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ASX RELEASE



28 February 2024

ASX: GRR

Underground Definitive Feasibility Study demonstrates significant value uplift and sustainable long-life mine.

Savage River Operations, Tasmania

- Definitive Feasibility Study presents a technically achievable and financially favourable underground mine at Savage River.
- Integration with the current opencut mining operation delivers excellent projected financial returns and sustains a mine life of 15 years.
- Savage River Ore Reserve increases by 12.5 million tonnes to 109 million tonnes with integration of the underground operation.
- The new life-of-mine-plan will deliver a substantial reduction of 30% in operating costs with underground mining costs at an average of A$13 per tonne.
- The integrated project post-tax NPV is ~A$775 million from the generation of ~A$2,122 million in cash returns over the next 15 years.
- The new plan delivers an internal rate of return of 34% based on an average product price of approximately A$177/tonne.
- Payback period of 6.4 years from the commencement of development in 2025.
- The underground mine will transition North Pit from opencut to an underground block cave and sub level cave mine over the next five years.
- Ore delivery of 64 million tonnes of ore produces 28 million tonnes of concentrate with an iron grade of over 66% over 15 years.
- Production will ramp up over the five years with forecast sales of 2.9 million tonnes of iron ore products from 2029.
- Carbon emissions targeted to reduce by 80% at the Savage River Mine, with the application of electric mining equipment and material handling systems underground. This is in line with company's Environment, Social Governance (ESG) initiatives to develop Green Pellet Production
- The company is now proceeding with engineering planning work, finalisation of the development application and extension of the existing exploration decline. Final board and regulatory approval for construction is expected towards the end of 2024.
- Capital investment estimate in the underground mine is ~A$891 million. This is to be funded from existing cash reserves and forecast future cash flows.

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Grange Resources Limited (ASX:GRR) (*Grange or the company*) is pleased to announce the completion of the Definitive Feasibility Study (DFS) into the potential for underground mining below North Pit and its integration with the company's current opencut mine at Savage River Tasmania. The robust financial outcomes of the DFS demonstrate that an underground mine is technically and economically viable for the North Pit ore body. The findings of the DFS have been integrated with the transition from opencut mining to demonstrate the effective implementation of the underground project alongside the current operation.

DFS Summary

- Technically and financially attractive with a 30% average reduction in operating costs compared to current open pit mining costs.
- Production of six to seven million tonnes of ore per annum from the underground Block Cave Mine with a mine life of 15 years utilising underground caving methods.
- Total production of 90.2 million tonnes of ore at approximately 45% DTR, returning a concentrate quality above 65% Fe. Total estimated opencut and underground production of 40.8 million tonnes of magnetite concentrate over 15 years.
- Underground mining costs average of A$13 per tonne during operation.
- Underground development and production capital of ~A$891 million with preproduction capital investment of ~A$416 million supported by existing infrastructure.
- A sub-level caving (SLC) transition mine to recover ore left in the walls of the North Pit provides early access to ore and contingency production during the establishment and ramp-up of the Block Cave Mine.
- Over two kilometres of exploration decline has been completed. This reduces the risk for many technical and cost elements of the project, with a further commitment for additional decline development and geotechnical investigation drives in 2024.
- Demonstrated ore continuity provides potential for further increases to mine life with the potential to exploit the high-grade resource at greater depth.
- Automation of mine production remains a possibility as technology continues to improve over the next 5 years.
- Board decision for Grange to move forward with execution planning and permitting over 2024 with final construction decision in the second half of 2024.



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Commenting on the delivery of the North Pit Underground DFS, CEO Honglin Zhao said:

> "This project represents a significant milestone in the future development and sustainability of the Savage River operation. We are in the fortunate position of being able to undertake this development while the current opencut operation proceeds.
>
> "We look forward to the next stage of detailed engineering and preparation to implement a modern block cave to extend the life of the Savage River mine.
>
> "This presents an important opportunity to extend the life of the operation [and substantially reduce carbon emissions] as we progress towards our net zero emissions target."

Introduction

Current mining operations comprise two active open pits, North and Centre Pits delivering over five million tonnes of ore per annum. North Pit is approximately 360 metres in depth. Current cutbacks and extensions will extend the depth of the pit to approximately 450 metres below the natural land surface.

An underground concept study and a mining options study was commissioned in 2018 to evaluate the potential for underground mining at Savage River's North Pit. This suggested that underground mining by Block Cave (BC) or Sub Level Cave (SLC) methods could be a viable and economically attractive alternative to increasing the depth of the North Pit. A Prefeasibility Study (PFS) was commissioned by Grange to investigate the viability of an underground mine and was completed in 2021.

During the PFS, an Exploration Decline was developed from the North Pit during the period March 2019 to September 2020 and included over two kilometres of development, eleven thousand metres of resource drilling and collection of a bulk sample of ore. The decline portal is located in the south-east corner of North Pit with the decline developed in the eastern wall of the pit and traversing from the southern end of the resource to the north.

The ground conditions encountered are similar to what was expected from the drilling and geotechnical interpretations. The decline ground conditions have generally been considered good and hydro-geological observations indicated that the eastern wall is generally tight and dry.

A Bulk Sample Drive (BSD) was developed through the ore at the -60mRL. Several breakaway headings were developed successfully from the BSD to test intersections and breakaways in the ore. The ground conditions in the ore ranged from fair to very poor.

The PFS was completed in 2021 and concluded that a Block Cave or Sub-level cave were both technically and economically viable and that the block cave produced superior financial returns without substantially increasing the technical risk. A study of material handling options to transport the ore from underground showed that trucking produced the best financial return but it limited production with no



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current solution on the market to economically expand. Current trucks available on the market also relied on diesel and the trucking option did not meet Grange's target for carbon emissions reductions. A decision was made to complete the DFS with inclined conveying which would further enable electrification of the underground mine and use of Tasmania's low emission hydro power.

Drilling continued post the PFS in 2021, with the final diamond drill hole completed June 2022. A total of 6,501m were drilled from surface and underground drilling platforms. Diamond drilling was required to define the resource further North and to collect geotechnical data for mine design. The drilling was also used to verify the resource limits for the North end of the Open Pit. To date, a total of 55 holes have been drilled as part of the North Pit Underground (NPUG) drilling campaigns (Stages 1 to 4). A total of 36,732m have been drilled as part of the NPUG study.

In 2022, Grange commenced the internal DFS to investigate the take-forward option from the PFS of a Block Cave and SLC Transition Mine and inclined conveyor to transport the ore from underground. The DFS has now been completed, subjected to an external independent review process and forms the subject of this market release.

The key changes made between the PFS and DFS are:

- Extraction level elevation lowered to -330mRL due to change in final stage of the North Pit design.
- Forecast for ramp up in production rate; 6Mtpa increasing to 7Mtpa to maintain concentrate production when head grades are forecast to drop due to dilution.
- Production sequence changed from two panels to single panel to remove interaction issues with two panels.
- Extraction level layout changed from 'El Teniente' diagonal to an offset herringbone to enable the use of tethered electric loaders and to mitigate effects of potential inrush events.
- Increase from 173 draw points to 204 draw points due to change in Extraction level layout and updated geology and geotechnical modelling.
- Apex level added 20m vertically above the Undercut level to provide dedicated exhaust horizon for the ventilation circuit.
- Dedicated drainage level at the bottom of the mine
- Materials Handling System (MHS) changed from truck haulage to inclined conveying.
- Single gyratory crusher replaced with two eccentric roll crushers.
- The SLC transition mine levels have been reduced from five to three sub-levels.
- The SLC transition mine peak production rate is reduced from 2.5Mtpa to 1.9Mtpa

During the process of conducting the DFS a first phase of integration with the current open cut mining at Savage River was undertaken to enable finalisation of the DFS. The integration focused on the following:






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- Reduction in operating costs by the removal of replicated costs between the open pit and underground.
- Improved ore stockpile management and reduction in stockpile levels.
- Delay and spread of capital expenditure while still maintaining maximum production.
- Opportunities to increase total pellet sales and production spreading fixed overheads over a larger production base and increasing annual revenues.
- Draw down of open pit working capital and stock inventories.

This announcement provides the market with an update on the production and financial outcomes of this integrated production and cashflow profile. It also informs the market of the technical analysis and requirements of the Underground Block Cave and Sub-level Cave as determined by the DFS.

Location

The Savage River Mine and concentrator plant is located in north-west Tasmania, approximately 100km south-west by sealed road from Burnie. The Mine has been in operation for more than 55 years, extracting magnetite from a series of open pits. Grange owns the mine and the downstream processing facilities which include a concentrator on site and a pelletising plant at Port Latta which is located on the Bass Strait coast. The pelletising plant and dedicated port facilities at Port Latta are located 70 kilometres northwest by sealed road from Burnie. Magnetite concentrate slurry is pumped from the mine to the pelletising plant through an 85km pipeline. The pipeline currently has capacity for delivering up to 2.85 million tonnes per annum (Mtpa).



Figure 1 Location of Savage River Mine



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Strategic Fit

The strategic rationale for the underground project is to ensure the sustainability of the mine; reduce the long-term mining cost; decrease carbon emissions; reduce environmental impact; increase profitability and extend the life of the mine. The underground mining option was assessed against the alternative of deepening the existing North Pit. The underground project returns higher value to stakeholders and is a strategically beneficial development option.

Key requirements were to:

- Complete a DFS study on an underground Mine at Savage River using block caving methods and conveyor haulage.
- Improve the confidence of the assessments made to +/-15% from the PFS of +/-25%.
- Confirm the absence of any technical or economic fatal flaws in the project.
- Reduce the risks identified in the PFS and eliminate extreme risks.
- Produce a positive NPV that exceeded the continued open pit mining option.
- Extend the mine life.
- Reduce the current operating cost.
- Significantly reduce the carbon emission through electrification.
- Provide the option to expand production to the pipeline limit.
- Transition to underground with no disruption to ore supply.

The DFS has delivered all of the key requirements and has confirmed the transition to underground mining is the best strategic fit for Savage River's long term mine development.



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Project Assumptions & Financial Outcomes

The integrated financial results cover Grange's Tasmanian Operations. Exchange rate ranges and product price for pellet and chips are based on forecasts provided by specialist market experts in 2024. The physicals and financial evaluations are summarised in Table 1. All material assumptions on which the DFS is based are included within this announcement.

Table 1 - Summary of the physicals & financials for the integrated mine plan. (1)

Physicals & Financials	Units	DFS
Key Material Assumptions		
Average Product Price	A$/t	177.3
Average FX	A$/US$	0.70
Discount Rate (real after tax)	%	8.29
Tax Rate	%	30
Physicals		
Ore Produced (1)	Mt	90.2
Ore Grade	%DTR	44.9
Total Conc	Mt	40.8
Pellet Produced	Mt	39.8
Chips Produced	Mt	1.73
Price & Revenue (5)		
Total Sales Revenue	A$M	7,290
Underground Capital Cost	A$M	891
Total Capital Costs (3)	A$M	1,181
Operating Cost (2)	A$M	3,813
Financials		
NPV (post-tax)	(A$M)	775
IRR	%	34
Payback	Years	6.4
EBITDA	A$M	2,880
Cash at Bank (4)	A$M	2,405
Unit Costs		
C1	$/t Conc	93.8
Mining (opencut & underground)	$/t Ore	16.74



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Notes:

(1) All material assumptions and technical parameters underpinning the estimates are disclosed in the ASX announcement Annual Resource and Reserve Statement Dec 2023 released on 28th February 2024. The company confirms that it is not aware of any new information or data that materially affects the information included in that earlier market announcement and all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

(2) Cash operating costs include all opencut mining costs, underground mining costs, concentrating costs, pelletising costs and shared services. This does not include corporate overheads.

(3) Capital costs are inclusive of underground capital costs, sustaining opencut and downstream capital costs.

(4) Cash at Bank includes total cash balances as at 31 Dec 2023.

(5) All financials are presented on 2024 real terms.

The concentrate production profile and cash flow profiles for the Integrated Life of mine Plan (LOMP) are shown in Figure 2 and Figure 3, below:

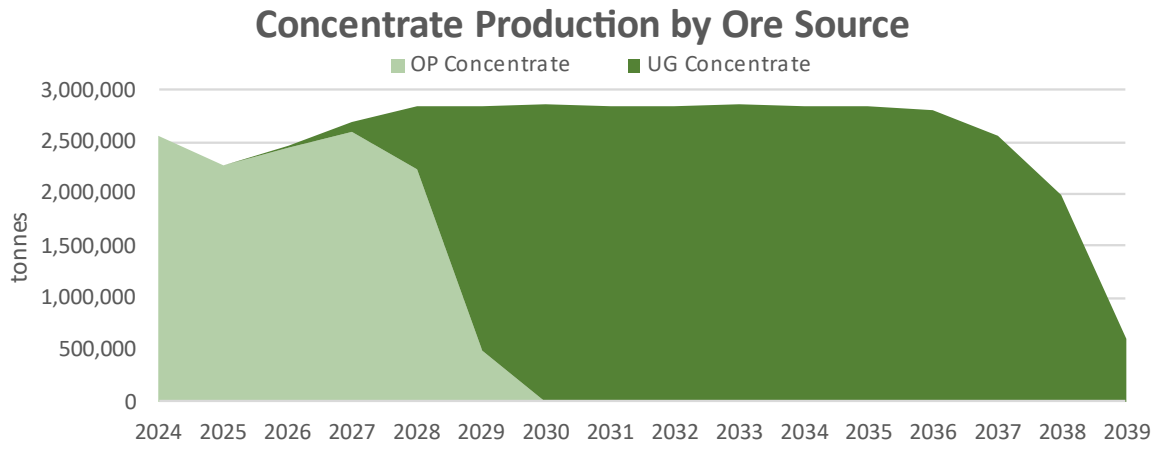


Figure 2 Annual production profile for the integrated schedule (see Table 1 Note 1)



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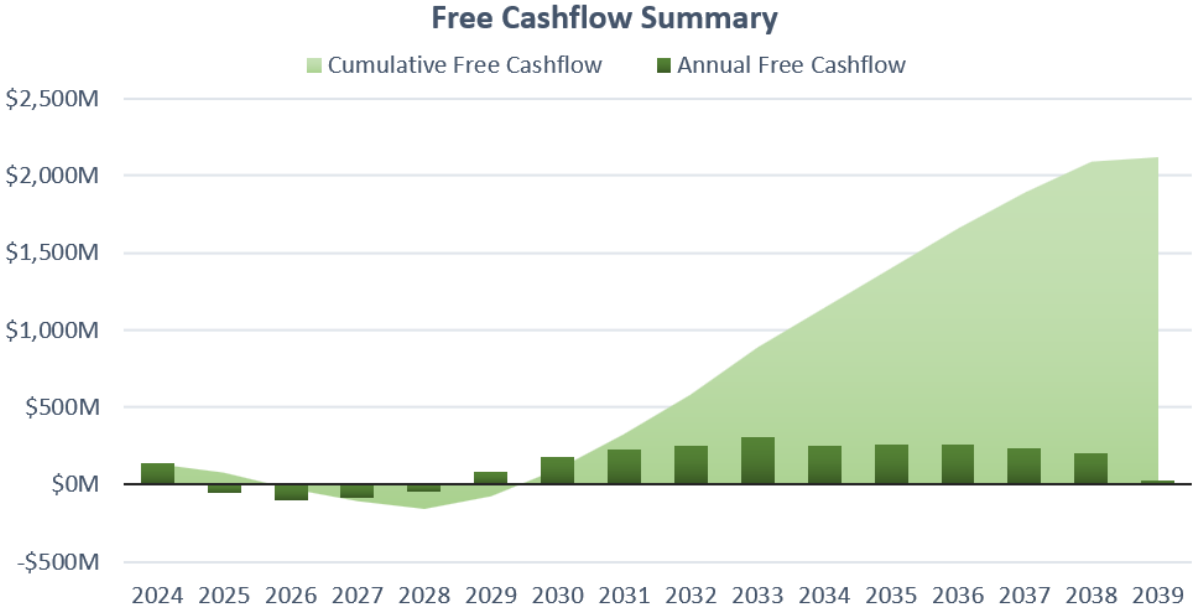


Figure 3 Annual cash flow profile for the integrated schedule.



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Mineral Resources

Full disclosure of Mineral Resources reported in accordance with the JORC Code is provided within the company's annual JORC Statement dated 28th February 2024. The following tables represent the Mineral Resource for only North Pit. In each case, elemental compositions were measured from Davis Tube Concentrate. A cut-off of 15%DTR was used in the calculation of Mineral Resources.

Table 2 North Pit Mineral Resources 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	125.8	64.5	36.1	**226.4**
DTR (%)	53.6	42.3	37.1	**47.7**
Fe (%)	67.8	67.8	68.0	**67.8**
Ni (%)	0.03	0.04	0.04	**0.03**
TiO_2 (%)	0.95	0.93	0.92	**0.94**
MgO (%)	2.01	1.64	1.69	**1.85**
P (%)	0.004	0.005	0.004	**0.005**
V (%)	0.35	0.34	0.33	**0.34**
S (%)	0.04	0.07	0.06	**0.05**

- Elemental compositions were measured from Davis Tube Concentrate.
- Above a cut-off grade of 15% DTR
- Stockpiles were included in this summary table and are itemised separately in tables of individual mining pits and aggregated stockpiles.
- The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Ore Reserves.

Ore Reserves

Full disclosure of Mineral Resources is accordance with the JORC Code is provided within the company's annual JORC Statement dated 28th February 2024. The figures below represent only the underground Ore Reserves for North Pit as the primary subject of this release. All underground Ore Reserves scheduled to be mined have been assessed as being in the Probable Reserves category. The Ore Reserves mined from underground have been assessed at the lower confidence level due to the mixing and modifying factors inherent within a caving operation reducing certainty in the timing and recovery.

In each case, elemental compositions were measured from Davis Tube Concentrate. A cut-off of 15%DTR was used in the calculation of Mineral Resources.



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Table 3 - North Pit Underground Ore Reserve 31 December 2023

	Proved Reserves	Probable Reserves	TOTAL Reserves
Tonnes (Mt)	0.0	64.4	**64.4**
DTR (%)	-	44.9	**44.9**
Fe (%)	-	67.6	**67.6**
Ni (%)	-	0.03	**0.03**
TiO_2 (%)	-	0.98	**0.98**
MgO (%)	-	2.07	**2.07**
P (%)	-	0.004	**0.004**
V (%)	-	0.35	**0.35**
S (%)	-	0.03	**0.03**

- Elemental compositions were measured from Davis Tube Concentrate.
- All Underground Ore Reserves are classified as Probable Ore Reserves. No Proved Ore Reserves are reported.
- The Ore Reserve includes production from block cave and SLC mining estimated using a PGCA flow and recovery model (which accounts mining dilution and mining recovery), plus ore from underground development with 10% mining dilution.
- No grade has been assigned to dilution entering the cave during the mining process or during development.
- The production cut-off grade for the block cave is ≥ 30% DTR.
- The cut-off grade for the SLC is ≥ 28% DTR.



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UNDERGROUND MINING OPERATION OVERVIEW

The DFS evaluated a Block Cave (BC) Mine below the North Pit and an SLC Transition Mine to recover the ore left in the northern wall of the North Pit. The Transition Mine provides early access to ore and contingency production during the establishment and ramp-up of the Block Cave Mine.

The target annual underground mining production rate is limited by the capacity of the pipeline that delivers concentrate slurry from the mine to the pellet plant in Port Latta.

Geotechnical Assessment

Geotechnical and hydrogeological analysis and risks have informed the mine designs for all options considered. The footprint for the BC is expected to cave readily despite its relatively narrow span, but has the potential to cave preferentially along structures, adversely affecting the recovery.

Simulated stress, strain and subsidence modelling for several iterations of the mine plan were undertaken using an LR4-FS4 model. The model simulated the cave growth and deformation of the mine development based on key inputs:

- mine geology
- geotechnical data
- mine design and development schedule
- draw point opening sequence and draw schedule

Geological and geotechnical data was collected from the development of underground openings and from surface and underground drilling and sample testing. Faults and large structures within the NPUG province have been identified, interpreted and wireframed from either surface or underground observation and drill core.

The modelling included all mining steps to simulate the construction of Open Pit, infrastructure development, BC and Transition Mine development and production, and their impacts on caving and the Open Pit stability.

Both the block cave (BC) and the southern portion of the SLC Transition Mine are expected to cave well at their maximum hydraulic radius with little to no additional measures required. The northern portion of the Transition Mine is likely to cave given the presence of large structures in the area and because caving will progress from south to north further promoting caving.

The assessment indicates that the poor ground and numerous faults in the ore zone would adversely affect stability on the extraction level of a block cave. This is mitigated by using wide draw bell spacings resulting in larger pillars and ground support and reinforcement schemes. Rehabilitation has also been forecast.

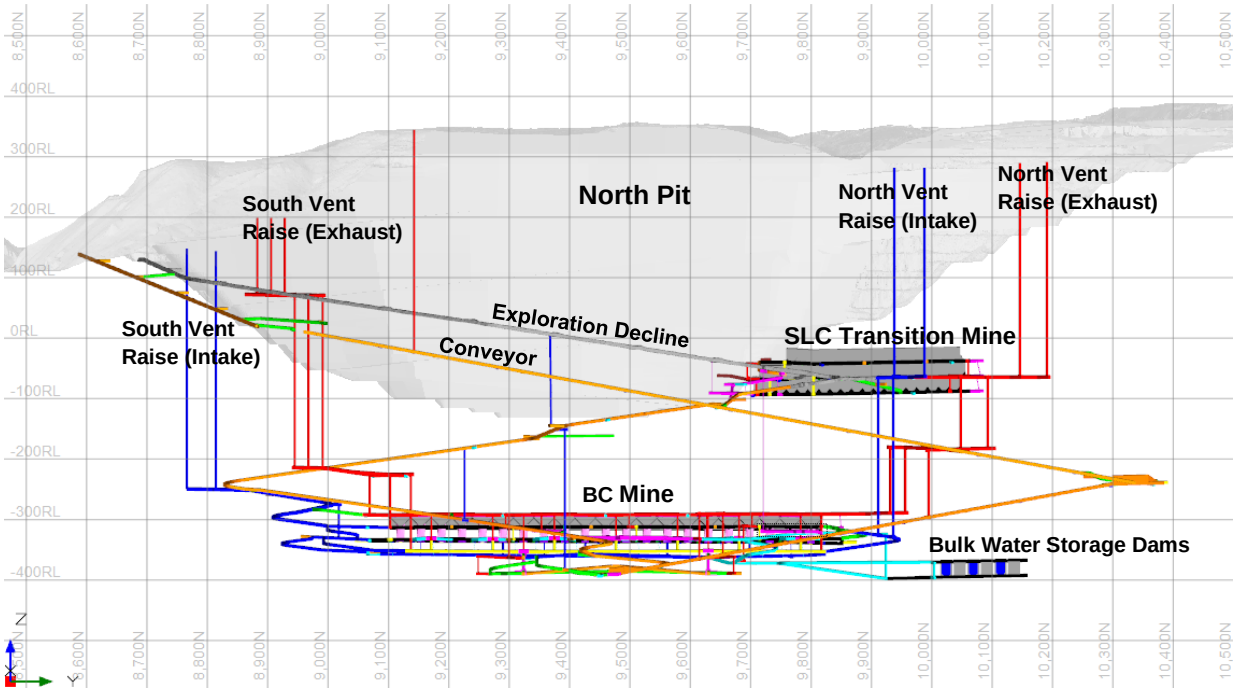


Figure 4 Long Section of NPUG development.

Underground Mine Planning

Underground development for both the BC Mine and SLC Transition Mine is based on extending and expanding the existing exploration decline development.

The BC Mine design and schedule are based on the following design criteria:

- Extraction level elevation at -330mRL, and footprint width of 80 to 100m and length to approximately 800m.
- Maximum tonnes per draw point limited to 500kt.
- Extraction level design includes 22 extraction drives and 204 draw points (102 draw bells).
- Cave Height at 180-220 metres from the Undercut level to the base of the North Pit.
- Drawbell Spacing is 34 metres x 20 metres in an offset herringbone layout, facing west and away from infrastructure. The level spacing is to maximise pillar size and geotechnical stability and is considered the upper limit for drilling and blasting of the undercut level.
- Undercut level 15m vertically above the Extraction Level. Advanced undercut strategy with the undercut leading the drawbells limited to three drawbells along an extraction drive, to minimize rockmass damage on the Extraction level.

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- The Apex level is 20m vertically above the Undercut level with the initial three apex drives at the major apex pillar developed as contingency measure to assist with establishing undercutting drill and blast practices.
- Drawbell Opening Rate at 2 drawbells per month and maximum drawpoint tonnage 10,000 tonnes per drawpoint per month.
- Cave initiation is from west to east and starts in the centre of the orebody. Caving then progresses North and South concurrently from the centre.
- Production ramp-up to 6Mtpa over 2.5 years.
- Production increases to 7Mtpa when the grade reduces.

The SLC Transition Mine recovers ore left in the Northern wall of the North Pit, 3 sublevels above the pit floor. This allows for early access to ore. The SLC Transition Mine provides contingency for ore production during the BC Mine production ramp-up and finalisation of the Open Cut. Allowances for development and production in areas of challenging ground conditions have been made in the mine schedule, including redrills and crosscut rehabilitation.

- The SLC Transition Mine is three levels at 25m vertical spacing.
- Crosscuts are at 18m spacings to maximise the pillar size between the crosscuts.
- Maximum production rate is 1.9Mtpa.
- The production front advances from the west to the east, with the cave initiating in the generally weaker rock mass in the west.

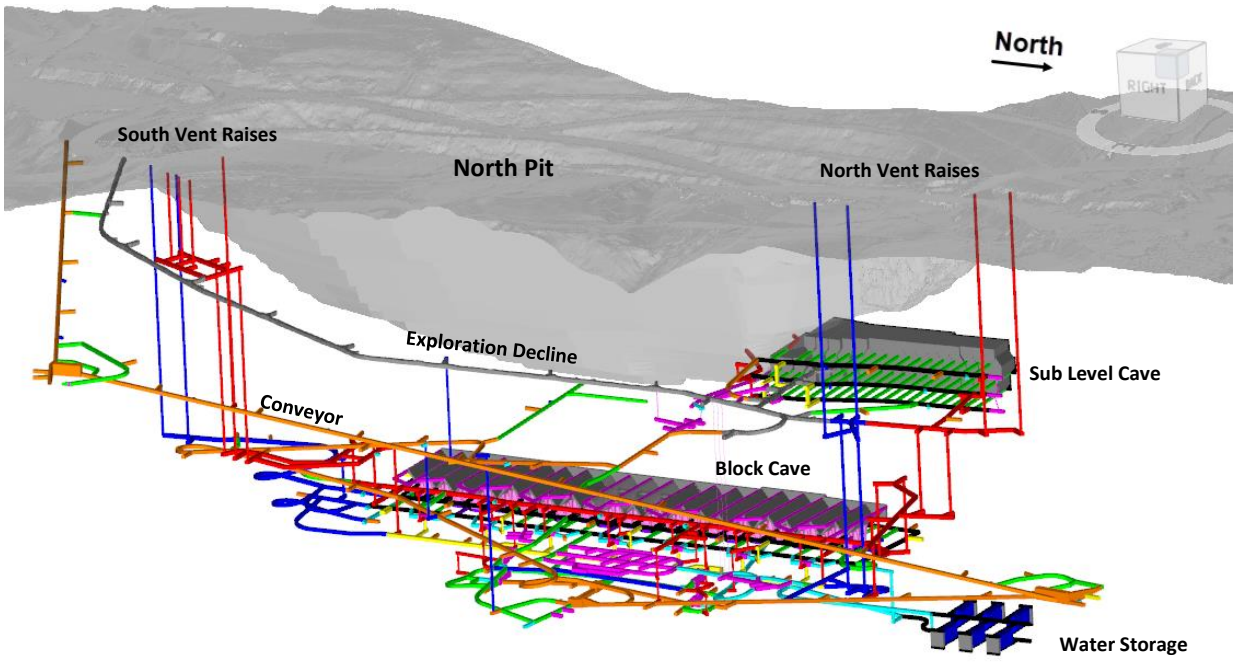


Figure 5 Underground mine layout (isometric)

BC Mine Cave Flow and Recovery

Cave Flow and Recovery assessments were completed using flow modelling software PGCA (Power Geotechnical Cellular Automata) and numerical modelling conducted using the LR4-FS4 model.

PGCA is a particle to particle-based flow modelling technique which can account for material properties, cave back constraints and other properties which are influential in the flow of broken rock. For the BC model, initial tonnages to draw from individual drawpoints were generated using the final cave shape as a boundary. A shutoff grade of 30% DTR was used to generate the inventory, which was then scheduled using a sequence created to match the sequence used in the LR4-FS4 model to create the cave shapes.

PCBC software was used to simulate a range of production scenarios for the BC Mine using the same production parameters as the other models but changing the draw schedule for each drawpoint. This modelling was used to understand and optimise the impact to recovery and drawpoint life for various productions strategies.

The flow models used a split production rate, initially ramping up to 6Mt over 30 months, and then increasing to 7Mt after 72 months. This is a point at which the head grade was expected to begin dropping due to dilution entry.

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The range of recovered tonnes from the various models are given in Figure 6. This includes results from:

- PGCA sensitivity analyses of the width of draw
- PCBC range of production strategies
- LR4-SR4 forecast with and without the discounting of recovered tonnes from drawpoints due to forecast damage.

The DFS has used the PGCA model at 18m width of draw as the basis of the underground ore production schedule.

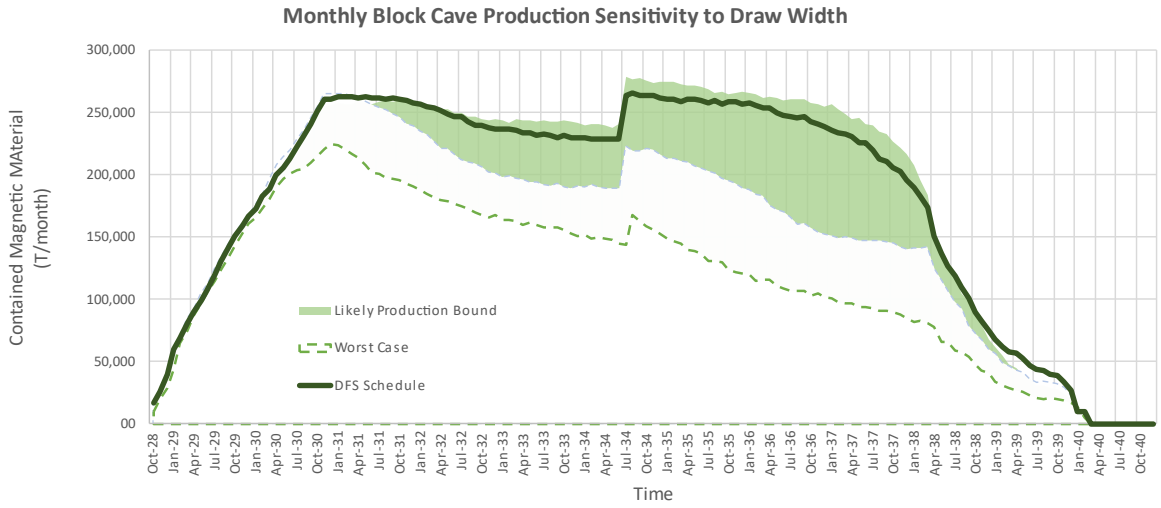


Figure 6 Flow & Recovery Simulation for the Block Cave, showing sensitivity to draw width.

Fragmentation Assessment

Both primary and secondary fragmentation have been assessed using BCF software. From the BCF modelling, overall primary fragmentation is a mix of both fine and coarse material. The BCF secondary fragmentation results indicate a significant portion of primary fragmentation is reduced in size due to internal comminution and column load stresses and is expected to be fine.

Inrush

An inrush event is considered to be the sudden, uncontrolled and potentially overwhelming arrival of material (fines, mud, or water etc.) into an excavation from an opening such as a drawpoint, crosscut or ore pass. Material typically flows or pushes out from the opening and is triggered by a disturbance.

Inrush events can be classified as either external or internal sources of inrush. Both classifications of sources are considered possible at Savage River in the BC Mine and SLC Transition Mine, and all sources have been considered within the NPUG risk assessment. Inrush control measures have been divided into



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five subcategories: exclusions, dewatering, fines, mine design and other. All these controls have been considered in the DFS to manage the inrush risk.

Subsidence

Numerical modelling forecasts completed using the LR4-FS4 model indicates subsidence will be largely constrained to the open pit, with some slight to negligible plastic strain potentially accumulating near the Brodric Creek Flow Through (BCFT). Undercutting of the pit walls, particularly the eastern and western walls, is expected overtime as the cave zone increases. This will induce some isolated failures of the pit walls but is not expected to result in large inter ramp scale instability.

Subsidence control measures for the mine design and exclusions (restricted access) have been considered. An extensive monitoring scheme for the NPUG project has been designed due to the criticality of monitoring the numerous geotechnical hazards which were identified as risks.

Mine Inflow Management

Water and water management is a significant consideration in the DFS as it impacts engineering, risk, environmental, operational and costs elements of the project. During the DFS hydrological models were developed to understand and assess local hydrology and mine inflow potential from rainfall. A concept mine water management plan was developed and the net impacts on the local hydrogeological environment of the mine water management plan were assessed.

The operating philosophy for the dewatering system is to effectively capture water on the extraction level or allow it to overflow to lower levels in the case of high intensity rainfall events. Development is graded such that water is diverted away from critical infrastructure so that the system can recover following a controlled flooding event.

The mine design includes bulk water storage dams which are connected to a dedicated drainage level below the Extraction level. In the event of a high intensity rain event, controlled flooding of the drainage level is planned with overflow volumes reporting to the bulk water storage dams. Two pumping stations transfer water out of the mine, with a maximum design rate of 750L/s.

Materials Handling Options

The PFS considered several haulage options with associated underground configurations and underground and surface infrastructure. The underground crushing and conveying option was chosen as the go forward case for DFS for the following reasons:

- Significant reduction in emissions and ability to meet the long-term requirements of the updated Safeguard legislation.
- Lower operating costs by the removal of production trucks and significant reduction in diesel.
- Better future proofing with higher ore production levels possible allowing the option of higher concentrate production.
- Improvement to the underground operating environment with improved air quality.



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- Increased options for future automation.

In addition, the single gyratory crusher that was presented in the PFS has been replaced with two eccentric roll crushers, which provides redundancy in the MHS. Crushed ore is transferred to the inclined conveyor system via apron feeder and conveyors.

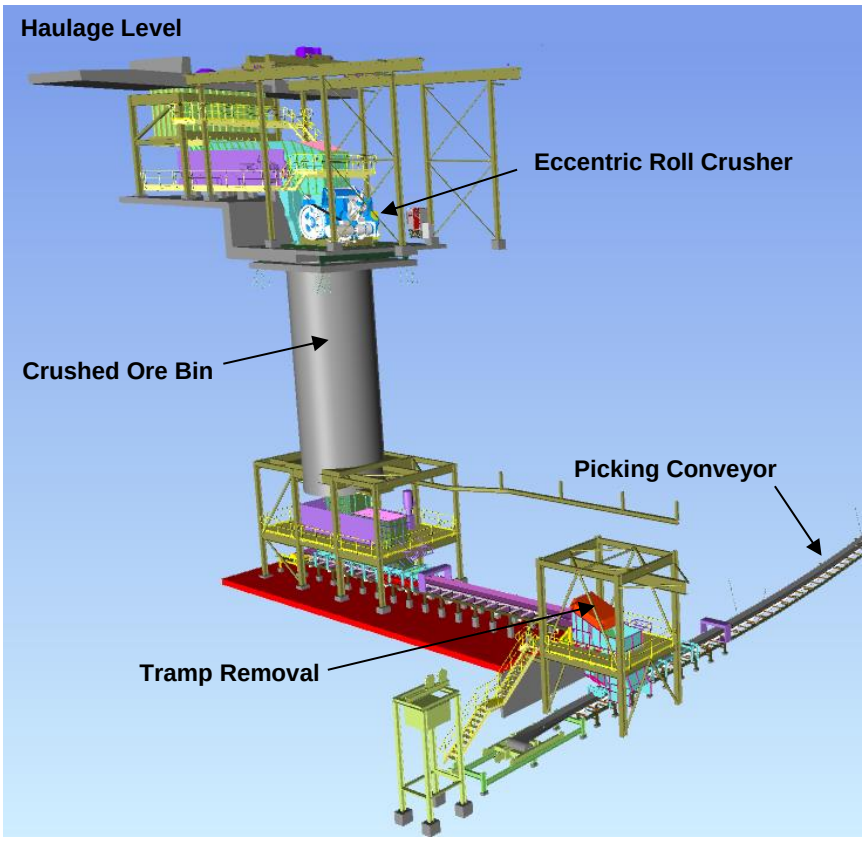


Figure 7 General Arrangement of Crushing Station



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Processing

The ore from underground will be processed through the existing plant at Savage River. Ore will be initially crushed underground before being conveyed to the surface and stockpiled on the ROM. The existing ore processing facilities include a crusher and magnetite concentrator at Savage River mine site and a pellet plant at Port Latta, which is located 80km north of the mine site on the north-west coast of Tasmania. At Savage River the ore, which comprises massive magnetite with accompanying sulphide and silicate minerals, is crushed, ground, and then concentrated using magnetic separation as the primary mineral separation technology. The magnetite concentrate, produced at a sizing of 80% finer than 45 microns, is pumped to the pellet plant.

A single pump station operates at the mine site using positive displacement pumps to pump the slurry through a 229 mm diameter pipeline. The pipeline crosses rugged terrain, ranging from 360 metres above sea level down to the coast near Stanley at sea level.

At the pellet plant, the pipeline discharge is received into the tank farm, and is filtered and agglomerated. The agglomerated pellets are then indurated in vertical shaft furnaces. Furnace discharge is screened and stockpiled, and then loaded into bulk ore carriers for shipment to customers. The ship loading facility comprises a 1.6km long jetty, on which a belt conveyor transports the pellets to an offshore ship loader.

Over the last 55 years the understanding of mineralogy and metallurgical characteristics of the ore and impurities has been well advanced. Some additional testing and fragmentation prediction of underground ore has been completed in the DFS and it demonstrates the same mineralogical and processing characteristics. There will be no major change to the processing plant operations for the underground mining operations.

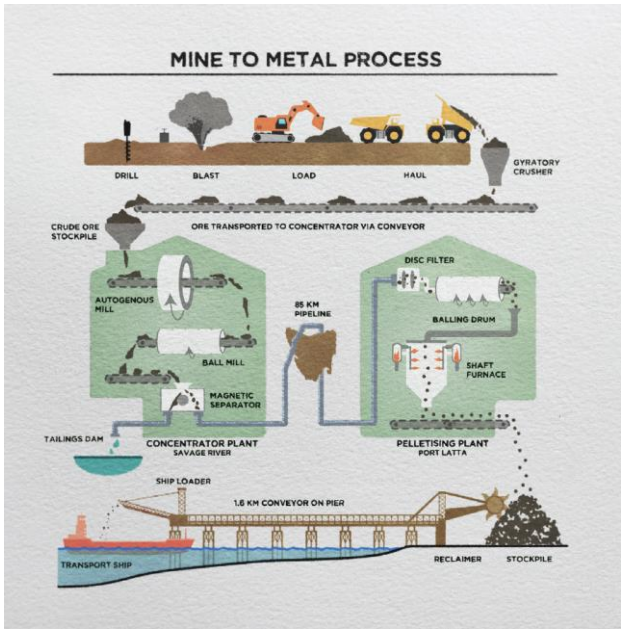


Figure 8 Grange's Mine to Metal Process

Production Profile

Opencut mining continues in Centre Pit and North Pit over the next 5 years. Ore is primarily supplied from Centre Pit during 2024 and 2025 with North Pit opencut becoming the primary ore source from 2026-2028. Open cut mining ceases in late 2027 allowing underground production to commence and ramp up over the next 3 years. The current integrated production schedule (Figure 9) supplies sufficient ore at the required grade to the ROM to maintain consistent concentrate production over the next 15 years.

Further optimisation of the Open Pit and Underground mining schedules will occur during execution to maximise value while maintaining minimal risk to the plant production schedule.

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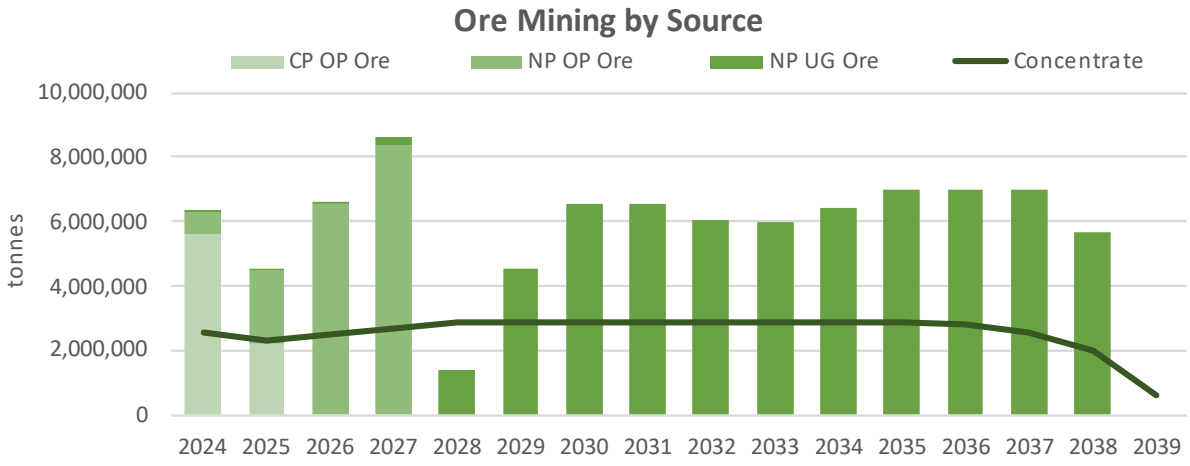


Figure 9 Planned production integration for transition from Open Pit to Underground

The underground material movement is shown in **Figure 10**. Production commences in year 5 and ramps up over 2.5 years. The waste rock is disposed within the existing waste rock dumps or dumped into the open pit. (see Table 1 Note 1)

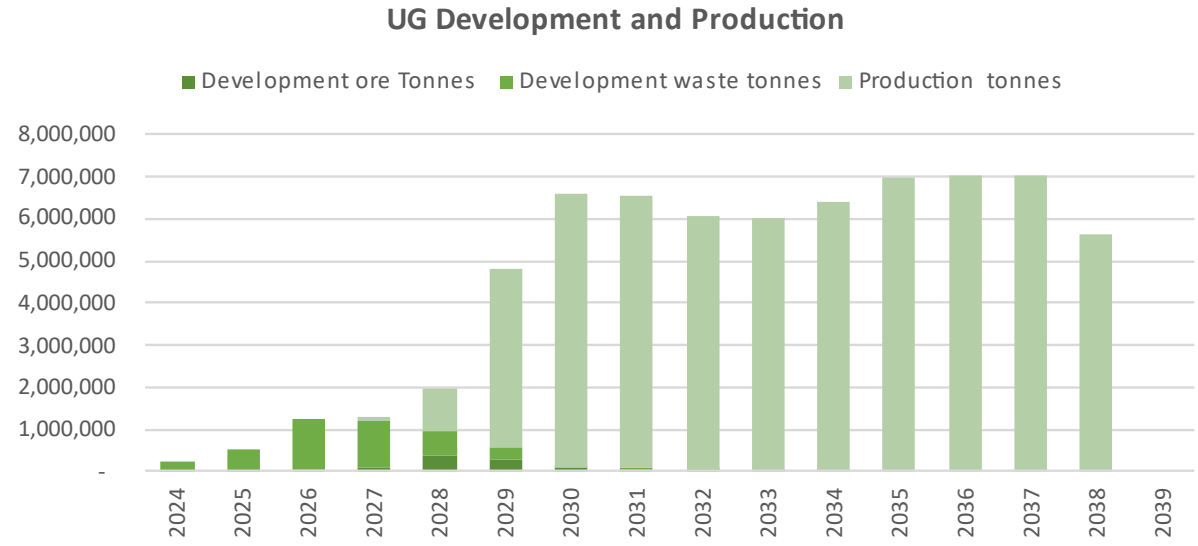


Figure 10. Underground material movement showing development and production ramp-up

(see Table 1 Note 1)

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Capital Cost Estimate

The majority of underground capital costs for the DFS have been built from first principles using supplier and OEM quotes, in-house data, EA agreements and contractor rates and/or industry norms in line with works of a similar nature and have been assessed to be within the accuracy level required by a DFS.

The underground capital costs for the BC with material handling by underground crushing and conveyor is estimated to be in the order of A$891M. The total capital cost estimates prepared by engineering consultants and Grange complies with the criteria requirement for a DFS accuracy range of ±15%.

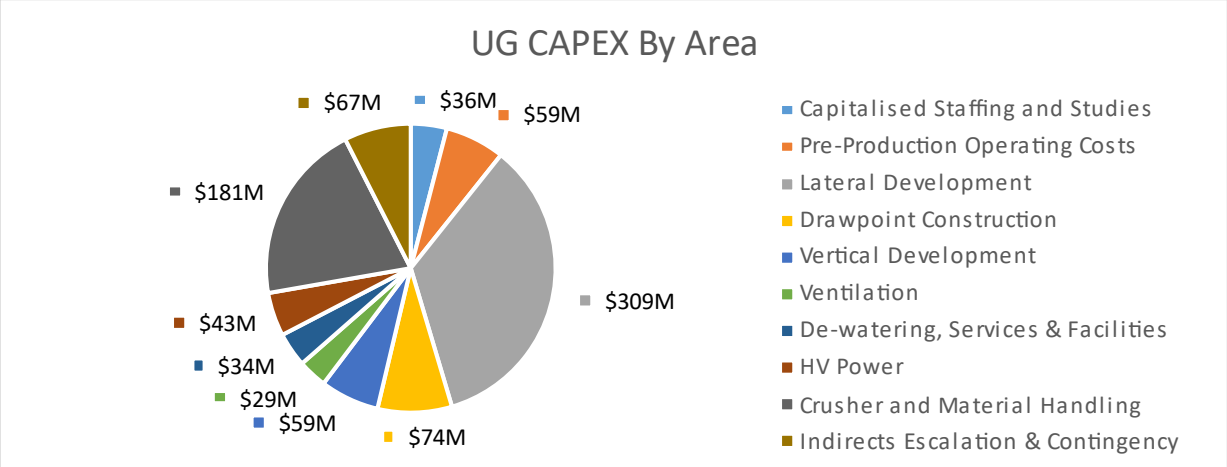


Figure 11 Underground Capital Costs by Major Category (A$M)

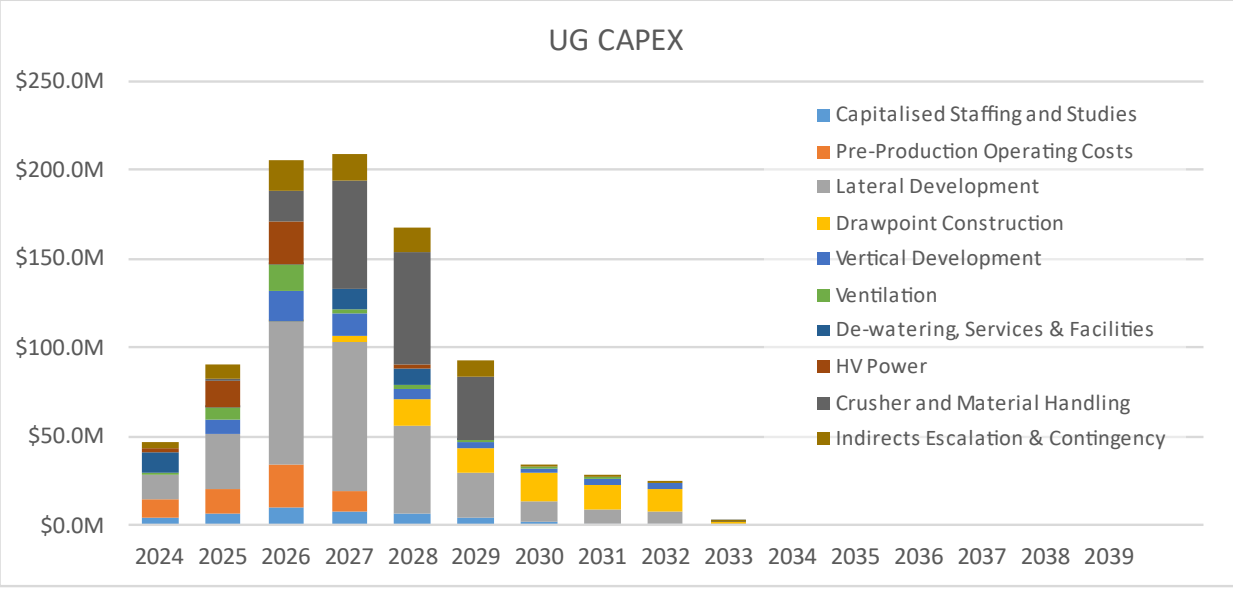


Figure 12 Annual Underground Capital Costs.



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Operating Cost Estimate

Underground mining costs have been built up from first principles and in many cases used actual costs, such as labour rate, from site activities and were finalised in November 2023. An underground benchmarking study of mining productivity and cost estimates for underground mining operations was conducted as part of the DFS. On the basis of the benchmarking works completed the development and production unit costs are reasonable and within industry norms. Infrastructure operating costs have been derived from estimates provided by engineering consultants and from costs at similar mining sites.

C1 costs are total cash operating costs including mining, concentrating, pelletising, and overheads. C1 costs are estimated to be an average of approximately $94/tonne concentrate over the life of the mine and $80/tonne of concentrate once the block cave is in full production after 2030.

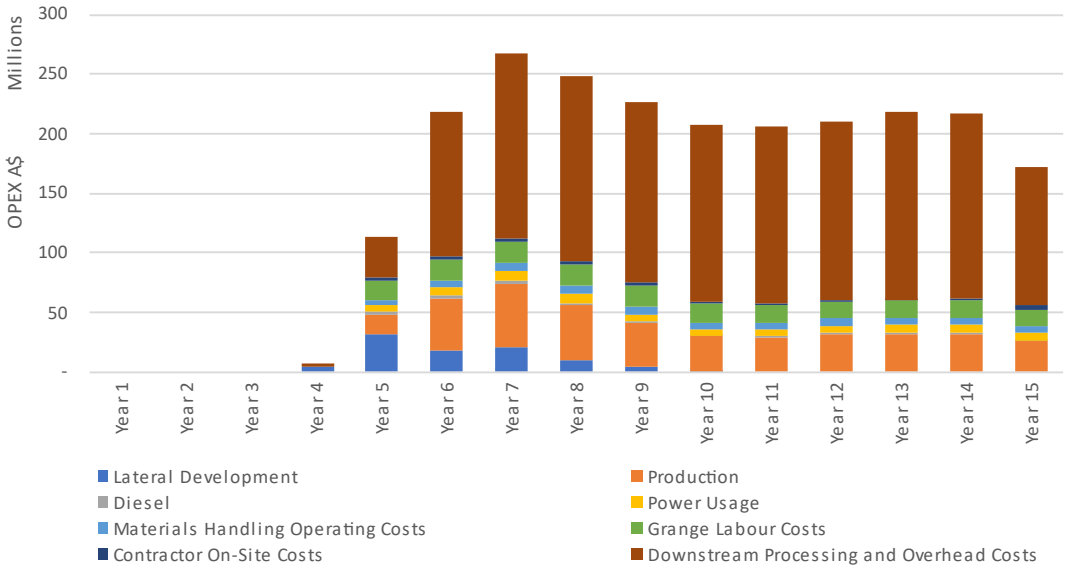


Figure 13 Annual Operating Cost for the DFS Underground Mine

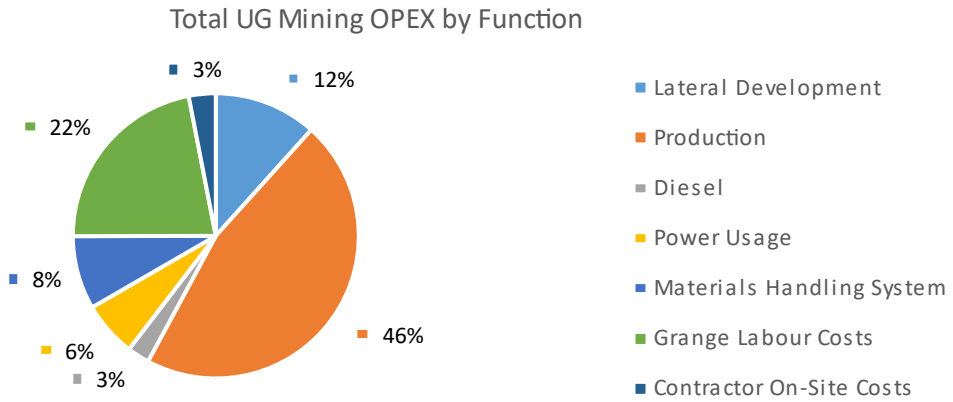


Figure 14 Operating Cost by Area for the DFS Underground Mine

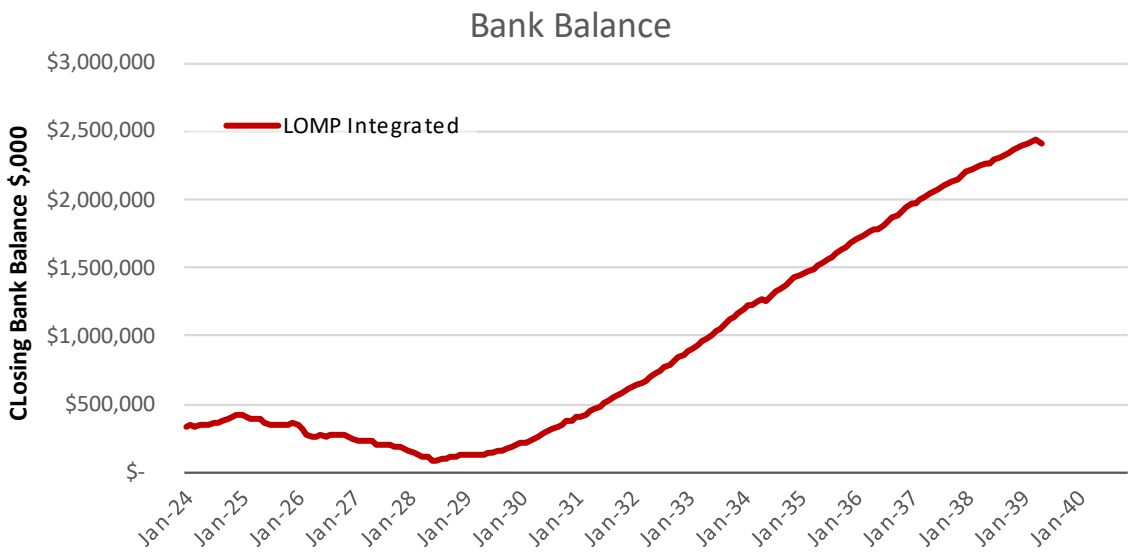


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Project Financial Assessment

The project free cash flows (after tax) were subjected to a discounted cash flow analysis (DCF) using a discount factor of 8.29%. The net present value (NPV) of project Free Cash Flow for the integrated case is approximately A$775M, generating an internal rate of return (IRR) of approximately 34%. The average product price assumed is approximately A$177/tonne.

Current forecast bank balance maintains funds above $60M through the life of mine and finishes with a balance of $2,405M. The current forecast does not include any distributions to shareholders that the board may elect to make in the future.








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Independent Review

The DFS was assessed through an independent review process by industry experts, AMC Consultants. The review was led by Mike Thomas from AMC Consultants and covered:

- Geotechnical investigations and technical application
- Mine design and ventilation
- Ore handling and underground infrastructure
- Water management and mud rush risk
- Development and production schedule
- Implementation planning and
- Capital and operating cost

The review confirms that the critical components reviewed of the DFS have demonstrated the technical and financial viability of the NPUG project based on the development of a block cave mine to a level which is commensurate with generally accepted standards of project development practice.

The reviewers were of the view that the selected base case offers a fair representation of the ore reserve for the accuracy required of a DFS. The reviewers provided endorsement for gating the DFS to execution planning based on the completion of execution planning and integration with the open pit production schedule.

No fatal technical or economic flaws were identified by the reviewers, and they consider the work has been completed to the standard required for a DFS.



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Key Opportunities

There is future opportunity to develop a recovery level from the BC Mine's haulage level to extract unrecovered ore resulting from early drawpoint closure.

There is potential for recovering additional ore from underground and extending the mine life.

In addition, mineralisation narrows and extends to the North and South of the Block Cave and to the North of the SLC Transition Mine footprints. Opportunity exists to expand the respective footprints to access this mineralisation.

Mineralisation also extends at depth which may be accessed by extending the decline.

Future mine studies are required to evaluate these opportunities which can be explored further in subsequent stages of project development. These extensions may not meet the total production requirements for the concentrator but could be supplemented with ore from Centre Pit or the future development of Long Plains. These options remain available to Grange to continue to extend its mine life at Savage River beyond this study.



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Project Threats

Risk assessments were completed as part of the DFS. A number of Extreme Risks were identified at the start and during the DFS. These extreme risks were predominantly related to inrush and cave management. With the completion of the DFS appropriate controls have been identified and implemented that have mitigated all the extreme risks.

The final DFS Risk Register showed:

- There are no Extreme Risks for the project.
- A total of 14 risks were classified as High.
- These risk assessments cover all major components of the underground project including geotechnical, mining, stakeholder, cost, schedule and hydrological risks.
- Further assessment of risk will be made during the Early Works and Project Readiness program during 2024 to further develop practical controls.

The main High Risks identified included:

- Underground Stability – Fall of Ground causing Injury & loss of access.
- Inrush – Inundation resulting in fatality.
- Blast of Air causing serious injury or damage.
- Interaction with Opencut activities.

Risk management will be an ongoing process in the development of the plans to execute this project. Exclusion and engineering controls have been reviewed to mitigate these risks, with further activities planned to address the High risks and reduce them to as low as reasonably practical. These include:

- Develop a Cave Management Plan, including Inrush Hazard Management Plan
- Re-design the pumping system for additional flows (from 500L/s to 750L/s)
- Contingency planning for a dam to manage additional water flows
- Financial sensitivity analysis of reduced recovery
- Financial sensitivity analysis on drawpoint damage
- Financial Sensitivity analysis on key inputs
- Audit of the cost model
- Develop a draft Project Execution Plan
- Draft a Stakeholder (internal and external) communications strategy



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Further Project Development

The positive results of the DFS and its integration with the current Open Cut mining provides Grange with the confidence to move forward to execution planning and inclusion of the underground mine into our life-of-mine plans.

Supported by the positive results of the DFS, the company is continuing with the decline development. The extension will continue to prepare the mine for underground production and provide additional technical data to further improve confidence in technical and financial models and identify potential methods to reduce risk.

Grange is currently in the process of submitting the development application and Environmental Impact Statement (EIS) to government agencies. Discussions with government agencies are well progressed and all necessary regulatory permits are already in place for the existing open cut mine, processing plant and tailing dams.

Grange looks forward to continuing to report to the market the ongoing company development strategy and our vision towards delivering this next phase of high quality, low carbon emission, magnetite.

Key Development	Indicative timeframe
Commence extension to the underground exploration development	Completed January 2024
Complete optimised integration with the open pit schedule	H1, 2024
Complete early works enterprise financial modelling in preparation for Budget 2025	H2, 2024
Receive final development and environmental permitting	H2, 2024
Complete decline extension development and data collection	H2, 2024
Final Board approval for construction	H2, 2024



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ABOUT GRANGE RESOURCES

Grange Resources Limited (Grange or the Company), ASX Code: GRR, is Australia's most experienced magnetite producer with over 55 years of mining and production from its Savage River mine and has a projected mine life beyond 2038. Grange produces a high-quality iron ore pellet with low levels of impurities that support reduced environmental impacts for end users.

Grange's operations consist principally of owning and operating the Savage River integrated iron ore mining and pellet production business located in the north-west region of Tasmania. The Savage River magnetite iron ore mine is a long-life mining asset. At Port Latta, on the north-west coast of Tasmania, Grange owns a downstream pellet plant and port facility producing more than two million tonnes of premium quality iron ore pellets annually.

Grange has a combination of spot and contracted sales arrangements in place to deliver its pellets to customers throughout the Asia Pacific region. In addition, Grange owns the major magnetite development project at Southdown, near Albany in Western Australia.

This announcement has been authorised by the Board of Directors of the Company

For further information please contact:

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The Definitive Feasibility Study referred to in this ASX release has been undertaken for the purpose of evaluating the technical and economic aspects of the potential development of an underground mine at Savage River in Tasmania. The DFS has been completed to a level of accuracy of +/- 15%.

Mineral Resources converted to Ore Reserves are classified as Measured and Indicated, there is no Inferred Resources included in the production schedule. For full disclosure of Mineral Resources and Ore Reserves please see JORC Statement dated 28th February 2024.

There are currently no material changes to Grange's current financial position or its long-term iron ore sales and it is fulfilling its continuous disclosure obligations.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the DFS.

Competent Person statements

The information in this announcement relating to estimates of Mineral Resources or Ore Reserves is extracted from the ASX announcement Annual Reserve and Resource Statement December 2023 released on 28th February 2024, immediately before this announcement which is available on www.grangereources.com.au. The company confirms that it is not aware of any new information or data that materially affects the information included in that earlier market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement. The company confirms that the form and context in which the Competent Person (being, Mr Ben Maynard) findings are presented have not been materially modified from the original market announcement.

-ENDS-