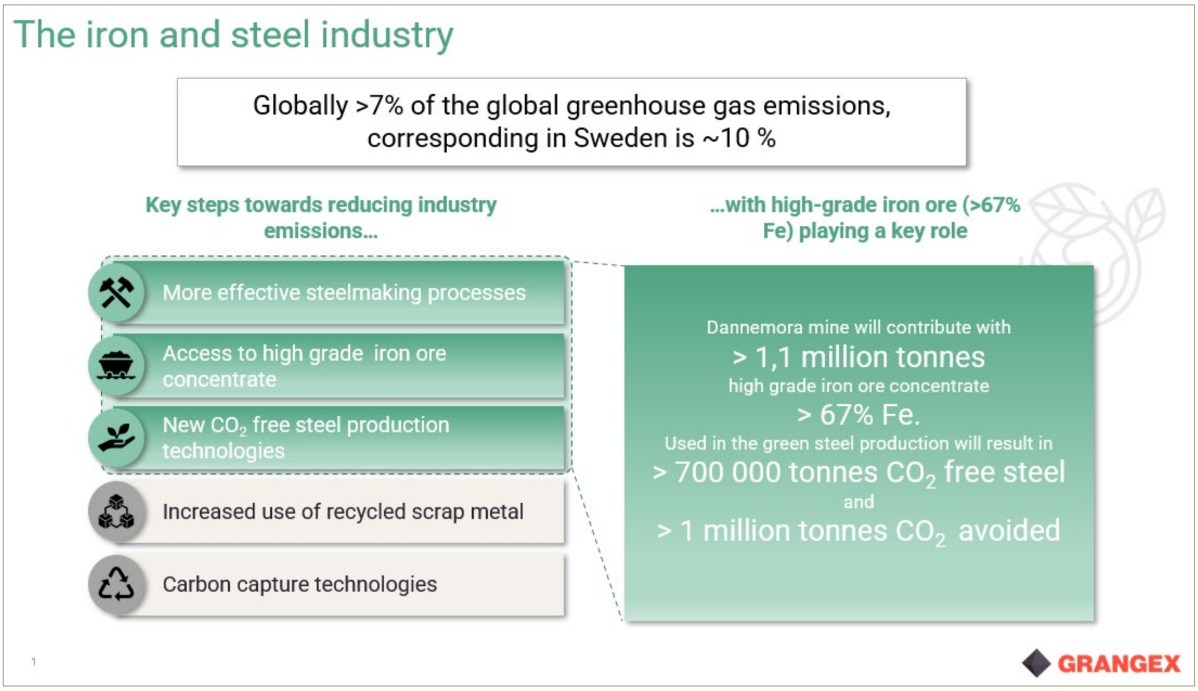
The Dannemora mine project will contribute with approximately 1.1 million tonnes of high-grade Fe concentrate per year with an iron content of > 67%. If used in green steel manufacturing > 700,000 tonnes of fossil free steel can be produced and > 1 million tonnes of CO_2eq avoided[12] (Figure 3).

[10] https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/eu-climate-targets-how-decarbonise-steel-industry-2022-06-15_en

[11] https://ieefa.org/sites/default/files/2022-06/Iron%20Ore%20Quality%20a%20Potential%20Headwind%20to%20Green%20Steelmaking_June%202022.pdf

[12] Approximately 2.2 tons of CO2eq/ton crude steel is on a global average emitted from blast furnace steelmaking. A state-of the art blast furnace results in generation of 1.6 tons of CO2eq. https://www.hybritdevelopment.se/en/hybrit-demonstration/

Figure 3: Dannemora's contribution to reducing CO_2



7.1 Sustainable Mining in Dannemora

The recommencement of mining at the Dannemora Mine is being designed to align with the company's business strategy. The company's (GRANGEX) strategy is to identify, acquire and develop a project portfolio of mineral projects in Europe comprising recycling and extraction; and strive for the lowest carbon footprint in the extraction sector using best available technology (BAT). As presented above the product from Dannemora will contribute to avoidance of greenhouse gas emissions when used in green steel manufacture. However, it is equally important to make whole operation as sustainable as possible. This includes reducing the carbon footprint of the mine, including transportation and harbour loading as far as possible, by electrification and where not possible use of fossil free fuels[13].

Sustainability is at the core of GRANGEX's business and the Sustainable Development Goals (SDGs)[14] and is embedded in the Company's strategic ambitions. The ambitions are presented in the figure below. In addition to these objectives, the Company's Code of Conduct and ethical business behaviour serve as a base for good governance (Figure 4).

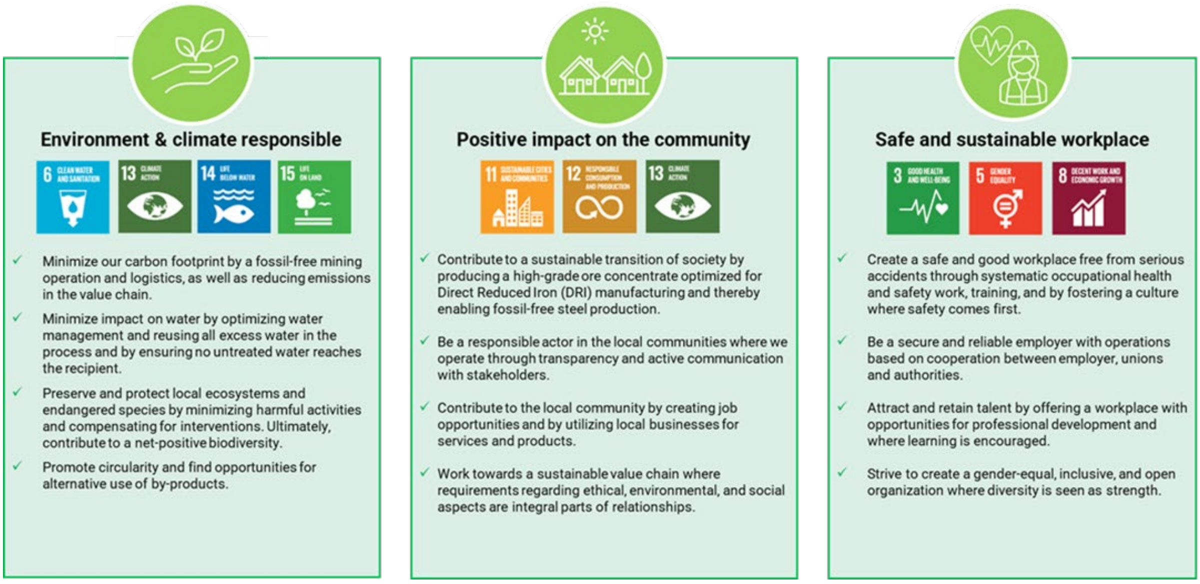
As a member of the Swedish Mining Association (SveMin), GRANGEX commits to ethical rules that include sustainable development; good working environment; environmental protection; risk management; disclosure of correct information; accounting principles; respect for landowners' interest; contractors' compliance with the SveMin rules; training and development; and continuous improvement. Details on the ethical rules are found on SveMin's website (www.svemin.se).

The International Council on Mining and Metals (ICMM) is an international organization dedicated to a safe, fair and sustainable mining and metals industry. The Council is made up of 26 leading mining and metals companies and 35 regional and commodities associations. The objective of the Council is to strengthen environmental and social performance within the industry and enhance mining's contribution to society. The ICMM has produced a Sustainable

[13] HVO100, hydrotreated vegetable oil
[14] THE 17 GOALS | Sustainable Development (un.org)

Development Framework with the most recent version being issued in 2015. This framework is made up of ten principles that represent best practice for sustainability in the mining industry. Dannemora is governed by these principles.

Figure 4: GRANGEX sustainability ambitions and impacts on SDGs



8.0 Geology

The Dannemora deposit is contained within the regional host rocks of the Leptite Formation, an assemblage of Svecofennian (of Lower Proterozoic age ca. 1.8 to 1.9 Ga) marbles, metavolcanics and subsidiary metasediments.

The principal units of the Leptite Formation are steeply dipping along the limbs of northeast-trending (ca. 030° NE) isoclinal fold structures, and occur between large granitoid intrusive bodies. The lithologies have undergone varying degrees of metamorphism related to both regional and local thermal alteration activity.

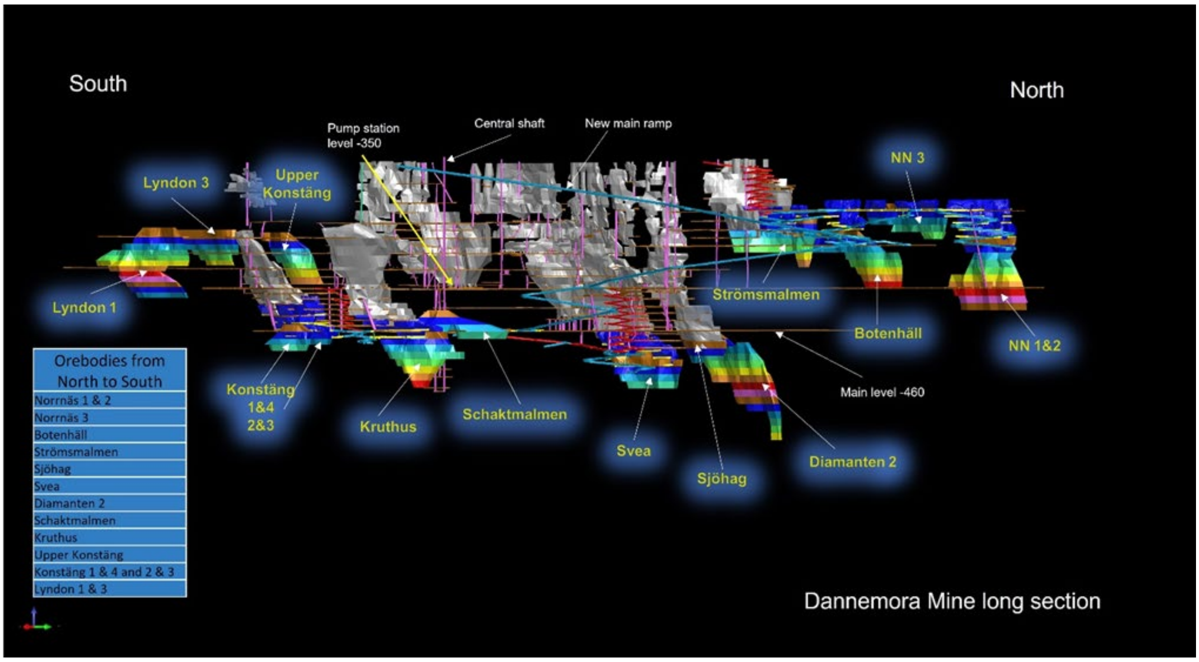
In the Dannemora Mine area, the metavolcanic and metasedimentary rocks are shaped into two parallel synclines separated by an isoclinal anticline which together plunge gently to the northeast. The principal mineralisation is confined to the easternmost syncline, with exploration to date only identifying smaller bodies associated with the westernmost structure.

8.1 Mineralisation

The magnetite mineralisation is mostly restricted to the upper unit of the upper formation at Dannemora, and is normally strata bound within dolomitic units.

Previous exploration work has identified about 25 individual mineralised bodies situated along a 3 km strike length of the syncline and surrounding structures at varying depths from surface. The bodies occur within a ca. 400 - 800 m wide stratigraphic thickness and display a thinning and thickening, which is commensurate with their positions relative to the primary structures, i.e., thinning and fragmenting within the limbs of the syncline and thickening towards the keel of the Dannemora Syncline. The limbs dip at ca. 85° near surface and shallow to ca. 60° at the 350 m level of the mine. The location of the mineralised bodies in long-section in relation to the main mine infrastructure is shown in Figure 5.

Figure 5: Location of existing mineralised bodies in relation to mine infrastructure (long-section)



Based on previous mineralogy and average compositional analysis, the mineralisation has been commonly categorised as a manganese-rich skarn iron ore (with an iron content of 30 to

50%, and a manganese content of 1 to 6%), and a manganese-poor skarn iron ore (with an iron content of 30 to 50% and a manganese content of 0.2 to 1%).

In terms of ore-related parageneses, magnetite is commonly associated with calcite and dolomite, and to a lesser extent with amphiboles (tremolite-actinolite), albite, andesine, arsenopyrite, biotite, chalcopyrite, chlorite, diopside, epidote, garnet, muscovite, oligoclase, orthoclase, phlogopite, pyrite, pyroxene, pyrrhotite, quartz, rhodochrosite, scapolite, serpentine, siderite and tremolite.

Rare, accessorial phases - often only observed in magnetite ore by electron microprobe - include apatite, arsenopyrite, bismuth, bismuthinite, cassiterite, chrysotile, cobaltite, dannemorite, galena, knebelite, löllingite, monazite, sphalerite, titanite and zircon.

9.0 Mineral Resource Estimate[15]

The Mineral Resource Estimate produced for inclusion in the DFS is compliant with the principles as set out in JORC-2012. It has been compiled under the supervision of Mr. Thomas Lindholm, GeoVista AB, who is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), and a Competent Person (CP) qualified to report on mineral resources, based on his training and experience in exploration, mining and mineral resource estimation of iron ore, base and precious metals. The statement on Mineral Resources is supported by a completed Table 1, as required by JORC-2012.

Table 1 presents a summary of the Iron Ore Resources for Dannemora Mine as of 5th April 2024 compared to of 8th August 2022.

Table 1: Mineral Resource Estimate for Dannemora Mine for 5th April 2024 compared to 8th August 2022

Category	2024				2022			
	Tonnes	Fe%	Mn%	S%	Tonnes	Fe%	Mn%	S%
Measured	17,344,000	37.19	1.92	0.27	17,319,000	37.49	1.90	0.25
Indicated (In Situ)	11,622,000	34.74	2.35	0.27	11,882,000	34.66	2.20	0.27
Sub-Total	**28,966,000**	**36.21**	**2.09**	**0.27**	**29,201,000**	**36.34**	**2.02**	**0.26**
Indicated - Tailings	2,200,000	21.00	2.50	0.19	3,000,000	22.50	2.50	0.19
Total Measured + Indicated	31,166,000	35.14	2.12	0.26	32,201,000	35.05	2.07	0.25
Inferred (In Situ)	5,709,000	34.16	2.32	0.13	5,948,000	33.33	2.27	0.15

The principal differences between the 2022 and 2024 Mineral Resource Estimates are:

- Addition of recently assayed samples which filled in gaps where the grades had either been set to 0% Fe and thus diluted the overall grade or not been included in the wireframing process thereby reducing tonnage;
- Re-classification from inferred to indicated of the tailings stored underground during the previous production phase; and
- Recently acquired information on the previous depletion in Upper Konstäng removed a substantial part of its tonnage; and
- Further studies on the recovery of the previously deposited tailings in Upper Konstäng have concluded that some 800,000 tonnes are not recoverable due to geotechnical risks.

In summary, the Total Measured + Indicated Mineral Resource Estimate for the Dannemora Project as of 5th April 2024 is estimated to be 31,166,000 t @ 35.14% Fe, 2.12% Mn and 0.26% S (using a cut-off of 15% Fe).

[15] As defined under JORC, 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. 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. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

10.0 Ore Reserve Estimate[16]

As demonstrated in the Section Mining below, the Mineral Resource Estimate presented in Table 2 has been subject to detailed mine planning, including the consideration of expected or actual Modifying Factors such as, waste inclusions (dilution), and planned and operational ore losses. The resulting tonnage is therefore considered to be a Probable Ore Reserve. The Estimated **Probable Ore Reserve** for the Dannemora Mine, on **19th April 2024**, is estimated to be **30.95 Mt @ 30.62% Fe, 1.75% Mn and 0.21% S**, as shown in Table 2. Also included in the ore reserve estimate is ca. 2.0 Mt of tailings @ 22.5% Fe, 2.50% Mn and 0.19% S. The tailings included in the ore reserve estimate are based on tailings historically placed as backfill in a number of the stopes in the Konstäng and Kruthus orebodies, in the south of the Dannemora Mine.

Table 2: Probable Ore Reserves reported for Dannemora Mine (19th April 2024)

All Orebodies	Diluted tonnes (kt)	Diluted Fe-grade (wt%)	Mn-grade (wt%)	S-grade (wt%)
Total	30,949,000	30.62	1.75	0.21

The estimate has been compiled under the supervision of Mr. John Walker (P.Eng.) SLR Consulting UK Ltd, who is a Fellow of the Geological Society (FGS), Fellow of the Institute of Materials, Minerals and Mining (FIMMM), and Fellow of the Institute of Quarrying (FIQ), and a Competent Person (CP) qualified to report on ore reserves, based on his training and experience in mining and ore reserve estimation of iron ore, base and precious metals.

[16] As defined under JORC, an 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

11.0 Mining

As part of the proposed recommencement of mining activities at the Dannemora Mine, a comprehensive development and mining plan has been developed as part of this FS.

Before the commencement of any mining, the mine will need to be dewatered. The average inflow of water into the mine during operation is estimated to be ca. 864 m^3/ day. Dewatering will be followed by the excavation of caverns for the underground crusher and associated facilities, the raise-boring of one ore pass from the main level (-460 m), and the commissioning of the existing Central Shaft hoisting system. Initial capital development undertaken by contractors between project months 7 and 20 focuses on this haulage and crusher related infrastructure development.

The current mining plan has been developed based on work carried out for the PFS and FS. The plan covers the development of ramps and drifting in ore, in addition to the need for investment in the form of shafts and drifts in waste to provide for necessary ventilation.

To reach an average production rate of ca. 3.2 Mt/yr in a cost efficient and environmentally acceptable manner, revisions to the ore/waste transport system underground and on surface have been undertaken. These include the service ramps to the underground crusher and hoisting area as well as to open stopes for dumping waste. Four previously worked out stopes reached via boreholes from the surface will be used for backfilling via pipes from the plant.

During the first year of mining, development of capital waste drifts will be prioritised. GRANGEX development commences in month 20 of the project and prioritises access to ore in the northern and Svea orebodies. Ore development completed prior to hoisting commencing in month 29 will be stockpiled, ramps developed to open up new ore drives, and production areas pre-drilled where possible. As a result, the production of iron ore during Year 1 is scheduled at ca. 2.6 Mt before ramping up to ca. 3.2 Mt in Calendar Year 2.

Additional underground development will comprise access development, and sublevel open stoping (SLOS) production drives in preparation for the recommencement of mine production. Development waste generated during this time will be tipped into old stopes mostly in the northern part of the mine.

The means of transport underground will differ from previous when production recommences. Lorries and loaders operating on HVO[17] will be used to transport ore to the underground crusher at -460 m level. From the underground crusher, ore will be hoisted to the surface via the Central Shaft hoisting system by skip.

There are ore zones in both the Northern and Southern areas of the mine which are partially developed, and can be readily accessed following the recommencement of mining to achieve an average target production rate of ca. 3.2 Mt/yr. As some stopes are already opened, the production in these areas can begin immediately after the dewatering of the mine is completed.

To minimise environmental impact and provide support in mined out areas, all future tailings produced will be backfilled in previously worked out stopes underground.

In general, the strength of the rock mass is good, with UCS[18] values in some areas around 160 MPa, and RQDs[19] of typically between 70 to 100. This will enable the use of a combination of 50 mm fibre-reinforced shotcrete or wire mesh in the back, and systematic bolting at 1.5 m centres; with 2.4 m long steel bolts. In areas with very good rock conditions, systematic bolting will not be necessary, and support will be by a combination of wire mesh and selective spot bolting. Using wire mesh instead of shotcrete will make it possible to proceed with drifting

[17] Hydrotreated vegetable oil

[18] UCS = Uniaxial Compressive Strength

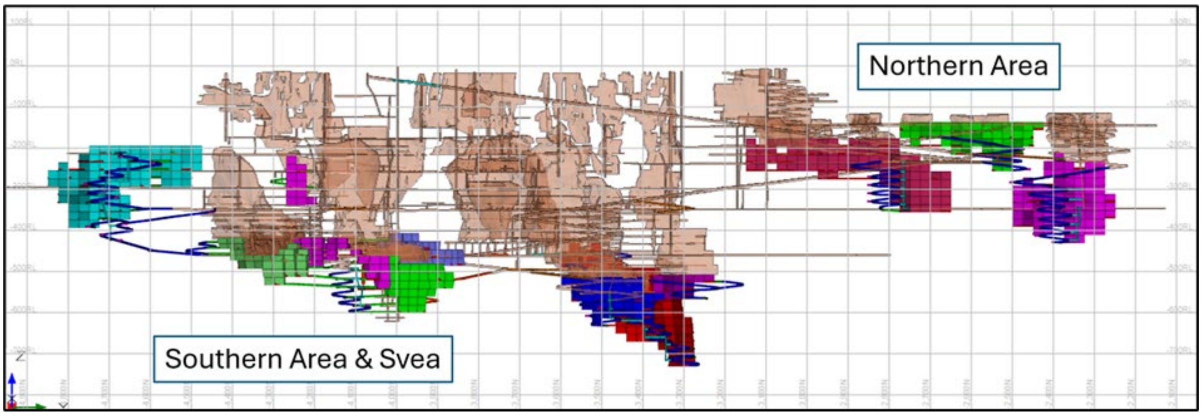
[19] RQD = Rock Quality Designation

immediately after installing the mesh. This process is more time efficient and is estimated to save up to three hours per round. In areas close to larger faults / fracture zones, it will be sufficient to install a combination of rock bolts and shotcrete.

The historic ventilation system comprised four ventilation shafts, and two declines with a capacity of 260 m^3/s. For future planned operations with equipment using HVO a capacity of calculated 352 m^3/s is necessary. A control system will help to decrease the costs for mine ventilation by only sending air to the areas where it is needed, rather than operating fans continuously.

Final mine design is seen below in Figure 6.

Figure 6: Longsection view of Dannemora Mine



11.1 Northern Area - Production Ramp Up

Existing development will allow access to ca. 800,000 t of inventory ore available for start-up production in the first 12 months after hoisting commences in the Northern Area of the mine (Figure 6).

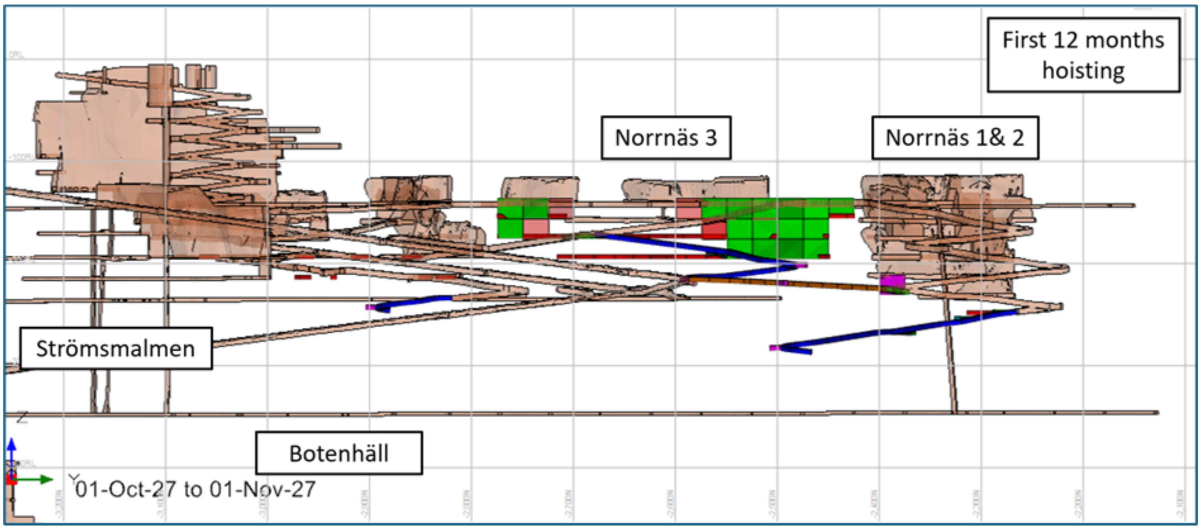
Between months 13 and 30 of the project, Norrnäs 1 & 2 orebodies will require ramp development from level -249 m to sublevels -250 m and -270 m, in 346 m of waste. Each ramp will be driven past each sublevel drift by at least 15 m, so as not to disturb the development of the production drift on the sublevel when the ramp is continued downwards to the next sublevel. This will also benefit the stability of the entrance to the stopes from the production drift. Associated level access and stockpile development will also be completed.

The ore drive on sublevel -160 m must be extended by ca. 210 m, which is scheduled in the six months prior to hoisting commencing. Approximately 380,000 t of ore is scheduled from sublevel -160 m during the first 12 months after hoisting commences, with levels -175 m and -195 m also coming online.

Sublevels at -215 m and -235 m in Botenhäll require additional development since the volume of potential recoverable ore has increased in Botenhäll and Strömsmalmen due to recent sampling of historical core. The two orebodies can now be connected, allowing Strömsmalmen to be developed and mined from Botenhäll. Sublevel -196 m which is already developed needs further development and levels -215 m to -355 m require both capital and operating development before production can commence in this area. Ore development in Strömsmalmen is scheduled during the project phase to provide ore for the crusher commissioning phase. Consistent production from both Botenhäll and Strömsmalmen is scheduled from the third year of operations.

Figure 7 below shows development and production scheduled in the northern area during the 12 months after hoisting commences.

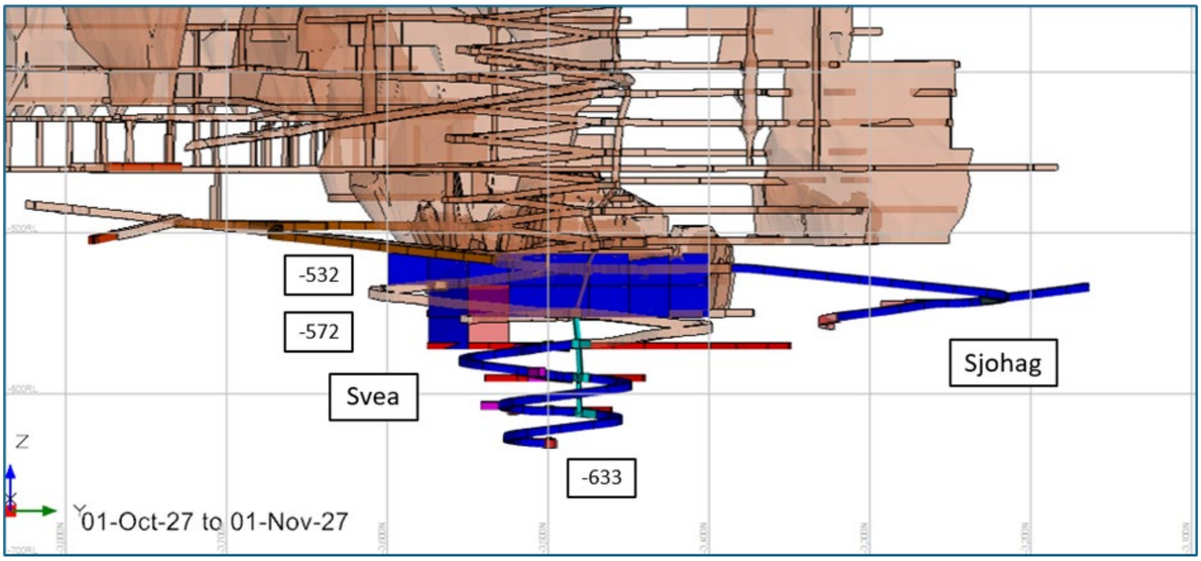
Figure 7: Northern Area Production and Development in first 12 Months after Hoisting Commences



11.2 Southern Area and Svea - Production Ramp Up

The mining at Svea level -554 m can be started as soon as the drifts have been inspected and any remediation work completed. A ramp down to the next sublevel will be prioritised in order to develop and maintain a reasonable rate of production. Ramp development to level -633 m in Svea, and access to Sjohag via a secondary ramp are prioritised in the 12 months after hoisting. Over 900,000 t of ore are scheduled during this period with production commencing from level -532 m once hoisting commences (Figure 8).

Figure 8: Svea and Sjohag Orebodies - Section looking West

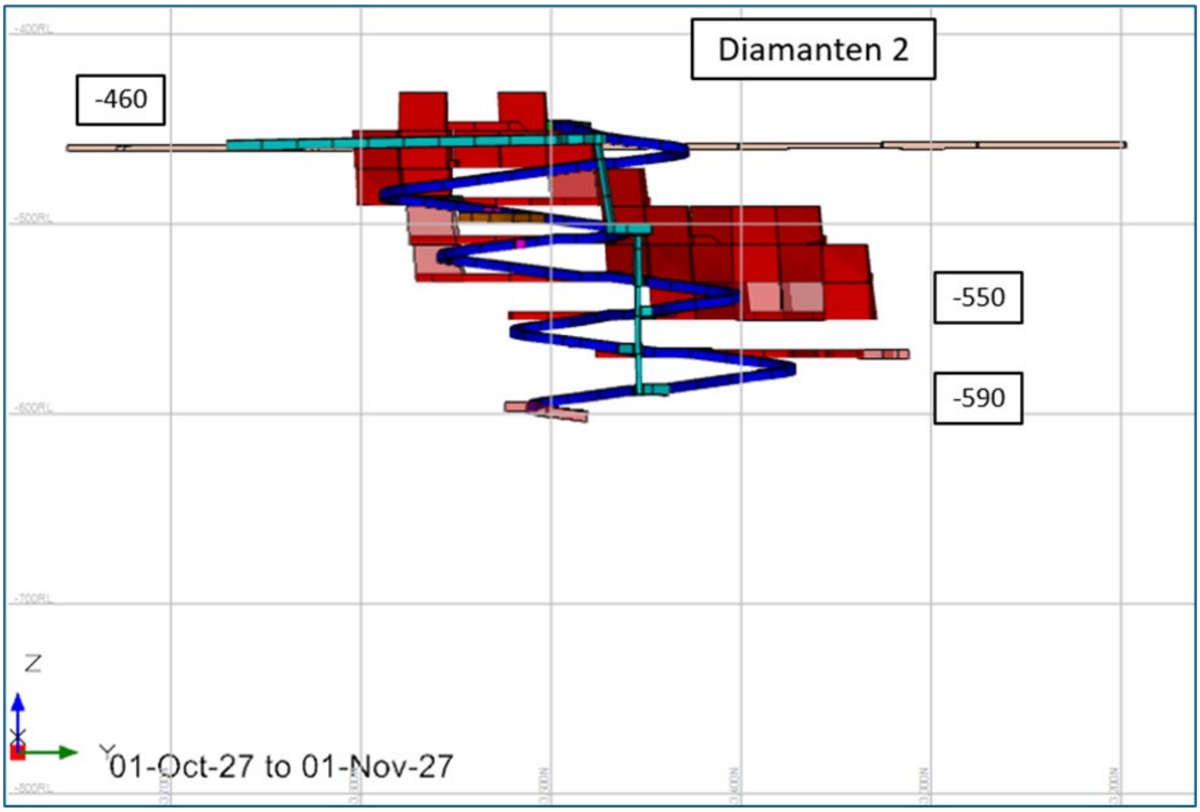


Since the orebodies of Svea, Konstäng and Kruthus narrow with depth, it will be important to start the development of a H-ramp towards Diamanten 2 (D2) as soon as the dewatering programme permits. This will be done in connection with the development of a cross-ramp (directly opposite the portal to the H-ramp towards D2), as well as the development of a ramp down towards KH sublevel - 495 m, and the development of drifts to KH sublevel -495 m and KÄ sublevel -495 m. This will provide the required production on at least four fronts. In order to ventilate D2 correctly, ventilation raises next to the orebody will be developed at an early stage.

The exploration drifts from the H-ramp D2 need to be developed in connection with the development of the H-ramp. If the exploration drifts are postponed, there will be disruption to the production of ore from D2 and to the installation of infrastructure in the H-ramp (electricity, water etc.). It will be advantageous to start development of the drift to D2 as soon as the dewatering permits (i.e., pumping of water from Svea). This will eliminate disturbance to the intersection of D2 crosscut when production starts in Svea. Waste rock produced can be transported to and dumped in Norrnäs 1&2 stopes, in the North.

Once Diamanten 2 is reached at level -500 m, ramp development will continue up to -460 m to create a ventilation circuit, and down to level -590 m. Stoping commences in D2 as soon as practicable in the first year after hoisting commences (Figure 9).

Figure 9: Diamanten 2 Orebody during first 12 Months of Production



It is projected that the following mining equipment will be required for the recommencement of mining activities at Dannemora: 3 drilling rigs for drifting, 3 longhole rigs, 6 loaders, 9 lorries, 2 bolters, 2 scalers and 2 blasting support vehicles, plus ancillary support vehicles.

The Dannemora mine will use equipment that use electricity or HVO . This will be important in reaching Dannemora's climate goals and reducing the mine's energy costs; in particular the costs for ventilation.

11.3 Rock Mechanics - Geotechnical

Geotechnical analyses in support of mining the Dannemora orebodies using available site characterisation data was undertaken as part of this study. Two campaigns of geotechnical data capture have been undertaken. The first of which in 2021-22 was the basis for the empirical and numerical modelling. In 2023 further data was collected and used to confirm the previous analyses, update the ground support designs, and produce a geotechnical block model.

11.3.1 Geotechnical Data and Historical Stope Performance

Core was logged for rock mass and sampled on site at Dannemora, as well as at Malå, northern Sweden by SLR. Underground mapping collected further rock mass data as well as structural (joint set) data. Rock mechanical testing was completed at GeoLabs Ltd UK, and included uniaxial compressive strength, triaxial strength, tensile strength, and shear strength tests. The lithology model was built using the Leapfrog modelling package by GeoVista AB (GeoVista). A structural model based on RQD data was produced by SLR. The ground data was used as inputs into the geological block model to create a geotechnical block model.

In situ stress measurements with LVDT- cell (Linear Variable Differential Transformer) were conducted by a third party SMCOY (Stress Measurement Company Oy, Finland, contracted by DIAB) and from the main ramp which accesses the central orebodies, near Strömsmalmen. Stope surveys were undertaken by a third party (contracted by DIAB); AMKVO AB (“AMKVO"). A remotely operated drone was used to survey the following stopes; Konstäng, Norrnäs 1&2, and Botenhäll.

An exercise has been carried out in order to assess the historic stope performance. Several cross-sections throughout each of the existing open stopes have been analysed. Whilst the geometries for these stopes are large in comparison to other mines, they have remained stable after many years of mining, though a localised area in the south of Konstäng has suffered minor instabilities (attributed to the nearby infrastructure drive being too close to the stope walls, forming a very thin pillar, rather than an inherent stope wall instability). The results of the surveys to assess stope performance showed that the Botenhäll and Norrnäs 1&2 surveys show a good correlation to the historical orebody wireframes, confirming their long-term stable performance. The Konstäng survey does not correlate with the historical orebody wireframe, whereby the hangingwall is in a higher position than initially anticipated. The stope is this volume because of mining, as opposed to some progressive failure since production ceased. It is likely that this void has been of that size since 1982. Investigations of mine archives produced an SSAB (Swedish Steel) journal from October 1982; it describes “mining of a Konstäng pillar (ore) down to level -350 m”. They “blasted 37 tons of explosives, and 265,000 tons of ore was produced”. This “pillar” was part of the Upper Konstäng orebody. “Piano wire” monitoring indicates no movement for the regions covered by the wires (Kruthus, Diamanten and Svea). A 2015 seismic study suggest that the stopes at Dannemora experienced some localised spalling, but no major failures.

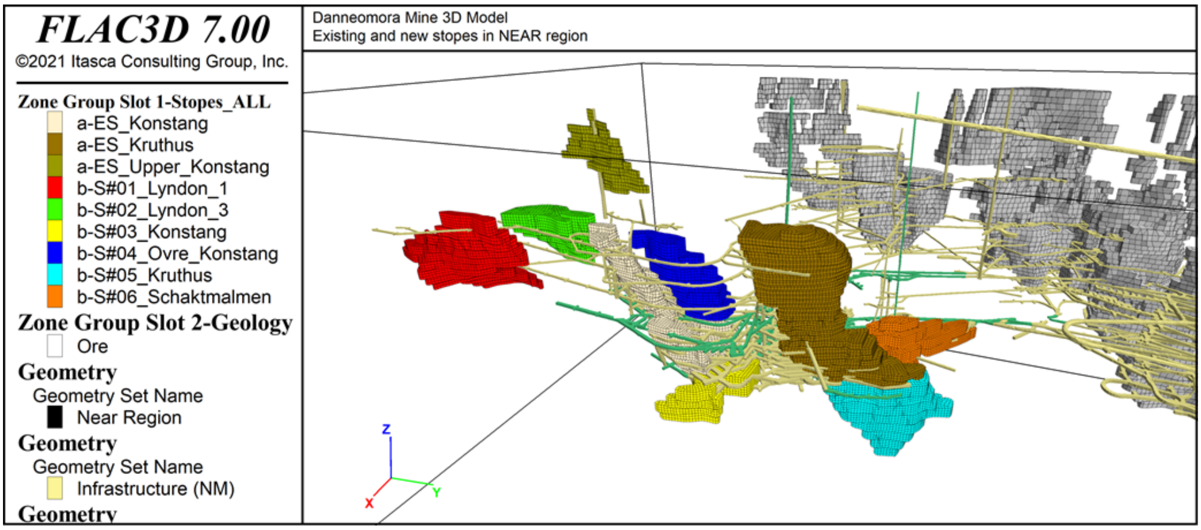
11.3.2 Stability Analyses and Support Design

The following conclusions are drawn from the stability analyses and support design:

- Whilst stopes plot in the “unstable” region of the empirical stope stability charts, the stope surveys, seismic data, and monitoring data have shown that the historical stopes (used for the back-calculation) are stable. Planned stope geometries in the current mine plan also plot in the “unstable” region of the empirical charts. The planned stopes are generally smaller (HRs) and have commensurate or higher Stability Numbers (N) than the historically stable stopes;
- Whilst efforts have been made to improve the rock mass values attributed to each orebody by updating the historical logging data, it is considered that they are still underestimated.
- The stope surveys indicate that a portion of the Upper Konstäng orebody has already been partially mined. Whilst the FLAC3D model simulated mining the entirety of the orebody it did show potential issues in the pillars adjacent to Upper Konstäng. A portion of the orebody remains and can be potentially extracted but should be done so later in the mine life and after further data capture and analyses.

- The empirical analyses indicated that the Diamanten 2 (45°), Schaktmalmen, Svea and Lyndon orebodies are the most likely of the orebodies to suffer instabilities due to their increased depth and lower dipping hangingwalls. Botenhäll and Sjöhag orebody hangingwalls are deemed, by empirical estimates, to have materially greater than the planned dilution of 10%. However, the most recent data indicates a more favourable stress gradient and higher UCS strengths than those used in the empirical calculations; whilst not fully mitigating these risks, indicate that issues may not be as problematic. Notwithstanding this, increasing the angle of stope walls to (near) vertical (if possible) is likely to be the most advantageous practical solution to increasing stope stability;
- The generalised fault factor value applied to the stope stability analyses is generally conservative, bar at Norrnäs 3 (level 175), and Konstäng (440 and 500), indicating a probable need for increased stope support and/or dilution beyond the anticipated average for those levels.
- Whilst the rock intact strengths and stresses are updated, the results from the FLAC3D (Fast Lagrangian Analysis of Continua in 3 Dimensions) (Figure 10) numerical modelling are still applicable, and the results of which show that:

Figure 10: Focus area orebodies within the FLAC3D model (grey = historically open stopes, ES = existing stopes, S# = planned stopes, yellow/beige = current infrastructure, green/teal = planned infrastructure)



  - The planned stopes are generally stable, with indications of plasticity between 2 - 18 m into the stope walls (though see exceptions below).
  - Historic Konstäng, Kruthus, and Schaktmalmen progressively coalesce as mining goes through each stage. Schaktmalmen (and the footwall of Kruthus) could experience adverse stress due to their increased depth when compared with the other planned Dannemora stopes. Notwithstanding this, Schaktmalmen is planned to be the final stope mined at Dannemora, and thus the impact of (any) instability will be minimal upon productivity.
  - The shaft and crusher excavations experience little to no plasticity from mining of nearby stopes according to the numerical model.
  - Numerical modelling shows that plasticity pervades into the Kruthus orebody drives and that there are low Strength-Stress ratios where the ore drives intersect with the orebody.
  - Whilst mining does not affect the planned lunchroom according to the numerical model, the excavated Schaktmalmen orebody plasticity contours interact with the

workshop areas, which suggests potential stability issues between the Schaktmalmen stopes and the workshops. Notwithstanding this, Schaktmalmen is planned to be the final stope mined at Dannemora, and thus the impact of (any) instability will be minimal upon productivity.

- Stopes are planned to be backfilled to secure long-term stability.
- The planned ore pass has an empirically estimated longevity of between 5.6Mt to 8.4Mt (before having to rehabilitate). It is noted that the empirical approaches are for weaker rock masses than Dannemora, so there is argument that the life span could be longer.
- The Botenhäll pillar, with current planned width of 35 m average might experience instability issues, so one of the orebodies forming the pillar should be mined and back filled before mining of the neighbouring orebody commences, or the pillar widths should be increased >40 m, or reinforcement cable bolts should be installed at each level.
- Ore drive backs are planned to be supported as standard.
- Ground support has been split into 5 main classes.
- Specific ground support is provided for stope brows, large excavations, and intersections; including cable bolts and straps.

11.4 Water Management

The general requirements of the Swedish Environmental Code (SFS 1998:808) in terms of the management of water have been used as the principal design guidelines for the Project. This ensures that the use of water for mining activities is controlled.

Consideration has also been given to the Swedish Agency for Marine and Water Management Authority's regulations (HVMFS 2017:20) and the Swedish Food Agency's regulations (SLVFS 2001:30) on drinking water during the design process.

The mine's water management system has been designed around the needs of the operation, the water balance and the potential impact on the environment. Water management can be divided into three different stages: (i) baseline, (ii) dewatering, and (iii) operation (dewatered state).

When the mining operation has ceased and closure has commenced, the mine will slowly refill with water. The conditions will essentially be the same as the conditions prior to the commencement of mining operations. There will be no active water management associated with the closure period.

The water management plan was presented to the Land and Environmental Court as part of the environmental permit application. The plan was accepted with conditions on pump flow, with a maximum 750 m^3/hr as a monthly average. In addition, water has to be treated before it is released to the recipient. The water released can contain a maximum of 10 µg/l As and 50 µg/l Zn as a monthly average. Suspended solids can amount to a maximum of 15 mg/l (annual average) and the pH cannot go below 6.5 as a monthly average.

11.4.1 Current Mine Water

At the time of writing, the Dannemora Mine is filled with water up to a level of ca. -326 m. To be able to install the crusher underground at the -460 m level, it will be necessary to pump out the water as quickly as possible. The water level in the mine rises by about one metre per month, on average.

11.4.2 System for Dewatering

There are various options for draining the mine of water. The dewatering can be done via the existing ramp or directly via the Central Shaft (or by a combination of both, to allow flexibility and increase capacity).

To enable the quickest possible start to production at Dannemora the shaft option has been chosen. A big advantage with this option is that pump capacity is already close to 200 l/s instead of 100 l/s for the ramp option. The system chosen for dewatering is easy to install and will save time.

The plan is to install a system which will be dropped into the eastern skip shaft associated with the Central Shaft.

As mentioned above, the first step is to reach the -460 m level where one of the mine's main pumping stations is located. Another pumping station is located on level -350 m next to the Central Shaft. As soon as the -350 m level is available the main pumps on this level will be installed to increase the pump capacity from 160l/s to 200l/s. The pumped water will be treated in a water treatment plant on surface next to Gruvsjön (the Mine Lake).

11.4.3 Mine Water Treatment Plant

All water that leaves the mine operational area, both during the dewatering and the operational phases, will be sent to the mine water treatment plant for treatment. After dewatering is completed, pumping will be carried out to maintain the mine's dewatered state during operations.

When dewatering the mine the water treatment system will consist of a mobile water treatment plant placed on a gravel bed near the mine water ponds located near Gruvsjön Lake. The total capacity will be ca. 800 m^3/hr.

The water treatment system proposed is a conventional water treatment technology with coagulation and floatation[20]. Tests have shown that this method works to lower the chemical constituents to meet the conditions in the environmental permit. The conditions in the permit requires the levels of arsenic and zinc to be kept below 10 µg/l As and 50 µg/l Zn.

The water treatment facility will be scaled down to correspond to the capacity required during operation, i.e. estimated to be a maximum of between 40 – 50 m^3/hr. This estimated volume has been calculated based on the water balance for the mine operation consisting of groundwater inflow into the mine, 'bleeding' from backfill material and water needed for processing. During normal operation all water from the mine will be used in the process, hence no water will be sent for treatment and released to the recipient.

11.4.4 Dewatering

The planned mine dewatering system comprises a submersible pump in the main shaft and pump stations at -350 m and -460 m levels. The submersible pump will be installed in the Central Shaft at -530 m, from where the water will be pumped to the mine water settlement pond/ponds on surface. The ponds have a capacity of ca. 1,800 m^3.

When the water level reaches the pumpstations on -350 m and -460 m levels those stations will be used to increase the pumping capacity. Figure 11 presents the proposed water flowsheet during dewatering of the mine.

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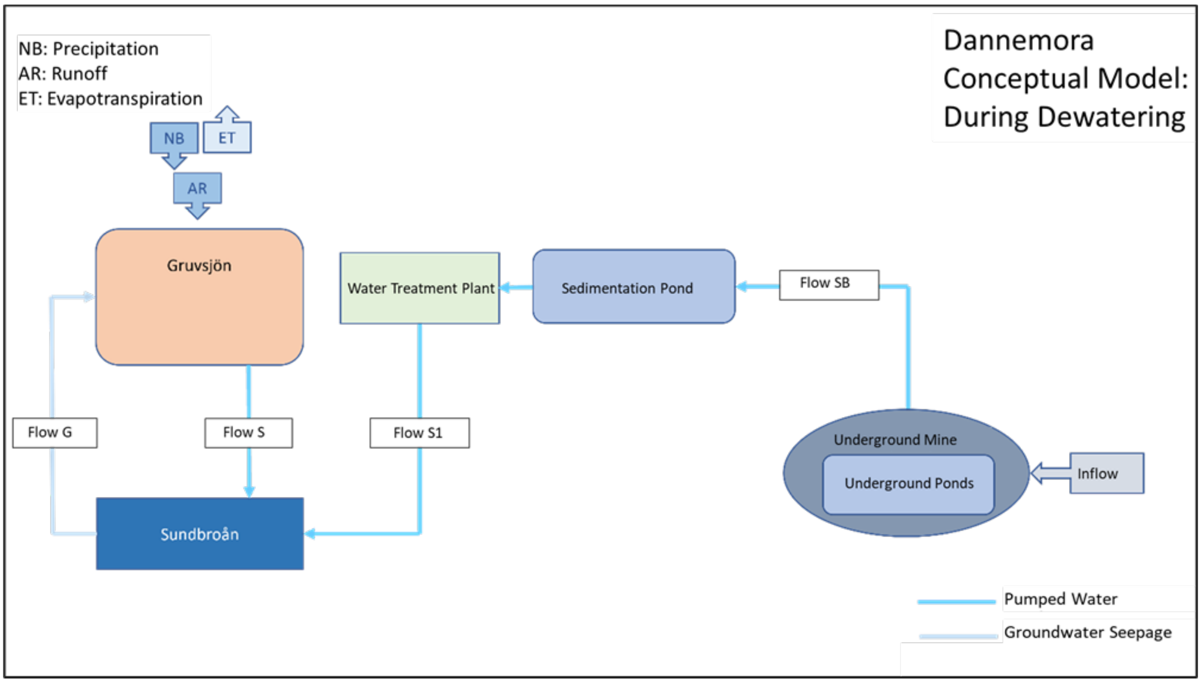
[20] The treatment proposed in the permit application used a different method, called Selmext. However, the treatment requirements are technic neutral. The conditions in the court decision pertains to levels of arsenic, zinc, amount of suspended materials and pH.

Figure 11: Proposed water flowsheet during dewatering (Geosyntec Consulting, June 2022)



When the water reaches ground level, it will be pumped to a concrete-cast sedimentation pond (Flow SB) before being sent to the mine water treatment plant. The treatment plant consists of several steps including precipitation of heavy metals, pH adjustment, flotation and sludge collection and lastly a disc filter. Samples are taken of the treated water to ensure the treatment efficiency and that no water exceeding the limits in the permit conditions will reach the recipient, Sundbroån (Flow S1). At the discharge point in Sundbroån, the speed of the pumped water will be reduced to minimize resuspension.

11.4.5 Water Management During the Operational Phase

During the operational phase of the mine, water will be pumped from the base of the Central Shaft at the -620 m level, and from the -466 m and -350 m levels. Areas of the mine that are located below these levels will be drained by temporary submersible pumps.

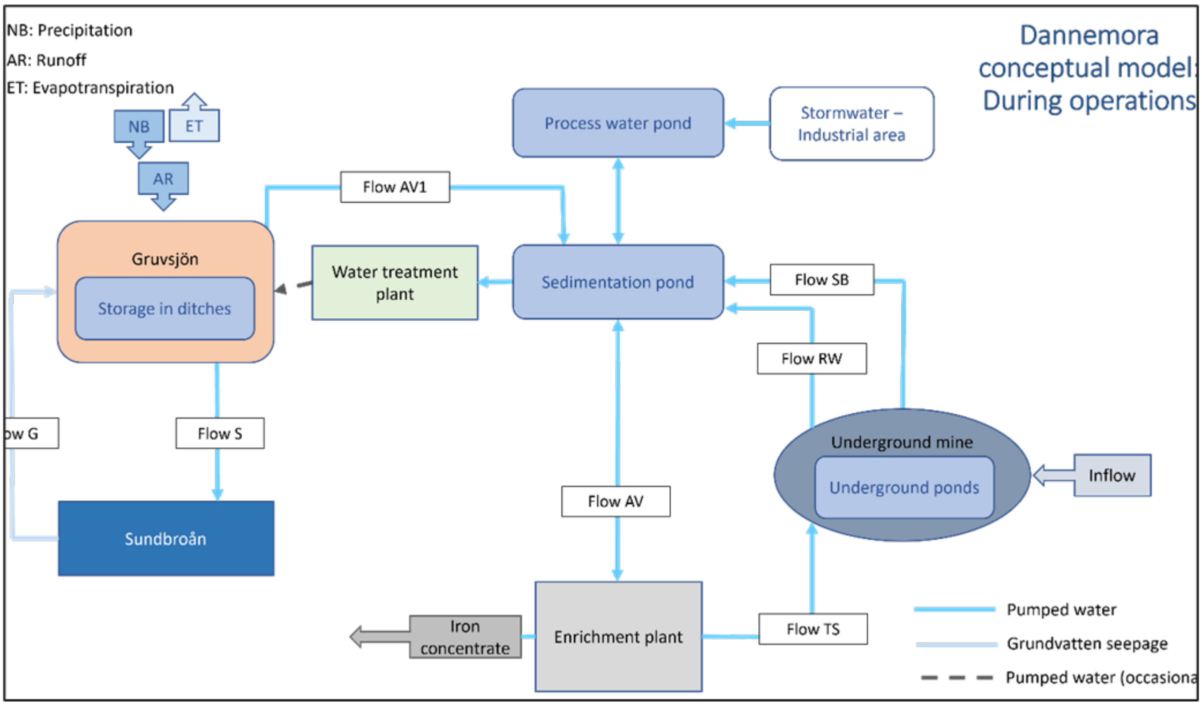
All water in the mine will be sent to sedimentation ponds before being pumped above ground for use in the process plant or for storage, and possibly discharge when all ponds and ditches in Gruvsjön are filled. The water will also be used for drilling underground and dust control.

During the operational phase, the water management system underground will include inflow groundwater to the mine (ca. 37 m^3/hr) and recirculation of water from tailings deposition in mined out stopes underground (ca. 22 m^3/h). The water will be pumped up from the mine to the sedimentation pond (Flow SB and Flow RW) for further distribution to the concentrator or storage. Above ground stormwater (ca. 2 m^3/ hr annual average) will be diverted via wells and closed pipes to the process water pond and the sedimentation pond.

Water not supplied from underground or stormwater will be taken from ditches in Gruvsjön via a new pumping station (Flow AV1) and from planned water reservoirs. Gruvsjön is connected with Sundbroån via inflow from Sundbroån through the wall separating Sundbroån and Gruvsjön. Withdrawal from Gruvsjön will be limited to a maximum of 4% of the monthly average flow in Sundbroån. In high-flow situations, i.e. when the flow corresponding to 4% of Sundbroån’s monthly average water flow is greater than the withdrawal need (flow AV1), the surplus will be used to fill the reservoirs, i.e. ditches in Gruvsjön.

The proposed flowsheet for water management during operations is shown in Figure 12.

Figure 12: Proposed flowsheet for water management during operations



During normal operations, water will rarely be discharged offsite, however, occasionally excess water will be diverted to Gruvsjön and further to Sundbroån to keep water levels in the channel in Gruvsjön at a level in compliance with given permits. All water leaving the site will be sent to the water treatment plant before being released to Gruvsjön.

12.0 Ore Processing

As part of the Scoping Study, Pre-Feasibility Study as well as the Feasibility Study (FS), a new iron ore process was developed for the Dannemora Mine and refined further as part of the this updated FS. After conventional crushing in two stages, the <45 mm product shall be fed for comminution to a High-Pressure Grinding Roll ("HPGR"). The mine is classified as "dry", meaning that there is very little water entering the orebody. This unique condition (for a Swedish mine) makes the mined ores particularly amenable for both HPGR comminution to a <6.3 mm size fraction, and subsequent dry separation by a magnetic drum separator of the medium-intensity class ("MIMS").

By magnetic separation of the <6.3 mm crushed product approximately one quarter or more (31.9% on average) of the mined material can be rejected with minimal magnetite loss. Therefore, only about 68.1% on average of the ore will need further staged grinding for liberation minerals to enable separation to a high-grade concentrate. The remaining coarse product will be returned to mined out areas underground as backfill or may be used for industrial purposes if testing confirms its usefulness. By preconcentrating the beneficiation plant feed, there will be a substantial saving related to grinding energy and a significant saving of water for downstream processing.

A typical wet ball mill circuit will be used to grind the plant feed to a suitable size for an effective intermediate magnetite upgrade using common rougher wet low-intensity magnetic separators ("WLIMS"). Included in the rougher processing is a "flash" (coarse particle) flotation section to facilitate removal of sulphur-bearing minerals. The rougher concentrate will then be ground in highly efficient fine grinding equipment to produce a final mineral liberation size. Finisher WLIMS followed by another final flotation section and dewatering WLIMS shall produce a final magnetic concentrate, to meet strict high-quality concentrate requirements. The flotation process has been developed for many similar situations. A non-chemical concentrate upgrading method has also been evaluated. This method, introduced in the last few years, is used instead of the common reverse silica flotation process to upgrade iron ore concentrates further.

The ores identified at Dannemora have a wide range of characteristics. Therefore, the process is designed to control and subsequently reduce the variability by rejecting unwanted minerals in efficient stages before the final beneficiation sequence and hence enable a consistently high-grade final concentrate, with a target of 68% Fe and a maximum of 0.05% S. The process is designed to remove substantial and varying amounts of interfering materials (deleterious elements) before the plant feed reaches the final stages. Anticipated ore variations will be essentially eliminated in up-front stages (MIMS, rougher WLIMS, flash flotation and a 2nd rougher WLIMS).

Several modifications to the process flowsheet were developed for the FS. These enhanced efficiencies in the pre-concentration stage and substantially reduced the sulphur content for difficult ore types. Performance projections based on testwork completed for the Scoping Study, PFS and FS initial testing indicates that the modifications made to the process flowsheet will prove positive. An assay of the sulphur level at 0.03% achieved with one of the samples has been verified by testwork received from SGS.

Considering that the composite sample for the Scoping Study is likely to be more representative for the near future operation after the mine restart and the bulk sample less representative (due to limitations related to sampling access), the projections for the process plant performance should be weighted towards the data obtained in the Scoping Study. Nevertheless, the performance achieved with the first bulk sample meets the desired target. Sufficient concentrate sample testing has been completed, and additional tailing sample testing for process guarantees is now available.

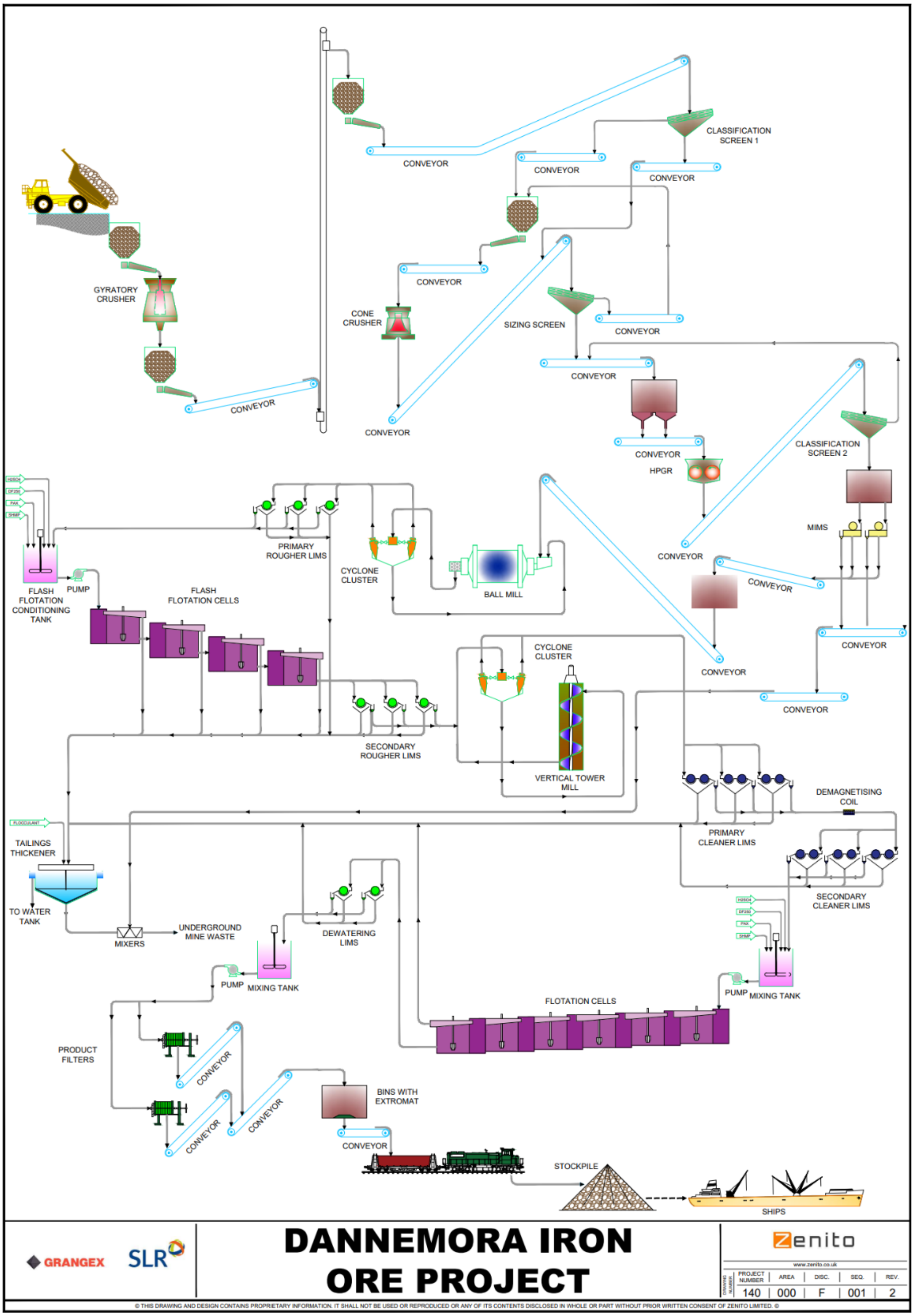
Further upgrading of the concentrate grade by either reverse silica flotation or by a new electromagnetic method should be considered. The latter method requires less water and would be preferable to reduce any potential complications with chemicals in recirculated water. The best time for further evaluation of this option is after ramp-up of the operation. A large size unit should be operated on the concentrate stream bleed to fully study the performance.

Detailed mineralogical study of drill core representing the projected future orebodies is recommended to primarily determine the occurrence of monoclinic pyrrhotite.

The design criteria for the initial flowsheet targeted an average mass yield of 36.61% $Fe_{(tot)}$ and a $Fe_{(tot)}$ recovery of 76.88% to produce ca. 1.14 Mt/yr at a grade of ca. 68.15% Fe when in full production. This is based on a 400 t/hr feed to tertiary crushing at a grade of 32.1% Fe. The proposed flowsheet for the Project is shown in Figure 13.

For an increase of the average mining rate by 6.7 % and the reduced average feed Fe(tot) grade at 30.6 %, revised calculations show 33.92 % mass yield and a Fe(tot) recovery of 74.8 % without changing the planned unit operations equipment. Estimated average production at a grade of Fe(tot) 68.1 % is 1.085 Mt/yr.

Figure 13: FS processing flowsheet including flash flotation in rougher circuit



13.0 Infrastructure

The current mine site has been operational for more than 100 years. There are two main ramps accessing the underground workings, plus a Central Shaft to a depth of 620 m. Figure 14 presents an aerial photograph of the mine site, with the existing and proposed new infrastructure shown.

Two powerlines, each with a capacity of 30 MW (total 60 MW) are available to the site from the main national power supply system. The mine’s estimated power requirement is a maximum of 25 MW.

To secure the necessary supply of power required for the operation of the mine, DIAB has to come to an agreement with the local distributor, in this case the state owned power supplier, Vattenfall. Such an agreement will be entered into during the development phase of the project. An agreement for the power required during the construction phase of the project, 7 MW, is in place and is valid for as long as is required or until DIAB want to increase it for full production.

In addition to the agreement with Vattenfall to secure the power transmission required to operate the mine, an additional agreement regarding the supply of power has to be entered into with a power supplier. This power supply agreement can be provided by a number of power producers in Sweden on a fixed price basis or a variable price basis.

The price per kWh for the DFS report has been fixed at SEK 0.75. This is based on long-term price assumptions presented by Vattenfall during our discussions with them regarding a long-term supply agreement.

Figure 14: Dannemora Mine Site

1	Administration Building	9	Ventilation Exhaust Shaft	17	Main Switchgears	25	Screener Station
2	Staff Building inc. Change Hse	10	Railway Terminal	18	Old Sorting Plant	26	Switchgear
3	Production Office	11	New Process Building	19	Control Room & Offices	27	Silo
4	Mapping & Drill Core Store A	12	Railcar Loading Silo	20	Drillcore Storage B	28	HPGR Building
5	Storage	13	Hoist & Skip Shaft	21	Water Tank	29	Storage for Grinding Media
6	Connection to Main Rail line	14	Existing Sorting Plant	22	Thickener	30	Mechanical Workshop
7	Mechanical Workshop	15	Entrance Industrial Area 1	23	Pipeline Backfill, Phase 1	31	Tailings Pump Room
8	Main Ramp to Mine	16	Entrance Industrial Area 2	24	Conveyor Belt Finished Product	32	Pipeline Backfill, Phase 2

There is road as well as railway access to the Site. National highway 292 runs between Hargshamn in the east and Söderfors in the west, and connects to European highway E4 at Tierp, in the north of Uppland County. The highway maintains a road standard of BK4, which is the highest standard in Sweden allowing a gross tonnage of 74 tonnes. The Site has access to a rail link connecting a pulp and paper mill (Holmen AB) in Hallstavik with the main rail line at Örbyhus. The main rail line provides a link to the Port of Loading for the Project; Oxelösund (south of Stockholm), which offers the possibility of loading bigger ships and therefore increases the Project's competitiveness, especially for far away destinations. All current information and most probable assumptions regarding availability of rail infrastructure indicate that the Port of Oxelösund will be the best alternative due to its better flexibility in terms of cost efficiency in reaching end customers.

Figure 15 and Figure 16 show 3D images of the Process Plant Site.

Figure 15: New Process Building looking west

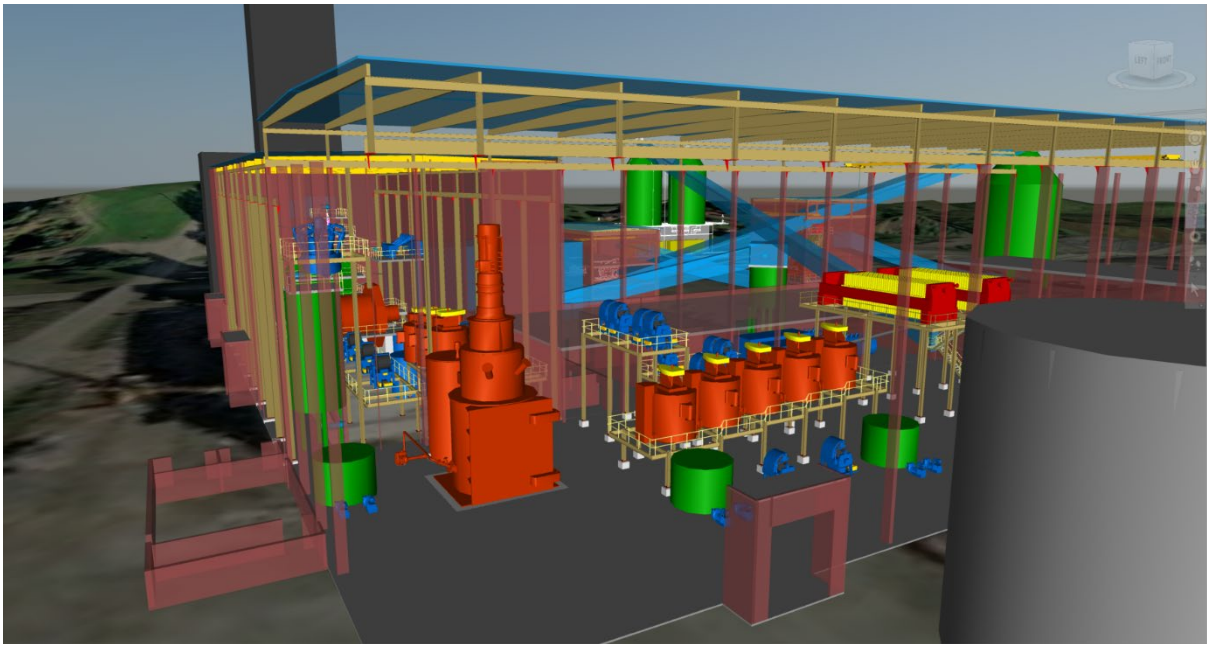
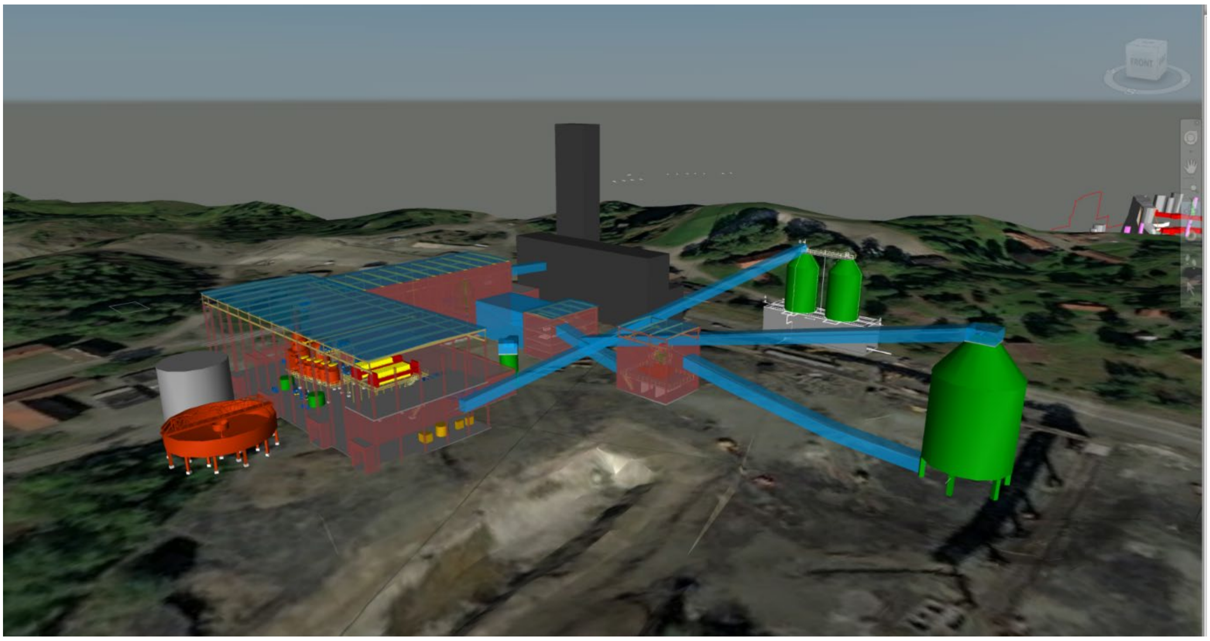


Figure 16: Process Plant Site Layout looking west



14.0 Environmental & Social

The terrain and associated habitats in the vicinity of Dannemora comprise of a rather flat lying topography, with small height differences between lakes, wetlands and wooded areas. Dannemora is located in the catchment areas of Gruvsjön and Dannemorasjön (Lake Dannemora). In and around Dannemora, the drainage conditions are complex. This is due in part to the system of dams and partly to the relatively flat topography, which results in unclear water divides. The nature in the area is affected by former mining, drainage ditches and agriculture. Two lakes, Filmsjön and Dannemorasjön, as well as three ponds are within in the Dannemora area. They are all eutrophic, nutrient-rich waters, with a large element of reeds. During dewatering of the mine, mine water will be pumped to Sunbroån via a water treatment plant which in turn will discharge into Dannemorasjön. Sundbroån and Dannemorasjön have as surface waters legally binding environmental quality standards (EQS) in accordance with the Water Framework Directive (WFD). The EQSs have been designated to be good by 2027. Sundbroån's ecological status has been classified as moderate due to eutrophication caused by the inflow of nutrients. As a consequence of Sundbroån flowing into Dannemorasjön the lake also has a eutrophication problem and is also designated as being moderate. Due to a number of parameters neither Sundbroån nor Dannemorasjön are reaching good chemical status. The dewatering of the mine is not considered to hinder the achievement of an environmental quality standard nor negatively impact the ecological or chemical status of Sundbroån or Dannemorasjön.

The future operations do not affect protected areas such as nature reserves, Natura 2000 areas, or areas of national interest for nature conservation. There are also no such areas in immediate proximity except for a water protection area (Kyrkholmen) ca. 1 km to the south of the mine.

The Dannemora mining project will be within the previous mining area. The only activity outside the area will be pumping water from and water storage in the Gruvsjön canal. A recycling station will be developed north of the industrial area, adjacent to the Strömsmalmsrampen road. The only new buildings will be constructed within the industrial area.

The Dannemora mining area is part of a site of national interest in terms of cultural environmental conservation. It represents a technologically historic and industrially significant landscape of outstanding importance for documenting the history of Swedish iron mining. The company owns and manages several buildings of cultural-historical value and maintains them. There is a good and well-functioning collaboration with the Dannemora Heritage Society, and the company makes many of the buildings available to the association.

To re-open the mine a new environmental permit was required. In 2022 an environmental impact assessment (EIA) was completed. It was preceded by several investigations and by consultation. In the EIA report potential consequences (negative and positive) resulting from the operation on the environment and surrounding communities were identified, and classified by extent and intensity, and mitigation to manage negative impacts. In June 2022 the formal application was submitted to the permitting authority, the Land and Environmental court in Nacka. On 22 June 2023, the Land and Environmental Court approved the EIA that gives Dannemora permission for mining and water activities in accordance with Swedish Environmental Code Chapters 9 and 11. The permit is governed by 16 conditions, pertaining to water related activities, management of vulnerable species, noise, dust, vibrations, chemical use and safety, energy management and a closure plan. It also requires an approved control program. Further, operations must adhere to the permit application unless otherwise specified.

Regarding the social aspects, there will be positive impacts (e.g., job opportunities; requirements for service providers; and transportation). The local community is as a whole positive to the start-up of the mine.

During consultation, the most frequent comments and questions were about water, noise and dust. Some stakeholders reported they had negative experiences from the previous operation regarding dust, noise and vibrations; the Company reported that the operation and its activities will be different because many activities will be underground. All comments were noted and will be considered during the life of mine; communication channels for contacting the Company and grievance mechanisms will be established.

15.0 Operational Considerations

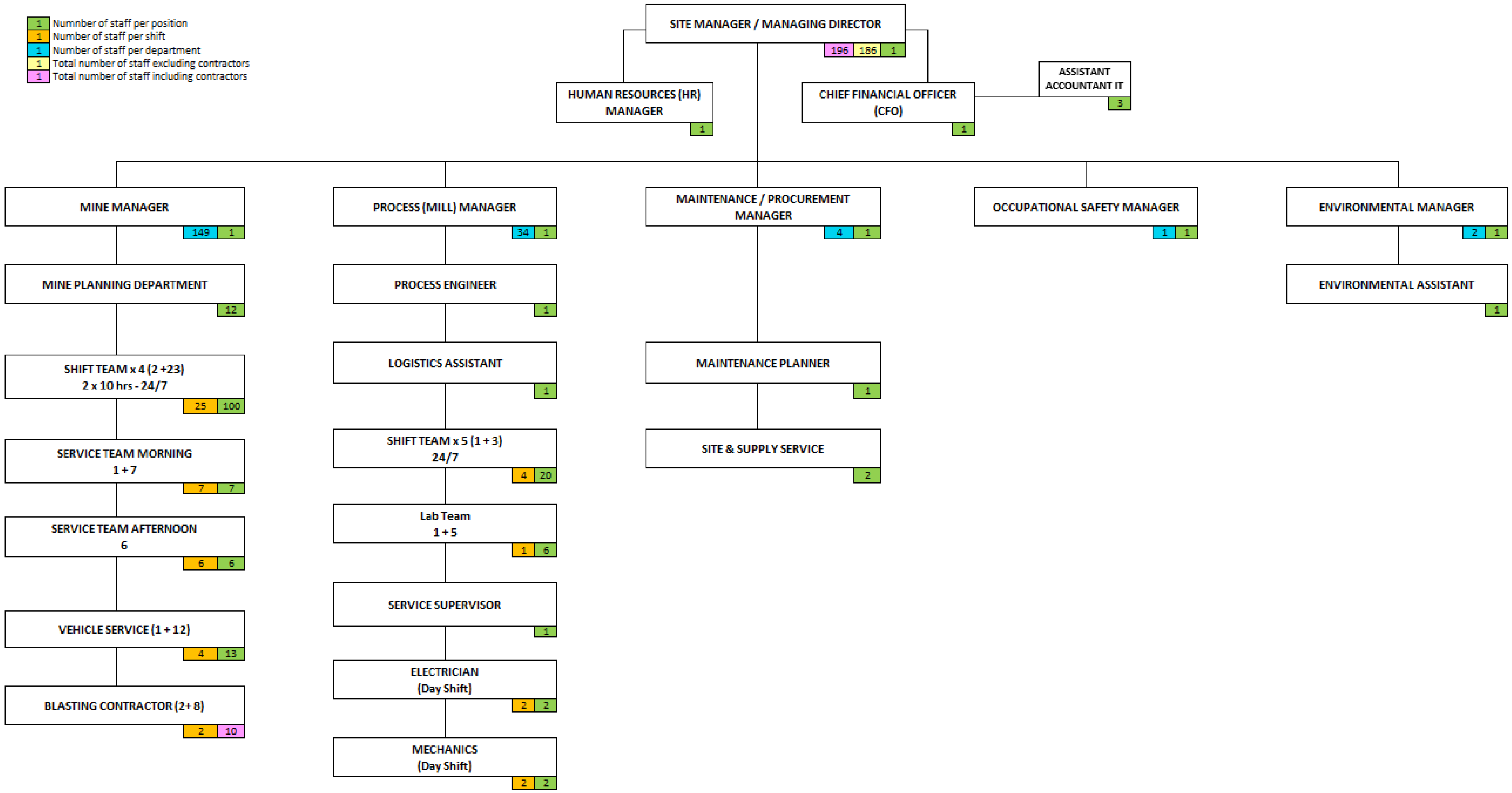
It is DIAB's intention to run an owner operated mine, with all key staff employed by DIAB and all key parts of the operations run by its own staff. There will be a need to work with contractors for special tasks such as blasting, servicing and specialists regarding mining as well as process equipment. The plan is to have the majority of all maintenance carried out by DIAB's own staff at the mine as well as the process plant.

Based on experience from the 2012-2015 operation, the total number of directly employed staff and contractors has been estimated to be about 196 in total, with about 186 when contractors are excluded.

It is proposed that the mining operation will run 7 days a week, with two 10 hour shifts per day, giving a total of 4 shift teams. It is envisaged that the process plant will run 24/7, with 5 shift teams. The plan is to have a "flat" management structure within the organisation, with the DIAB Managing Director reporting to the CEO of Grängesberg Exploration Holding AB, GRANGEX.

A Mine Manager will be responsible for the mining operation, with a Mill Manager being responsible for processing and loading of product to the rail cars, prior to transport to the port. The Management team will consist of the following: Managing Director, Mine Manger, Mill Manager, Human Resource (HR) Manager, Chief Financial Officer (CFO), Maintenance & Procurement Manager, and Occupational Health & Safety Manager, and Environmental Manager. Including support staff for the management team, the total number will be ca. 13 people (Figure 17). The Managing Director will delegate tasks and responsibilities for the different parts of the operations to the relevant managers, in accordance with industry best practices and Health and Safety legislation.

Figure 17: Dannemora Organogram



16.0 Cost Estimation[21]

16.1 CAPEX

Total capital expenditure for the Dannemora Project has been estimated to amount to ca. MUSD 262.4 (ca. MSEK 2755.3) over an 11-year mine life (excluding a 28-month pre-development period) (Table 3). Expenditure is comprised of Initial (growth) and sustaining capital throughout the project life as detailed in the table below. Estimates have been based on quotations and inhouse estimates prepared by DIAB to within an estimated +/-10 - 15% order of accuracy, reviewed and compiled by SLR.

In the financial calculation, leasing has been used to finance a major part of the underground equipment (such as loaders, drill rigs and trucks). Leasing has also been used to finance part of the electrical equipment.

The leasing for the underground equipment has been based on a 15 % downpayment and the balance payable over the lifetime of the equipment and the monthly leasing cost calculated as OPEX.

The leasing of the electrical equipment is based on a proposal received from a major player in electrical power industry in Sweden. About 160 MSEK could be financed this way with repayment calculated over the LOM and calculated as a monthly OPEX.

The USD:SEK rate of exchange used in this report is 10.5.

Table 3: Project Capital Costs

Capital Cost	Cost (MUSD)
Initial	215.1
Sustaining	47.3
Total	**262.4**

A breakdown of Initial (Growth) capital expenditure to key cost areas is provided below in Table 4. This table doesn't include contingency and project management costs.

Table 4: Initial Project Capital Costs - Key Areas

Initial Capital Cost	Cost (MUSD)	% Cost
Civil Works	43.2	25%
Mine Dewatering	6.3	4%
Mine	32.1	18%
Ore Treatment	77.3	44%
Infrastructure	16.0	9%
Total	**174.9**	**100%**

The remaining capital expenditure consists of the items presented in Table 5.

[21] Cost Estimations and Financial Evaluation are based on complying with the Principles of the JORC Code as presented in Table 1 of the Code for those preparing Public Reports on Exploration Results, Mineral Resources and Ore Reserves.

Table 5: Other Project Capital Costs

Other Capital Cost	Cost (MUSD)
Indirect	21.9
Contingency	18.3
Total	**40.2**

16.2 OPEX

For the Dannemora Project, total operating expenditure has been estimated to amount to ca. MUSD 664.7 (ca. MSEK 6,989.9) or USD 21.51/t (ore) or USD 63.3/t (product) over an 11-year mine life (Table 6).

Expenditure is comprised of key areas throughout the project life as detailed in the table below. Unit operating costs per tonne of ore processed are also provided. Estimates have been based on quotations and in-house estimates prepared by DIAB within a within a +/- 10 - 15% order of accuracy, reviewed and compiled by SLR.

Table 6: Project Operating Costs

Operating Cost	LoM Cost (MUSD)	USD/t Product
Mining	285	27.1
Processing	150	14.3
General & Administration	39	3.7
Logistics	145	13.8
Closure	1	0.1
Leasing Related Costs	44.5	4.2
Total	**664.7**	**63.3**

17.0 Financial Evaluation

A cashflow model evaluation has been completed for the Project, analysing capital costs, operating costs and revenue on an annual basis over the full 13-year project life. The project plan comprises a 28-month pre-development period, followed by 11 years of mine production and processing to a saleable magnetite concentrate.

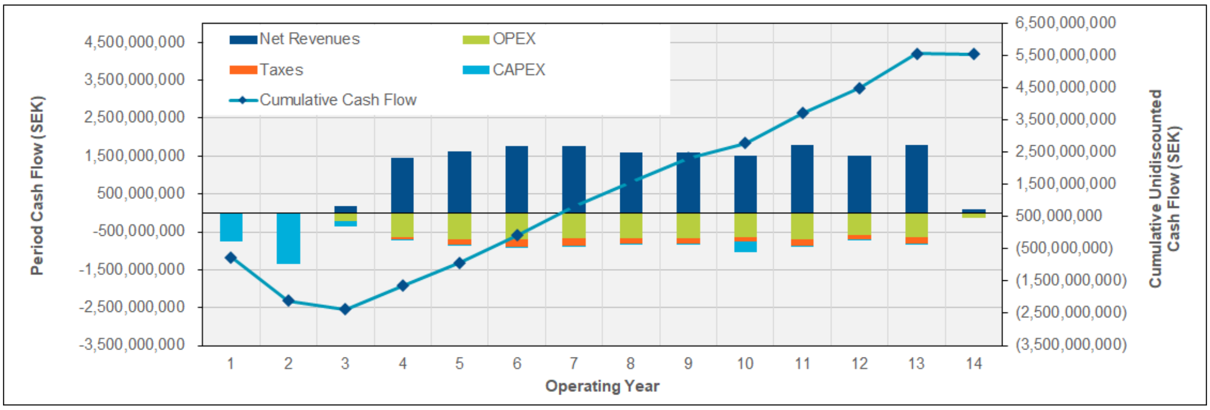
A financial model for the Project has been prepared based on a run-of-mine (ROM) estimate of ca. 30.95 Mt @ 30.62% Fe, 1.75% Mn and 0.21% S, and on life-of-mine (LOM) physical schedules, capital and operating costs, discount rate and revenue assumptions provided by DIAB and compiled by SLR.

A conventional discounted cashflow model has been prepared to derive project Net Present Value (NPV), Internal Rate of Return (IRR), payback period and cashflows on a before and after-tax basis. A discount rate of 8% has been applied that considers cost of capital and geographical risk.

Based on the Capex and Opex inputs presented above, the Project generates a Pre-Tax Net Present Value (NPV) MUSD 269 at a discount rate of 8%, with an Internal Rate of Return (IRR) of 25.6%. This results in a Post-Tax NPV of MUSD 200, with an IRR of 21.9%, and payback period of 4.09 years from start of production.

Annual project cashflow over the LOM is presented in Figure 18.

Figure 18: Annual after tax cashflow over the LOM

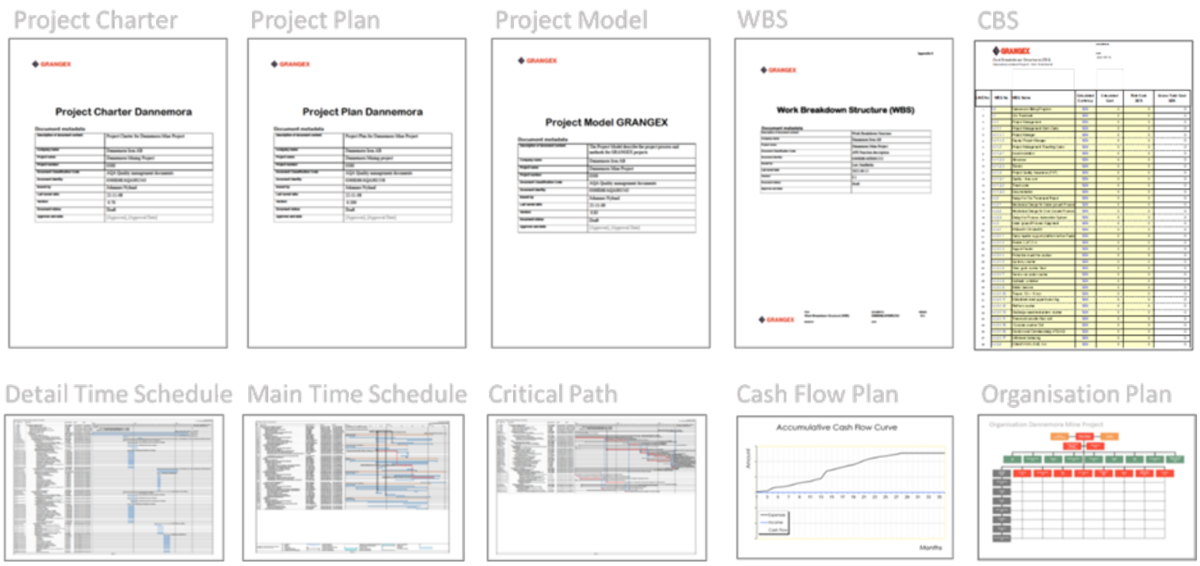


18.0 Project Implementation Plan

The Project Implementation Plan (PIP) consists of a number of key stages, including; workshops for Stakeholder Analysis, definition of Work Breakdown Structure (WBS) and Cost Breakdown Structure (CBS) with Cost calculations, followed up with meetings obtaining a detailed time schedule based on Suppliers tenders and/or estimations by Experts.

The main components of the PIP are shown in Figure 19 below.

Figure 19: Project Implementation Planning Documents



18.1 Strategy for the Project Implementation

The PIP specifies an overview of the approach, tasks and schedule, as well as identifying and addressing any unique challenges facing the Project. The Project will be designed and constructed to industry and regulatory standards and will address all environmental and safety issues. Adherence to the PIP will ensure that the Project is completed on time and within budget.

The project implementation is expected to take a period of approximately 28 months to full production.

The strategy for the Project implementation is based on:

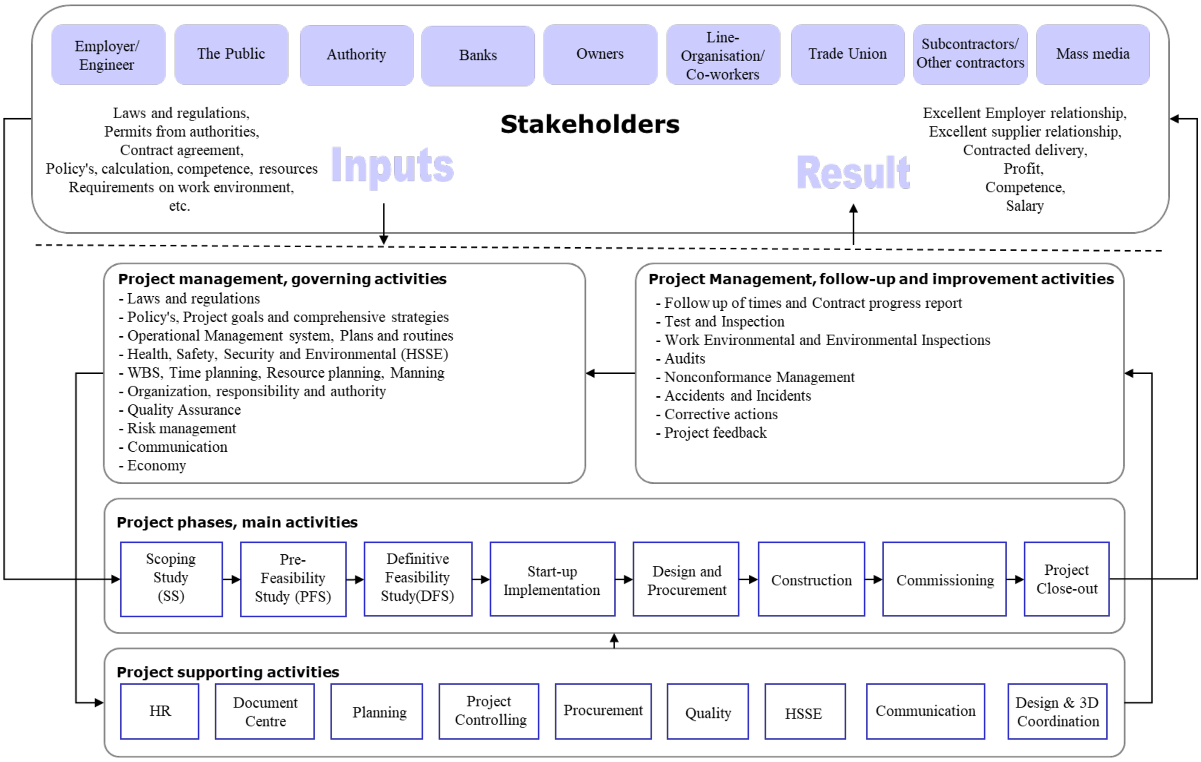
- A project team of the owner's resources, hand-picked consultants with expert skills, and with experience from similar large and complex projects;
- The project team for project management and design will be located at the Dannemora office to give an optimal mix of risk minimisation and governance of the whole chain of the Design & Procurement-, Construction- and Commissioning phases;
- Project Methods by GRANGEX Project Portal with state of art project methods and template supports Quality Assurance Process;
- Procurement of equipment together with functional and design responsibility, combined with procurement of “Construction Execution Contracts” (AB04), and with owner supervision for civil works-, installation- and commissioning works, will enable the project team to take control of risk mitigation and find the optimal cost solution. However, in some cases, for appropriate work packages, “Design and Build Contracts” (Turn-key) will be put in place for specialist technology vendors and suppliers; and

- Operational Readiness by Early Involvement in Commissioning by Owner's Operation & Maintenance Team.

18.2 Project Management Methods and Quality System Process

The overall project methodology approach will follow the owners' requirements and be based on relevant standards such as ISO 9001, ISO 10006, ISO 14001, etc., as well as an experienced based application of PMI Guidelines. These standards form the basis and provide guidance for the application of methods and structures for the Project Plan with underlying plans. Figure 20 below shows an overview of the basic structure of the Project Plan that handles the project management activities and secures the quality of Project activities in a systematic and orderly manner.

Figure 20: The Project Management and the Quality System Process



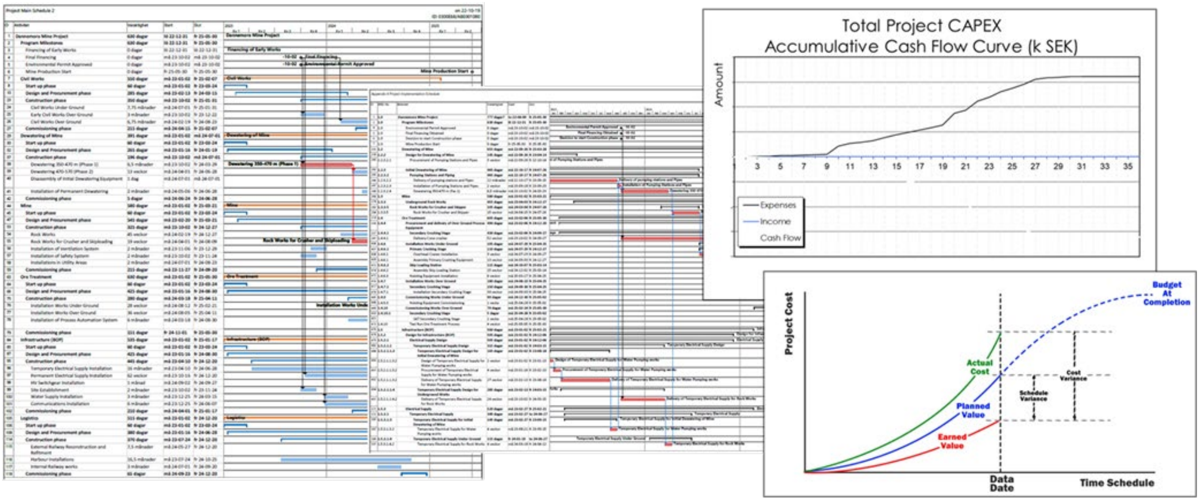
The figure shows the Project Management and Quality System Process that are defined in the Project Charter and Project Plan. The figure also presents key Stakeholder requirements, including authority requirements, environmental requirements, public's expectations, and owner's requirements.

These inputs form the basic requirement needed to be handled by Project Management activities, including Project phases – Main Activities and Project Supporting Activities.

18.3 Project Implementation Schedule

Figure 21 below shows the Project Implementation planning prepared during the FS. The Time Schedules are based on activities with links which provide full control via Critical Path Analysis. The Work Breakdown Structure (WBS) defining the Scope, provides a common coordinated structure for the Cost breakdown structure (CBS) and Time Schedule. This coordinated WBS and CBS will enable Earned Value to be achieved for the Project.

Figure 21: Planning documents during FS



19.0 Conclusions & Recommendations

19.1 Conclusions

The Dannemora Mine restarted production in 2012, however operations ceased in 2015 due to bankruptcy. The main reasons for the bankruptcy were: (i) the quality of the finished product was below market expectations, and (ii) unfinished installations in ROM equipment (i.e. the hoisting system). In addition, the beneficiation stage resulted in high production costs. Additionally, the prices achieved could not pay for the cost of production in a depressed market.

However, during the production period of 2012-2015, it was proven that sustainable mining could be undertaken in an efficient and cost-effective way with the production of ca. 3 Mt/yr of ore.

Based on the experience from 2012-2015, and with the clear objective to focus on improving the quality and grade of the finished product such that it would meet the demands and needs of customers globally, a new beneficiation process was required. This was accomplished by using known advanced and proven technologies, and appropriate confirmatory testwork. By improving the Fe-concentrate grade and reducing critical deleterious elements to acceptable levels, it will be possible to achieve substantially higher prices compared to the 2012-2015 period.

Based on the results of this DFS, and future market expectations, the recommendation is that the Project should be taken to the tender stage. The metallurgical testwork completed indicates that there is a possibility to further increase the Fe-concentrate grade from 68 % to over 69 %, which would further enhance the viability and sustainability of the Project.

The financial evaluation of the Project carried out as part of this updated DFS is based on an estimated overall LOM capital expenditure of ca. MUSD 262.4 with an operating cost of ca. USD 63.3/t of product based on an Iron Price of USD 151/t. Based on this expenditure, the Project is estimated to generate a Pre-Tax Net Present Value (NPV) of MUSD 269, at a discount rate of 8%, with an Internal Rate of Return (IRR) of 25.6%. This results in a Post-Tax NPV of MUSD 200, with an IRR of 21.9%, and a payback period of 4.09 years.

Based on metallurgical testwork completed to date it is possible to produce a Fe-concentrate of ca. 68% Fe, that would be of DRI (Direct Reduced Iron) quality and meet the requirements for “green steel”. This quality of Fe-concentrate is in limited supply, and it can be expected that this situation will be even further underlined over the coming years. Testwork undertaken during and subsequent to the FS was targeted to identify the potential to further increase the Fe-content in the concentrate. Efforts will also be made to maximise the mining grade throughout the LOM.

Furthermore, once in operation, the area immediately surrounding the mine has the potential for further discovery of substantial additional mineral resources, as a number of the mineralised bodies are open at depth.

A key conclusion of the DFS is that the Dannemora Mining Project will play an important part in reducing CO_2 emissions by producing a high magnetite Fe-concentrate with Green Steel credentials.

It is planned to utilise and upgrade the previous improvements made to the mine during the 2012-2015 period as part of the future proposed development. The mine plan developed during this period has formed the basis of the new and extended LOM, with areas previously planned and/or development being utilised to reduce initial start-up CAPEX.

At present, most of the interpreted mineralised bodies are open at depth due to the shallow nature of the majority of the drilling. Drilling on existing inferred resources and exploration targets has the potential to add to the current mineral resource for the Project.

Much of the work carried out as part of the DFS is based on information/data and knowledge gained by key individuals (i.e., that were part of Scoping Study and PFS teams) who previously worked at Dannemora during the 2012-2015 period. These individuals will continue to part of the project team and provide inputs as the Project develops.

The results of the DFS provide a strong foundation to take this Project - the recommencement of mining at Dannemora - to the next stage.

19.2 Recommendations

Following the conclusion of the DFS a number of key technical and project recommendations can be made under the following headings:

19.2.1 Marketing

- Emphasise the product's strength as being produced with a minimal CO_2 footprint and ideal for "Green Steel" production.
- Identify customers that focus on developing steel production with the smallest possible CO_2 footprint.
- Present and represent at iron ore conferences in Europe and the Middle East.
- Active marketing towards all potential customers with a clear strategy to reduce CO_2 emissions in Europe and the Middle East.
- Investigate potential interest and shipping solution for sales to distant destinations (MENA and Japan).

19.2.2 Community

- Continue to be proactive in information meetings with all who will be impacted, positively or negatively, by restarting the mine.
- Continue dialogue with all stakeholders during permitting, construction and operation.

19.2.3 Geology

- In direct connection to standard drill core logging, in-house produce small (2-3 cm) semi-polished ore samples and skarn, in order to exert mineralogical and geochemical control on ore and gangue material by using standard ore microscopy and (near in-house) SEM-EDS.
- Acquisition of hand-held XRF analyser for in-situ ore control, underground as well as during drill core logging.
- Underground laser scanning to facilitate mine planning and ore control.
- Expansion of Indicated and Measured Mineral Resource: Exploration drilling on existing inferred resources and exploration targets to add to current mineral resource.
- Continue to collect samples from core which was not previously assayed for Fe due to having an historical cut-off grade of 20% Fe, and from areas where it was not possible to recover the Fe in the beneficiation plant.

19.2.4 Geotechnical

- Carryout Geotechnical logging (RQD etc.) when drill core logging.

19.2.5 Mining

- The drilling of exploration targets should be initiated as soon as possible with the objective to increase the LOM.
- The sub-level height in Dannemora is normally set to 19 m in order to avoid ore losses or too much waste inclusions. The reason for ore losses and/or waste inclusions are often that the orebodies are undulating in nature. A cheaper way than dense diamond drilling to get a better knowledge of the ore outlines would be to dense drill a set of percussion holes from nearby drifts or ramps, and log them with a magnetometer and deviation survey them. This will at least increase the ability to make better production planning decisions and quite possibly to increase the height of the sub-level by a number of metres.
- The use of portable XRF equipment at the mining front would enable better selection of the mined material to the crusher.
- Review of cut-off grade to consider the possibility of flexible cut-offs based on the different characteristics of the ore in different parts of the mine. In addition to this, is the need for ROM blending to enable production of specified grades.

19.2.6 Processing

- Further upgrading of the concentrate grade by either reverse silica flotation or by a new electromagnetic method should be considered once the plant is up and running.
- Additional drill core samples representing deeper mining levels and all orebodies should be collected for confirmatory testing.
- Batch testing of additional drill core samples against mining schedule to investigate enhancement of final concentrate quality.
- Determine additional comminution data on a selection of drill core.
- Liaise with mining engineers to update/revise mine plan.
- The aim is to provide a DR quality concentrate and to optimize the grade vs recovery.
- TML determination of concentrate to be done by an external laboratory. Moisture content to be determined during production.
- In preparation for production, consider and plan for possible blending of ore from areas with high S content with ore from areas with low S content.
- Investigate options for processing high pyrrhotite content ore to achieve sufficiently low S content by finer grinding and enhanced extraction methods as well as selectively mine and blend accordingly.

19.3 Opportunities

A number of opportunities to improve and maximise the Project's life and financial return have been identified:

- Due to the ongoing shift (the Green Industrial Revolution) towards fossil free steel making, there is an important opportunity to be had in moving the Dannemora concentrate firstly to be CO_2 free ex works, and also later on an FOB basis. This can be achieved with the following actions:
  - For the construction phase, request contractors/suppliers to use equipment with reduced carbon footprint;
  - Undertake electrification of the mine and all related operations;

    - HVO driven train transport initially (ca. 9 km), with electrification to port (ca. 200 km);
    - Electrification of harbour loading procedures; and
    - Negotiate with customers to exercise shipments with a minimized CO_2 footprint.
- All CAPEX costings are based on quotations, price lists and/or calculated prices, hence there is an opportunity to negotiate final terms and prices with suppliers.
- Plan and exercise exploration drilling of the inferred resource and identified exploration targets with the objective to increase the LOM.
- Investigate and evaluate the possibility to further reduce the Project's carbon footprint by identifying the source of input goods, such as explosives chemicals, steel and concrete with a minimal or no carbon footprint, and additional electric underground mining equipment.

19.4 Risks

Risks to project viability have been reviewed and highlighted, with thoughts/plans on how to mitigate same, for the next phase of the Project:

- Securing a long-term electrical power supply agreement with the local network distributor, Vattenfall. Work initiated and constructive discussions ongoing.
- Securing stable and long-term agreement with the Transport Administration for rail access to Oxelösund. Final discussions ongoing.
- Securing long-term power prices at competitive levels with power supply companies. Contacts and discussions initiated.
- Secure qualified staff for the operation. Continue to develop contacts with local schools and develop a good relationship with local and regional stakeholders.
- Security of delivery of key equipment with long-lead times.
- Dewatering of the mine is completed on schedule.
- Following dewatering, underground civils works not carried out on schedule (i.e., installation of crusher, and related infrastructure).

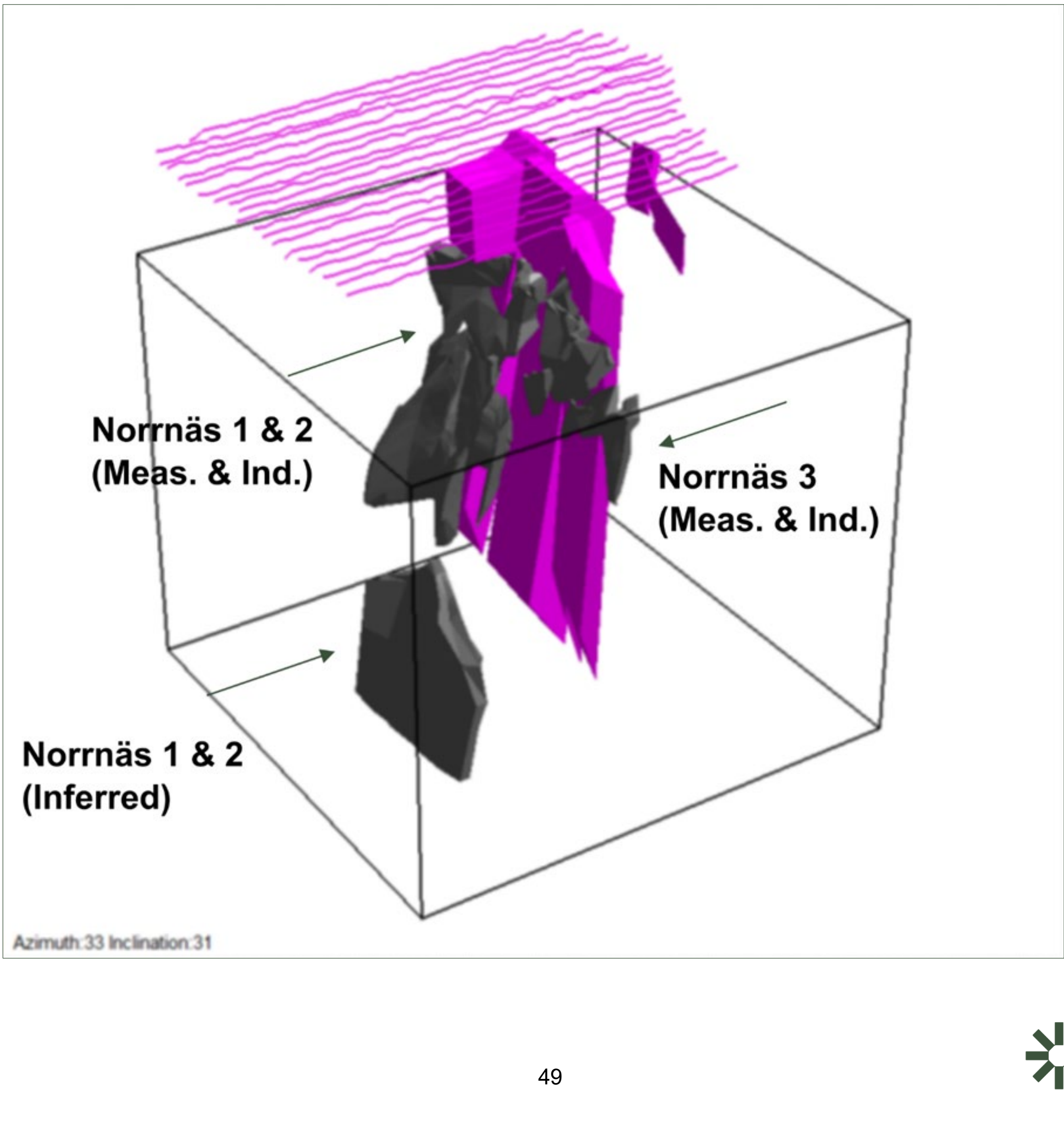
20.0 Exploration Potential

The area in the vicinity of the Dannemora deposits holds the potential to further increase mineral resources through exploration. At present, most of the interpreted mineralised bodies are open at depth due to the shallow nature of the majority of the drilling. Drilling on existing inferred resources and exploration targets has the potential to add to the current mineral resource.

Recent re-logging of the existing drill core, and updating of the wireframes point to a number of target areas with interesting exploration potential. The most obvious targets are those at deeper levels, just below known mineralization, i.e., where known orebodies are open at depth. Moreover, re-logging of the existing core and analyses over the past two years has produced a ca. 6 Mt of additional iron ore with grades >15% Fe.

During the previous period of production, 2012-2015, an extensive magnetic survey was carried out over the northern part of the deposit. The survey area covered Norrnäs 1-2 and Norrnäs 3. Modern modelling and interpretation of the data was reported by GeoVista (2021). The modelling removed the anomaly field created by the known magnetite orebodies, with the remaining anomaly modelled as potentially inferring ca. 3.3 - 3.4 Mt of iron ore at ca. 36 - 38% Fe occurring below Norrnäs 1-2 and Norrnäs 3. Figure 22 presents the results of the modelling.

Figure 22: Interpretation of total magnetic field (grey bodies are known from drilling, magenta bodies modelled to explain remaining magnetic field)



In addition, several geophysical borehole surveys indicate that magnetic bodies are located at depth, again requiring further drilling to prove up additional mineral resources.

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