Level 9, 2 Mill Street
Perth WA 6000

T 61 8 8317 1700
E info@corelithium.com.au

ABN 80 146 287 809
ASX CXO

CORE LITHIUM

14 May 2025

ASX: CXO Announcement

Finniss Repositioned as a Highly Attractive Low-Cost Operation with a 20-Year Life

For personal use only

Highlights

Lean, Long Life, Underground Operations

- The Restart Study (**Study**) confirms the potential for an attractive 20-year mine life
- High confidence production plan with 94% of the first 10 years backed by Ore Reserves[1]
- Underground mining capitalises on the high-grade, continuous and steeply dipping orebodies that are open at depth

Highly attractive Cost Structure and Productivity Gains

- Mining costs reduced by 40%[2] to $63–$72/t[2] (from $120/t[2])
- Processing costs cut by 33%[2] to $40–$46/t[2] (from $69/t[2])
- Unit operating costs of $690–$785/t[2] (FOB, SC6 eq ex-royalties), placing Finniss among the most competitive global spodumene operations
- Concentrate production lifted 7%[2] to ~205ktpa SC6 equivalent

Plant Optimisation Without Major Capital

- Flowsheet simplified and debottlenecked delivers 20%[2] throughput uplift
- Global recoveries increase to an average of 78%, producing a high quality, coarse-grained concentrate
- Processing plant and infrastructure transitioning to 100% Core-owned, allowing full operational control

Lower Pre-Production Capital and Stronger Economics

- Pre-production capex reduced by 29%[2] to $175–$200M (from $282M[2])
- Free cash flow of $1.2 billion[3] highlights the strength of the reconfigured operation

Strategic Funding Process Underway

- Morgan Stanley Australia Limited appointed as corporate advisor to lead funding strategy, with a focus on minimising dilution for shareholders.
- A Final Investment Decision (**FID**) remains subject to Board approval, contingent on market conditions and securing a suitable funding pathway

1. *Refer to ASX Announcement "Updated Finniss Lithium Project Ore Reserve and Mineral Resource Estimate" on 14 May 2025*
2. *Percentage changes are with reference to amounts disclosed in the 2024 Lithium Ore Reserve Update. Refer to ASX announcement "Lithium Ore Reserve Update" on 25 September 2024. The range disclosed above is inclusive of relevant contingency.*
3. *Based on consensus with a long-term SC6 price of USD 1,330/t CIF and an exchange rate of AUD/USD $0.70.*

Core Lithium Ltd (**ASX**:**CXO**) (**Core** or **Company**) is pleased to present the outcomes of the Study for its Finniss Lithium Operation (**Finniss**, **Project** or **Operation**) located near Darwin in the Northern Territory (**NT**). This announcement contains a short overview of the Study outcomes followed by a technical summary.

Core Lithium's Chief Executive Officer, Paul Brown, commented:

"Our team has always believed in the opportunity at Finniss, and I'm pleased to share the Restart Study with the market today.

The plan we've outlined capitalises on the Project's strengths, including established infrastructure, high-grade ore bodies well-suited to low-cost underground mining and a process plant with proven recoveries and further scope for optimisation.

We've undertaken a rigorous, bottom-up review of every aspect of the operation. The Study brings together our operating experience to deliver a plan that is more robust, more efficient and built for the long term.

At BP33, we are developing a large-scale underground mine. Grants will shift to underground mining, cutting costs and doubling its mine life. Carlton will use Grants' surface infrastructure, supporting a 20 year mine life. Blackbeard offers further potential to extend mine life and expand operations.

Our plant upgrades will improve recovery and reduce contaminants, whilst keeping capital costs low. These improvements include enhanced screening, with more affordable crushing and the addition of a gravity circuit.

This resets Finniss as a more resilient operation to price volatility, and will be a reliable source of high-quality, coarse-grained spodumene concentrate. The Study outlines a lower-cost, longer-life, and scalable operating plan that generates free cash flow of $1.2 billion, representing a six-fold return on pre-production capital.

Core has identified a range of opportunities and is considering multiple funding pathways. Our focus is to secure an option that minimises dilution and maximises value for shareholders.

Finniss remains an important project for the Northern Territory. While no restart decision has been made, there is the potential to create several hundred jobs, many of which would be residential. We've had strong support from the NT Government and look forward to continuing that collaboration.

Finally, I want to thank the Core team and our consultants. This is a substantial piece of work, and the quality of the Study reflects the deep experience and capability of everyone involved."

For personal use only

For personal use only

Cautionary Statement

The Study includes the Grants, BP33, and Carlton deposits, to produce a mine plan and resultant financial evaluation, including the Measured, Indicated, and Inferred Mineral Resources.

The Study includes two levels of accuracy based on the underlying Mineral Resource classification, which include:

- **Pre-Feasibility Study** – The Grants and BP33 Measured and Indicated quantities are considered to be at least to a PFS level of accuracy as defined by the JORC Code.
- **Scoping Study** – The Inferred portion of BP33, the Carlton mining study and processing inputs for these are considered to be at least to a Scoping Study level of accuracy as defined by the JORC Code.

The Scoping Study referred to in this announcement has been undertaken to analyse the economic outcomes of mining Carlton in conjunction with the BP33 and Grants deposits. It is a preliminary technical and economic study of their potential viability. It is based on low-level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further evaluation work and appropriate studies are required before Core will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

The Scoping Study is based on the material assumptions outlined below. These include assumptions about the availability of funding. While Core considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding will likely be required and will be determined by the strategic approach taken to progress the Operation. As the Carlton Scoping Study outcomes are phased after ten years of production, the development of Carlton is expected to be internally funded based on current modelling. Investors should note that there is no certainty that Core will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Core's existing shares. It is also possible that Core could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Core's proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

The Study contains approximately 12.9% of Inferred Mineral Resources. An Inferred Mineral Resource has a low level of confidence than an Ore Reserve or a Measured and Indicated Mineral Resource and there is no certainty that further exploration work will result in the conversion of the Inferred mineralisation into an Ore Reserve or Measured or Indicated Mineral Resource or that the production target itself will be realised.

For full details of the updated Finniss Ore Reserve, including a Competent Person statement. Refer to ASX Announcement "Updated Finniss Lithium Project Ore Reserve and Mineral Resource Estimate" on 14 May 2025.

For personal use only

Study Key Outcomes

The Company has completed a comprehensive, bottom-up assessment of the Operation. The focus has been to develop a new mining and processing plan to reduce the Project's operating and capital cost base and improve operating efficiency. This Study delivers a more resilient operation that will be able to operate through the commodity cycle and deliver significant shareholder value.

The Study includes:

- Optimised mine plans for the Grants, BP33 and Carlton deposits and mining schedules;
- An enhanced process flowsheet and proposed process plant upgrades;
- Detailed operating and capital cost estimates; and
- Future upside opportunities.

An updated Ore Reserve and Exploration Targets for the Blackbeard and BP33 Deeps has also been completed to support the Study and have been released separately by Core today.

The Study demonstrates a robust operation with an updated potential Mine Life of 20 years and future extension potential. The project boasts exceptional potential to grow beyond this Study's production estimate.

Table 1: Study Summary

Key Metrics	Units	Amount
Life of Mine (LOM)	Years	20
Annual production throughput	ktpa	1,200
Ore processed (Ore Reserves)	kt	10,726
Ore processed (feed total)	kt	17,575
Average feed grade	%	1.27
Global recovery	%	78
Nameplate annual concentrate produced (SC6 eq.)	ktpa	205
Concentrate produced (SC6 eq.)	kt	2,911
Operating Costs		
Mining	$/t mined	63 – 72
Processing & tailings	$/t processed	40 – 46
Site General & Administration	$/t processed	9 – 10
Transport	$/t product	22 – 25
Unit operating Costs (FOB SC6 eq. excluding royalties)	$/t	690 – 785
Capital Costs		
Pre-Production Capital	$M	175 – 200
Sustaining Capital	$/t mined	20 – 22

For personal use only

Mining

The updated mine plan for Finniss is based on underground mining. This capitalises on the high-grade, steeply dipping and continuous nature of the ore bodies which are typical of the deposits in the Bynoe Pegmatite Field. Underground mining will significantly reduce waste movements and enable greater control of the quality of feed being delivered to the process plant.

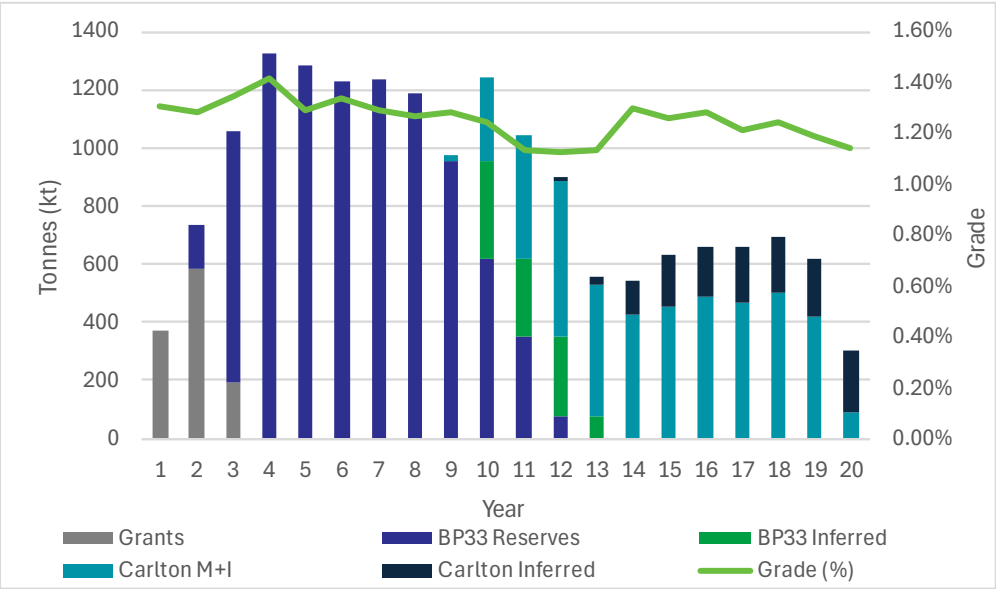
The Study contains more tonnes at a lower cost compared to the previous plan, while maintaining a similar high-grade ore feed of 1.27% Li_2O. The first ten years of the Study mine schedule (Figure 1) is 94% sourced from Ore Reserves.

The Study mine plan will result in a change in the mining method at Grants from open pit to underground and optimised underground mine plans for BP33 and Carlton. Mining will initially be undertaken at Grants. Advancement of underground development at BP33 will be undertaken concurrently with ore from BP33 entering the mine schedule in year two.

A portal will be developed at the southern end of the Grants pit adjacent to the existing haul road. The underground design utilises two mining areas of 25m high stopes. A 1,200m link drive from the Grants pit is also planned to access the Carlton deposit as part of the Study mine plan.

BP33 contributes 85% of ore feed in the first ten years of operation. Mineralisation at BP33 is hosted within a dominant, large, sub-vertical pegmatite body and a smaller sill-like body on the northwestern side. The BP33 pegmatite is 350m in strike length and up to 40m in true width. There is a very strong steep southerly plunge component with a depth extent currently more than 800m. These characteristics make BP33 well suited for highly productive, low cost, Long Hole Open Stoping mining methods. Dual access to the ore body from the decline will allow flexibility in stope sequencing.

Figure 1: Study Mining Schedule



The transition from an open pit to planned underground mine extraction has more than doubled the Grants Ore Reserve. The Study also optimises the BP33 mining method to decrease future development requirements. Accordingly, the BP33 Ore Reserve tonnes has increased by 7%.

For personal use only

Table 2: Statement of Ore Reserves

Deposit	Reserve Category	Tonnes (Mt)	Li_2O (%)	Contained Li_2O (kt)
Grants Underground	Proved	0.87	1.29	11.2
	Probable	0.28	1.36	3.9
	Total	**1.15**	**1.31**	**15.1**
BP33 Underground	Proved	2.56	1.27	32.4
	Probable	6.74	1.32	88.8
	Total	**9.29**	**1.31**	**121.2**
Stockpiles / TSF	Proved	-	-	-
	Probable	0.28	0.68	1.93
	Total	**0.28**	**0.68**	**1.93**
Total	Proved	3.43	1.28	43.6
	Probable	7.30	1.30	94.6
	Total	**10.73**	**1.29**	**138.2**

Less than 25% of the Finniss Mineral Resources have been included in the Ore Reserve, presenting significant scope for extensions to the mine life in future with further drilling and mining studies.

Table 3: Statement of In Situ Mineral Resources

Resource Category[4]	Tonnes (Mt)	Li_2O (%)	Contained Li_2O (kt)
Measured	6.3	1.41	89
Indicated	21.6	1.30	280
Inferred	20.3	1.18	239
Total	**48.2**	**1.26**	**608**

To date, Core has conducted relatively limited exploration drilling outside the Mineral Resource area. As a result, there is substantial potential for the addition of further high-grade resources from regional deposits, which Core intends to assess through future exploration drilling.

In addition to the In Situ Mineral Resources, a total of 310kt @ 0.66% Li_2O Indicated Resources are reported for the Mineralised Material within the Tailings Storage Facility (TSF) and coarse rejects stockpiles located throughout the Project.

4. *The In Situ mineral resource was announced as "Finniss Mineral Resource Increased by 58%" on 11 April 2024.*

For personal use only

Table 4: BP33 & Blackbeard – Exploration Target

Exploration Target	Tonnes (Mt)	Li_2O (%)
Blackbeard	7 – 10	1.50 – 1.70
BP33 Deeps	3.9 – 6.5	1.50 – 1.60

The Exploration Target Estimate for the Blackbeard deposit as well as extension of the BP33 resource at depth have been reported in accordance with JORC 2012 guidelines as summarised in Table 4. Full details are provided in the Updated Ore Reserves release[5].

Figure 2: BP33 Exploration Target[6]

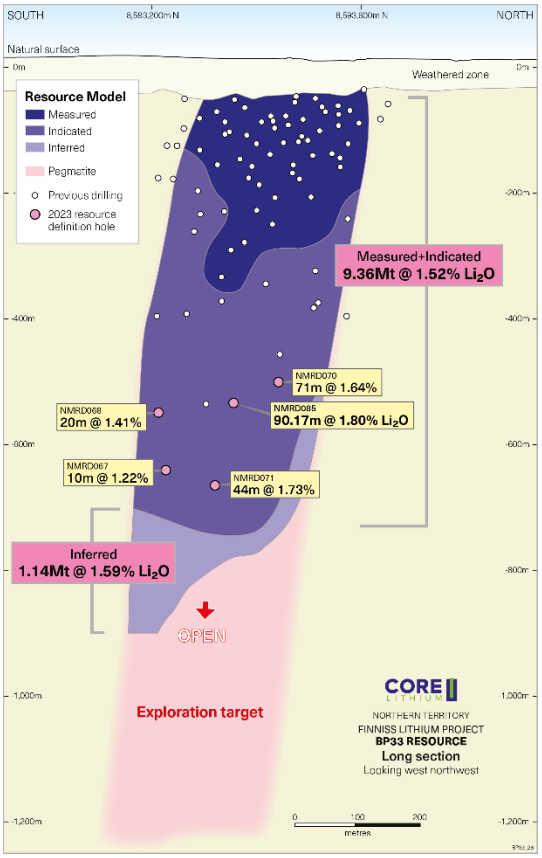
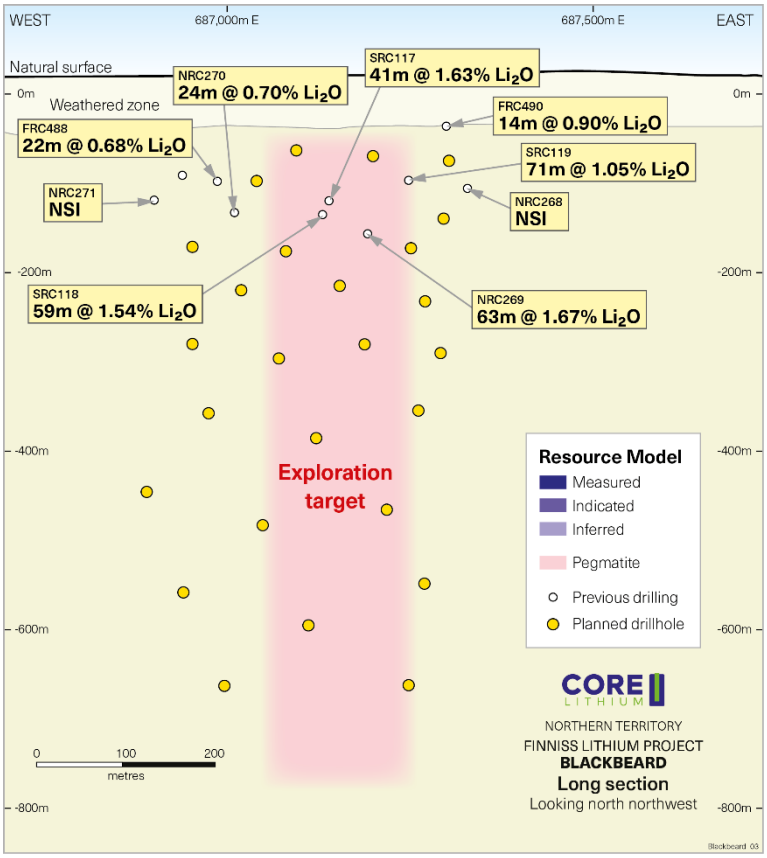


Figure 3: Blackbeard Exploration Target[7]



Cautionary Statement: The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code. The estimated quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

5. *Refer to ASX Announcement "Updated Finniss Lithium Project Ore Reserve and Mineral Resource Estimate" on 14 May 2025.*
6. *Refer to ASX announcement "Mineral Resource at BP33 increased to 89% Measured and Indicated" on 16 October 2023. The BP33 Mineral Resource Estimate (MRE) of 10.5Mt at 1.53% Li_2O was first reported on 16 October 2023. The BP33 MRE is comprised of 2.85Mt at 1.44% Li_2O Measured MRE, 6.51Mt at 1.55% Li_2O Indicated MRE and 1.14Mt at 1.59% Li_2O Inferred MRE.*
7. *Refer to ASX announcement "Significant Increase to Finniss Mineral Resources" on 18 April 2023 and "New high-grade Lithium drill results within 20km of the Grants processing facility" on 6 November 2024.*

For personal use only

Processing

Finniss has a Dense Media Separation (DMS) plant with a nominal processing capacity of 1.0Mtpa that will be expanded to 1.2Mtpa as part of the Study. The plant has been actively maintained by a dedicated team with the expectation that it will be restarted to ensure its value is preserved.

With the recent acquisition of the Crushing circuit, Core will move to 100% ownership of the processing infrastructure.[8]

Crushing and processing activities will be integrated into a more efficient operating model, which forecasts crushing costs to half. This reduction leverages the high return on invested capital identified as part of the Crushing plant acquisition. Overall processing costs will reduce by 33% to $40-$46 per tonne processed.

Within the Study, a detailed program of metallurgical testwork and optimisation studies, was completed both internally and independently. This confirmed that the most cost-effective process plant configuration at Finniss is an enhanced DMS plant without the need to install a flotation circuit. The Study proposes a reconfiguration of the current processing plant. This is designed to increase throughput to 1.2Mtpa and average global recovery to 78% through:

- Adoption of 10mm plant feed size which brings product size distribution within original plant design envelope.
- A gravity separation circuit to process ultra-fine material.
- Reconfiguration of the rolls crusher, into a close circuit, enhancing and improving Ultra fine DMS performance, increasing recovery.
- Increased screening capacity by the simple addition of static screens in front of vibrating screens.
- The Gravity Classifier circuit will also produce a dry stack tailings stream, diverting material that would previously need to be stored at the TSF.

The dry stacked tailing stream will be diverting materials that would previously need to be stored at the Tailings Storage Facility, to be backhauled and used in BP33. This will negate the need for a tails dam lift in the medium term.

In addition to improving recovery, the processing upgrade is forecast to stabilise the concentrate quality, reduce concentrate handling costs, and provide a high-quality and consistent source of underground paste fill material for BP33.

As a result of the above test work and the simplified flow sheet, high cost grinding and a flotation circuit is no longer required.

The DMS plant spodumene concentrate grade, has a design range between 5.0 and 6.0%, providing the Company with material flexibility to tailor its product to maximise value and meet customer requirements over time.

8. *Refer to ASX announcement "Finniss Restart Study and Operations Update" on 27 March 2025*

For personal use only

Operating Costs

The Study incorporates a new operating cost model with refined mining and physical parameters that have reduced total operating costs significantly. The change to an underground mining method for BP33 and Grants has led to a halving in mining costs to $63-72/t. The acquisition of, crushing infrastructure, along with enhanced flow sheet and increased throughput will significantly reduce processing costs by approximately 33% to $40-46/t processed.

Table 5: Operating Cost Summary

Cost Centre	Units	Total
Mining	**$/t mined**	63 – 72
Processing & Tailings	**$/t processed**	40 – 46
General & Administration	**$/t processed**	9 – 10
Transport	**$/t product**	22 – 25
Unit operating Cost (FOB SC6 eq. excluding royalties)*	**$/t**	**690 – 785**

*Unit operating cost (FOB excluding royalties) includes mining, processing, haulage, port charges, and site based general and administration costs. It is calculated on an SC6 equivalent basis.

Upside Opportunities

The Study has identified several opportunities to enhance the restart plan, including pathways to improve returns, extend mine life, and increase production.

Process improvements

Opportunities exist to enhance processing performance by increasing DMS feed efficiency and improving recovery. Further refinement of mining practices may also reduce dilution, contributing to higher feed grades and better plant outcomes.

Increased production and LOM extension

Immediate potential exists to target increased ore production from Finniss to extend the mine life. The Study mine plan only includes the Grants, BP33, and Carlton deposits defined Mineral Resources. Several prospects are planned to potentially increase the LOM mineable quantities in future work programs, these include Blackbeard and BP33 Deeps.

Throughput expansion

Further studies are underway to investigate the potential to increase the plant throughput beyond 1.2Mpta. Potential feed material could be sourced to support this expansion through bringing forward mining at Carlton and the potential addition of Blackbeard with exploration success.

For personal use only

Capital and Funding

The restart of Finniss will require pre-production capital of $175 – $200M.

To fund the Finniss restart, Core continues to advance funding and strategic discussions with potential partners and financiers. Morgan Stanley Australia Limited has been appointed to evaluate the broad range of funding alternatives available to Core. The Company remains focused on minimising equity dilution and maximising value for shareholders.

Core reported a cash balance of $30M as at 31 March 2025 which is sufficient to support current work programs to advance the project and finalise the strategic funding process. FID for the Finniss restart will be subject to the approval of the Core Board and securing a suitably attractive funding option.

This announcement has been approved for release by the Board of Core Lithium Ltd.

For further information, please contact:

Investor Enquiries	**Media enquiries**
Paul Brown	Michael Vaughan
CEO	Executive Director
Core Lithium Ltd	Fivemark Partners
+61 8 8317 1700	+61 422 602 720
info@corelithium.com.au	michael.vaughan@fivemark.com.au

About Core Lithium

Core Lithium Ltd (**ASX**: **CXO**) (**Core** or **Company**) is an Australian hard-rock lithium company that owns the Finniss Lithium Operation on the Cox Peninsula, south-west and 88km by sealed road from the Darwin Port, Northern Territory. Core's vision is to generate sustained shareholder value from critical minerals exploration and mining projects underpinned by strong environmental, safety and social standards.

For further information about Core and its projects, visit www.corelithium.com.au

For personal use only

Important Information and forward-looking statements

This announcement may reference forecasts, estimates, assumptions and other forward-looking statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it cannot assure that they will be achieved. They may be affected by various variables and changes in underlying assumptions subject to risk factors associated with the nature of the business, which could cause results to differ materially from those expressed in this announcement. The Company cautions against reliance on any forward-looking statements in this announcement.

Certain information in this document refers to the intentions of Core. Still, these are not intended to be forecasts, forward-looking statements, or statements about future matters for the Corporations Act or any other applicable law. The occurrence of the events in the future is subject to risk, uncertainties, and other actions that may cause Core's actual results, performance, or achievements to differ from those referred to in this document. Accordingly, Core and its affiliates and their directors, officers, employees, and agents do not give any assurance or guarantee that the occurrence of these events referred to in the document will actually occur as contemplated.

Statements contained in this document, including but not limited to those regarding the possible or assumed future costs, performance, dividends, returns, revenue, exchange rates, potential growth of Core, industry growth or other projections, and any estimated company earnings are or may be forward-looking statements. Forward-looking statements can generally be identified by the use of words such as ‘project,’ ‘foresee’, ‘plan’, ‘expect’, ‘aim’, ‘intend’, ‘anticipate’, ‘believe’, ‘estimate’, ‘may’, ‘should’, ‘will’ or similar expressions. These statements relate to future events and expectations and, as such, involve known and unknown risks and significant uncertainties, many of which are outside the control of Core. Actual results, performance, actions, and developments of Core may differ materially from those expressed or implied by the forward-looking statements in this document.

Such forward-looking statements speak only as of the date of this document. There can be no assurance that actual outcomes will not differ materially from these statements. To the maximum extent permitted by law, Core and any of its affiliates and their directors, officers, employees, agents, associates, and advisers:

- Disclaim any obligations or undertaking to release any updates or revisions to the information to reflect any change in expectations or assumptions.
- Do not make any representation or warranty, express or implied, as to the accuracy, reliability, or completeness of the information in this document or the likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and
- Disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).

For personal use only

Competent Person Statement and JORC Information

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') sets out minimum standards, recommendations, and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves.

The information in this report that relates to Mineral Resources and the Exploration Target is based on information compiled by Dr Graeme McDonald, who is a full-time employee of Core and a Registered Member of the AusIMM and the AIG. Dr McDonald has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the JORC Code.

Reporting of the Mineral Resources Estimate and Exploration Target complies with the recommended guidelines of the JORC Code and is therefore suitable for public reporting.

The information in this report that relates to Ore Reserves is based on information compiled by Mr Tom Joseph, a full-time employee of Core and a registered member of the AusIMM. Mr. Joseph has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

Reporting of the Ore Reserves estimate complies with the recommended guidelines of the JORC Code and is therefore suitable for public reporting.

The estimated ore reserves and mineral resources underpinning the production target have been prepared by competent persons is accordance with the JORC code.

Core confirms that the Company is not aware of any new information or data that materially affects the results included in this announcement as cross referenced in the body of this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource Estimate (MRE) and Ore Reserve Estimate (ORE) 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 announcements.

For personal use only

Restart Study - Finniss Operation, Northern Territory

Core Lithium

TABLE OF CONTENTS

1 EXECUTIVE SUMMARY 1

1.1 Restart Development and Operations Changes 2
1.2 Key Outcomes 3
1.3 Mineral Resources and Ore Reserves 5

2 INTRODUCTION 7

2.1 Study Participants 7
2.2 Property Description and Location 7
2.3 Location 7
2.4 Land Tenure 7

3 ACCESSIBILITY, CLIMATE AND LOCAL RESOURCES 9

3.1 Accessibility 9
3.2 Climate 9
3.3 Local Resources 9

4 HISTORY 10

4.1 Production History 10

5 GEOLOGICAL SETTING 11

5.1 Deposit Geology 11
5.2 Geology and Geometry Context 13

6 MINING 14

6.1 Grants Underground Mine 14
6.2 BP33 Underground Mine 16
6.3 Carlton Underground Mine 20

7 CONSOLIDATED STUDY PRODUCTION SCHEDULE 24

7.1 Study Physicals 24

8 METALLURGICAL TESTING AND PROCESSING 28

8.1 Recent Testwork 28

9 INFRASTRUCTURE AND APPROVALS 30

9.1 Current Tails Storage Facility 31
9.2 Site to Port Facilities 32
9.3 Power Supply 32
9.4 Water Supply 32
9.5 Flood Risk 34
9.6 Environmental and Approvals 34

10 CAPITAL AND OPERATING COSTS 35

10.1 Study Operating and Capital Costs 35
10.2 Royalties 36

For personal use only

LIST OF TABLES

Table 1-1 Study Physicals 3
Table 1-2 Summary of Economic Evaluation 5
Table 1-3 Statement of In Situ Mineral Resources as at 30 April 2025 5
Table 1-4 Statement of Ore Reserves as at 30 April 2025 6
Table 6-1 Grants Mine Design Criteria 14
Table 6-2 BP33 Mine Design Criteria 19
Table 6-3 Carlton Mine Design Criteria 21
Table 7-1 Study Physicals 24
Table 7-2 Study Production plan 25
Table 8-1 Overall Yield and Recovery 28
Table 10-1 Unit operating costs (FOB SC6 eq) by cost centre 35
Table 10-2 Pre-production Capital Cost 35

LIST OF FIGURES

Figure 1-1 Study Mining Schedule 3
Figure 1-2 Study Processing Feed Schedule 4
Figure 1-3 Study Concentrate Produced 4
Figure 2-1 Finniss Project Tenements 8
Figure 5-1 Geology of the Finniss Lithium Project area 12
Figure 5-2 Geological and Geometric Context 13
Figure 6-1 Grants Underground – Mine Design Layout 15
Figure 6-2 Grants Stope Mining Sequence 15
Figure 6-3 Grants Mining Schedule 16
Figure 6-4 Plan View of BP33 17
Figure 6-5 Typical Level Layout 17
Figure 6-6 Long Section View of BP33 stopes 18
Figure 6-7 BP33 Current Boxcut 18
Figure 6-8 BP33 Mine Schedule 20
Figure 6-9 Carlton and Grants Link 22
Figure 6-10 Carlton Panel Layout 22
Figure 6-11 Carlton Mine Schedule 23
Figure 6-12 Carlton Scoping Study +/-10% Sensitivity 23
Figure 7-1 Study Mining Schedule 26
Figure 7-2 Study Processing Feed Schedule 26
Figure 7-3 Study Concentrate Produced 27
Figure 8-1 Proposed Process Flowsheet 29
Figure 9-1 BP33 Infrastructure Layout 30
Figure 9-2 Grants Infrastructure Layout 31
Figure 9-3 Water Supply and Storage Network 33

For personal use only

For personal use only

1 Executive Summary

Core Lithium (**Core**, or the **Company**) has prepared a Restart Study (the **Study**) for the Finniss Lithium Operation (the **Operation** or **Finniss**), which is located approximately 25km from Darwin in the Northern Territory or 88km by road. This technical report (the **Report**) incorporates various studies, both internally and externally of Core and outlines the proposed restart, upside potential, and next steps for the Study.

The Operation includes many lithium deposits, a purpose-built processing plant, and related facilities adjacent to the Grants deposit (**Figure 2-1**), supporting previous operations. All aspects of the Operation are now owned by Core including the recently acquired crushing plant. In addition, all critical infrastructure is in place to support operations for the proposed 20 year mine life. Of significance is that all key approvals are in-place for the restart of the Operation, with no outstanding heritage or biodiversity approvals required for either the proposed changed mining plan or key infrastructure.

Previously, open pit mining commenced in late 2021 at the Grants deposit, followed by Dense Media Separation (DMS) processing in early 2023, producing a lithium concentrate. After the construction of the open pit mine and adjacent processing plant and infrastructure, initial development was undertaken at the BP33 underground deposit located 6km south (**Figure 2-1**). BP33 early works were suspended in late 2023. Mining at Grants was suspended in January 2024 and processing in mid-2024, with all infrastructure placed on care and maintenance for any potential restart.

During the time the plant was operating, several areas of the process underperformed compared to initial design expectations. Feed related issues included higher than design host rock dilution lowering head grade and finer feed particle size distribution resulting in lower than design plant recovery and throughput rates. Additionally, a variety of issues were encountered within the processing circuit including screen constraints and poor rolls crusher performance impacting the ultra-fine dense media circuit recovery.

Following a comprehensive review of the operational performance, technical work, and various optimisation studies, both internally and independently of the Company, the operational restart is based on establishing underground operations at both key deposits of Grants and BP33. The underground mining methodology will minimise host rock dilution in the plant feed. This combined with upgrades to the processing plant addresses historical issues with recovery, throughput and the addition of a Gravity Classification Circuit increases average global recovery to 78%.

As presented in this Report, the Study includes the commencement of underground mining simultaneously at both Grants and BP33 with a ramp-up to production of 1.2 Million Tonnes Per Annum (Mtpa). The Study includes a mining schedule which includes the recently updated Ore Reserves, along with Inferred material from BP33, and the Measured, Indicated, and Inferred material from the nearby Carlton deposit. As noted below, this study includes both a pre-feasibly study (PFS) level of accuracy and a scoping study level of accuracy for separate and defined material in the schedule (see **Section 7**).

It should be noted that all costs are presented in AUD (unless otherwise stated), the economics have been detailed and evaluated on a 100% equity basis, and no adjustment has been made for inflation (real terms basis).

For personal use only

1.1 Restart Development and Operations Changes

The Study focused on optimising the current infrastructure on-site. The review of technical and economic issues during the previous operations highlighted the requirement to take a 'simplistic' operational model moving forward, increasing flexibility in the mine and plant, and allowing an improved control and outcomes-focused approach. As such, the Study, has been designed to build on the current infrastructure and mining approach, debottleneck mining rates and plant throughput, and increase plant recovery. A key outcome of the Study has determined that the highest value is achieved by maximising underground feed from BP33 and Grants and processing this material through an enhanced DMS plant. This negates the need for a flotation circuit, as previously proposed.

Key enhancements include:

- Changing the mining method at Grants from open cut to underground to exploit additional tonnages with less dilution and minimise waste movement requirements.
- Optimising the BP33 mining method to maximise orebody extraction, minimising dilution and accelerate development requirements.
- Increase the Paste Fill plant capacity from 25,000m^3 to 35,000m^3 to debottleneck the underground operation to increase production to 1.2Mtpa while providing paste fill for geotechnical support.
- Adoption of 10mm plant feed size which brings product size distribution within original plant design envelope.
- A gravity separation circuit to process ultra-fine material.
- Reconfiguration of the rolls crusher into a close circuit enhancing and improving Ultra fine DMS performance, increasing recovery.
- Increased screening capacity by the simple addition of static screens in front of vibrating screens.
- The Gravity Classifier circuit will also produce a with a dry stack tailings stream, diverting material that would previously need to be stored at the TSF. Dry stack tailings and rejects materials will be backhauled to be used in BP33 paste fill, negating the need for a tails dam lift in the medium term.

These changes have been designed to optimise throughput to a nameplate of 1.2Mtpa with an average global recovery of 78% over the life of the Operation.

For personal use only

1.2 Key Outcomes

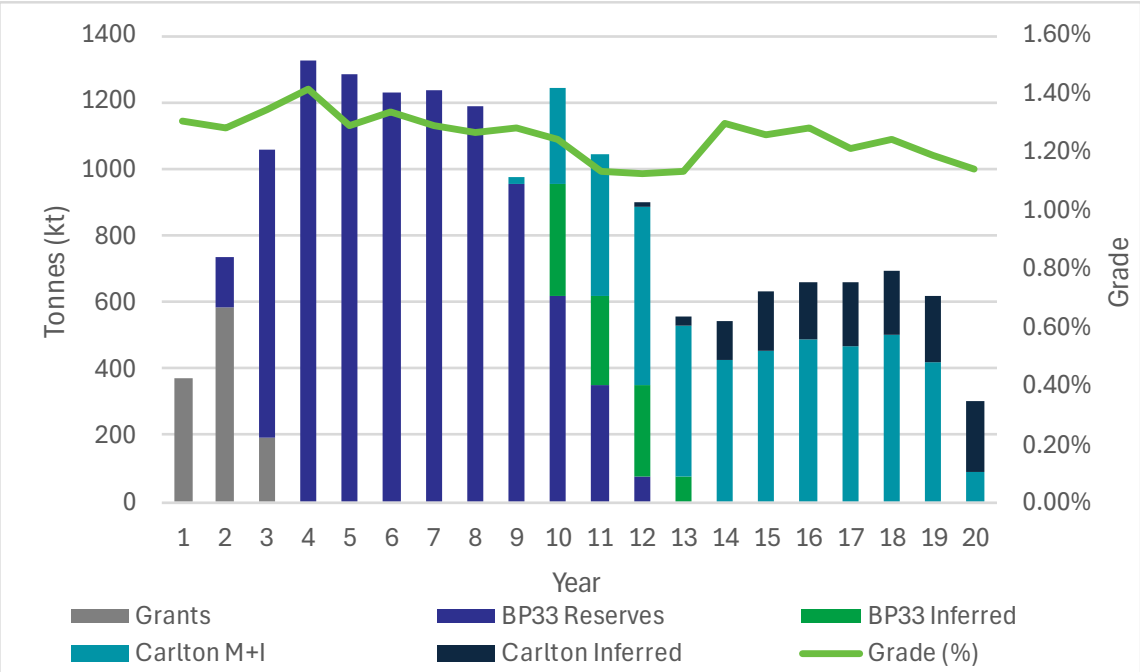
1.2.1 Study Physicals

The key physicals relevant to the Study have been summarised in **Table 1-1** and graphically in **Figure 1-1** through to **Figure 1-3**. Active mining in the Study extends to a potential 20 years. As can be seen in **Figure 1-1** the Inferred material accounts for 12.9% of the total feed and occurs in the second half of the mine life. Further breakdown is supplied in **Table 7-1.**

Table 1-1 Study Physicals

Parameter	Units	Metric
Active Mine Period	Years	20
Ore Processed (Feed total)	kt	17,575
Ore Reserves Processed	kt	10,726
BP33 Inferred Processed	kt	957
Carlton Measured and Indicated	kt	4,586
Carlton Inferred Processed	kt	1,305
Feed Grade (average)	%	1.27
Global Recovery	%	78
Concentrate Tonnes (SC6 eq)	kt	2,911

Figure 1-1 Study Mining Schedule



For personal use only

Figure 1-2 Study Processing Feed Schedule

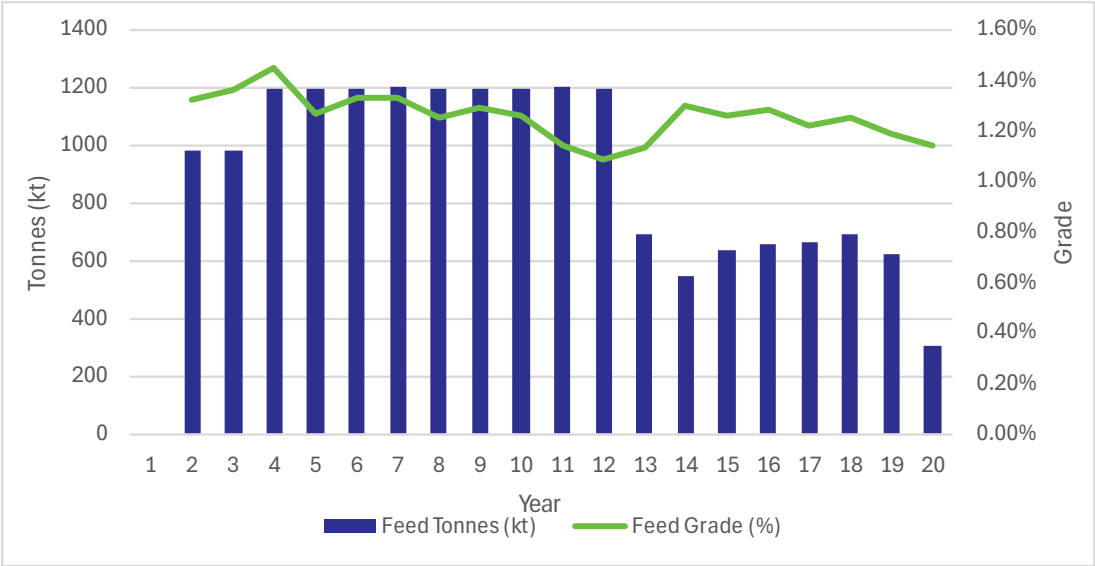
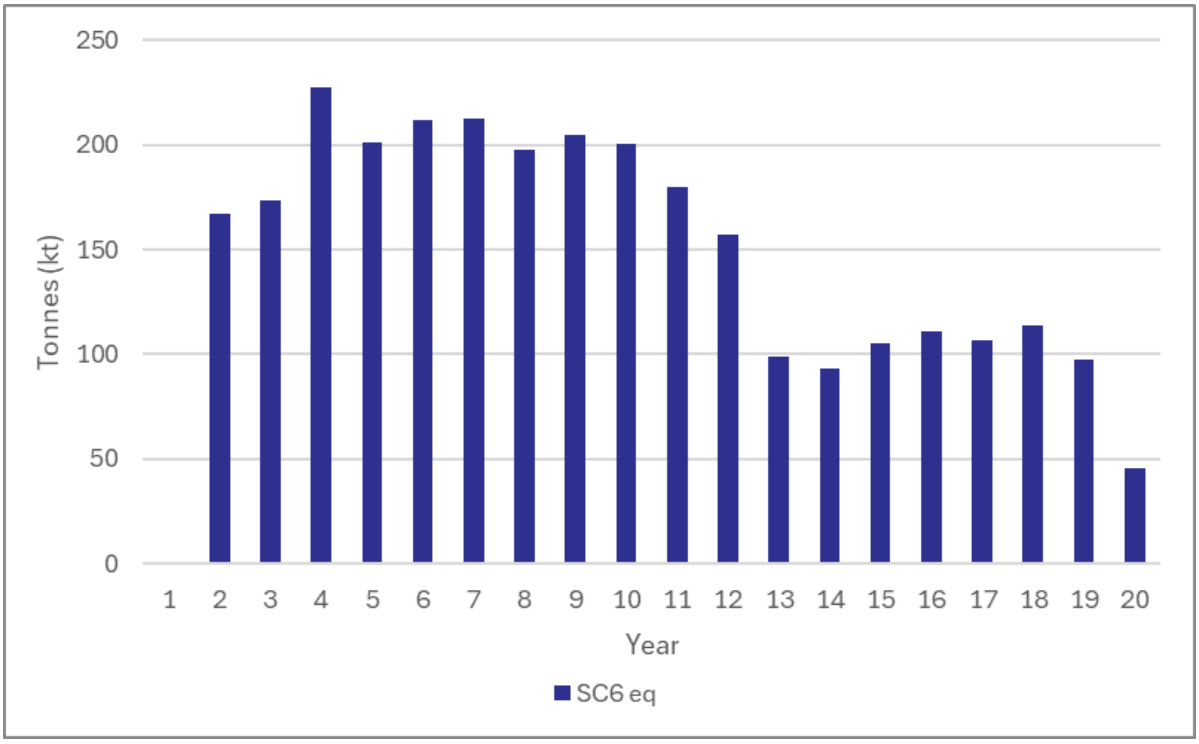


Figure 1-3 Study Concentrate Produced



1.2.2 Economic Evaluation

The economic evaluation of the asset was completed using a discounted cash flow analysis, which confirmed the robust economics of the operation**. Table 1-2** provides a summary of the economic evaluation.

Table 1-2 Summary of Economic Evaluation

Economic Evaluation	Units	Amount
Total Pre Production Capital Costs	$M	175 to 200
Unit operating costs (SC6 eq)[a]	$/t	690 to 785
Free cash flow (FCF)[b]	$M	1,150

a. Unit operating cost (FOB excluding royalties) includes mining, processing, haulage, port charges, and site based general and administration costs. It is calculated on an SC6 equivalent basis.

b. Based on consensus with a long term SC6 price of USD 1,330/t CIF and an exchange rate of AUD/USD $0.70.

1.3 Mineral Resources and Ore Reserves

The information presented below is derived from a separate release provided by Core which includes the Statement of Mineral Resources and Ore Reserves[9].

Results of the Mineral Resources estimate for the Operation are summarised in the Statement of In Situ Mineral Resources in **Table 1-3**, which are reported to be in line with the requirements of the JORC Code (2012). **Table 1-3** presents the In Situ Mineral Resources inclusive of and not additional to the Ore Reserves presented in **Table 1-4.**

Table 1-3 Statement of In Situ Mineral Resources as at 30 April 2025

Resource Category	Tonnes (Mt)	Li_2O %
Measured	6.33	1.41
Indicated	21.6	1.30
Inferred	20.3	1.18
Total	**48.2**	**1.26**

In addition to the In Situ Mineral Resources, a total of 310kt @ 0.66% Li_2O Indicated Resources are reported for the Mineralised Material within the TSF and coarse rejects stockpiles located throughout the project. These Mineral Resources are based on actuals from the operations production records.

9. *Refer to ASX Announcement "Updated Finniss Lithium Project Ore Reserve and Mineral Resource Estimate" on 14 May 2025*

For personal use only

1.3.1 Ore Reserve

The Ore Reserves have been estimated at 10,726kt @ 1.29 %, as summarised in **Table 1-4.** The Ore Reserves are estimated based on the Mineral Resources block model, relevant modifying factors, Mineral Resource classification, and supporting financial model and reported at $110/t NSR basis.

Table 1-4 Statement of Ore Reserves as at 30 April 2025

Type	Classification	Quantity (kt)	Li_2O (%)
BP33	Proved	2,554	1.27
	Probable	6,736	1.32
Grants	Proved	870	1.29
	Probable	284	1.36
TSF/Stockpiles	Proved	-	-
	Probable	283	0.68
Combined	**Proved**	**3,424**	**1.28**
	Probable	**7,302**	**1.30**
	Total	**10,726**	**1.29**

Notes:

- *The Ore Reserves have been reported on a 100% equity basis.*
- *Ore Reserves are reported in accordance with the JORC Code (2012).*
- *Ore Reserves are reported on a dry basis and in metric tonnes.*
- *The totals contained in the above table have been rounded with regard to materiality. Rounding may result in minor computational discrepancies.*

For personal use only

For personal use only

2 Introduction

Core has prepared a Study for the Finniss Lithium Operation, which is located in the Northern Territory, approximately 25 km from Darwin or 88 km by road. The Operation includes several lithium deposits, a processing plant, and related facilities adjacent to the Grants deposit (**Figure 2-1**).

2.1 Study Participants

Core's Executive and technical team has worked collaboratively with various independent experts to compile this Study. Key areas include:

- Mine design and scheduling
- Geotechnical/ Hydrology
- Ventilation
- Processing Testwork and Flowsheet design
- Compliance and Reporting
- Independent Project Review

2.2 Property Description and Location

The Finniss Operation is owned and operated by Core. Open pit mining at the Grants deposit and processing using DMS to produce a lithium concentrate commenced in early 2023. After construction of the open pit mine and adjacent processing plant and infrastructure, initial development was undertaken at the BP33 underground deposit located 6 km south (**Figure 2-1**). BP33 early works were suspended in late 2023. Mining at Grants was suspended in January 2024 and processing in mid-2024, with all infrastructure placed on care and maintenance for any potential restart.

2.3 Location

The Operation is located in the Northern Territory, approximately 25 km from Darwin or 88 km by sealed road (**Figure 2-1**). A major bulk handling port (operated by a third party) is located 88 km by road, which various parties use for international export of products. **Figure 2-1** details the Operation's location, Port of Darwin, and key infrastructure locations.

Figure 2-1 depicts key elements of the regional setting, incorporating natural and built features such as rivers and creeks, water supply dams, conservation reserves, state forests, main roads and highways, rail lines, and towns.

2.4 Land Tenure

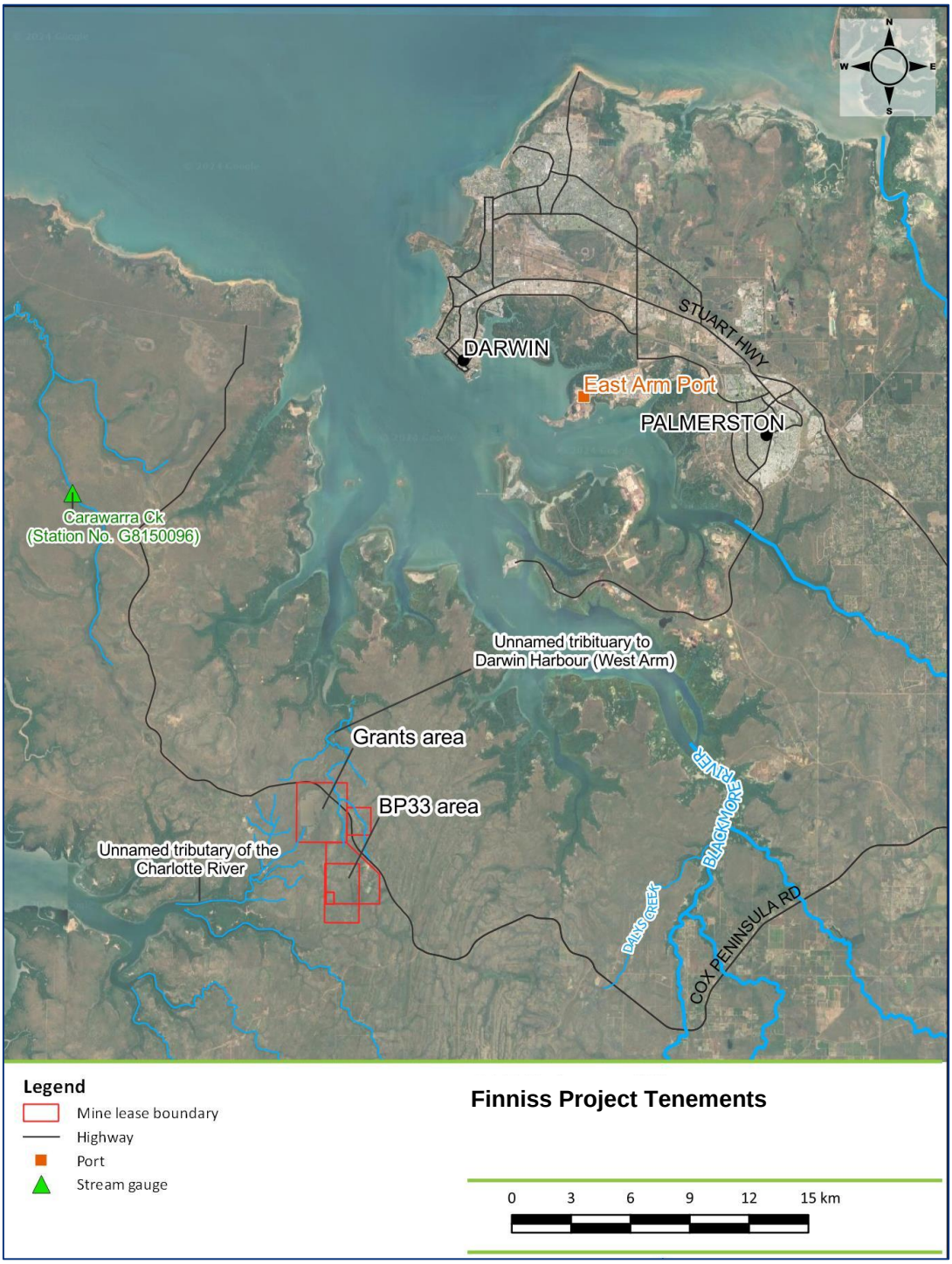
The Operation covers an area of approximately 500 km^2. It is made up of Mining Leases (**Figure 2-1**) and Exploration Leases including EL29698, EL29699, EL30012, EL30015, EL31126, EL31127, EL31271, EL31279, EL32205, ML29912, ML29914, ML29985, ML31654, ML31726, ML32074, ML32278, ML32346, MLN16, MLN813 and MLN1148.

The mining leases which comprise the Operational area lie on vacant crown land. The exploration licenses occur on a combination of vacant and privately leased crown land.

Across the tenure, there are known Aboriginal sacred sites and archaeological and heritage sites. All known are referenced in the AAPA certificate Core obtained over its mining leases. All sites are avoided with compliance managed as part of an established Environmental Management System (EMS). The tenements are in good standing with respect to statutory requirements of the Minerals Titles Act (2010) and all necessary access agreements are in place.

For personal use only

Figure 2-1 Finniss Project Tenements



For personal use only

3 Accessibility, Climate and Local Resources

3.1 Accessibility

The Operation is located adjacent to a Rural Arterial Road that connects to Darwin, which is constructed to a high standard and is maintained and owned by the Northern Territory government. It is an established heavy haulage route with the Operation accessed via a purpose-built access road to the site.

The Darwin International Airport is approximately 90 km north and connects to all major centres in Australia as well as international destinations. A third party-operated port is available at Darwin, 88 km, which was previously used to export products to the market.

3.2 Climate

The Operation and the surrounding area climate are considered tropical savanna, with a Köppen and Geiger classification of Aw. Summers generally have higher rainfall and temperatures than the winters, with an average annual temperature of 27.4 °C and annual rainfall of 1,873 mm. Being a tropical climate, the precipitation varies substantially during the year, with the difference between the lowest and highest levels of rainfall being 441 mm. The variation in temperatures throughout the year is significantly lower at 4.0 °C.

3.3 Local Resources

Core intends to re-establish a skilled, predominantly local workforce based in Darwin and surrounding communities. The Company has direct experience with the quality and capability of personnel in the region from prior operations and is confident in the availability of talent to support a successful restart. Vendors and service providers are well established, with reliable freight and logistics networks across the Northern Territory and interstate, ensuring strong operational support.

For personal use only

4 History

The Bynoe Pegmatite Field has a long history of tin and tantalum (Sn-Ta) production, spanning over a century. Remains of historical workings are evident today as shallow open pits, eluvial scrape and shafts. Despite the long-lived exploration and mining history, the region's potential as a globally significant lithium district was not recognised until mid-2016.

Core commenced exploration in 2016 and by 2017 had defined the first lithium mineral resource at Grants. Core's exploration has consisted of regional geophysical programs including aeromagnetics, gravity and remote sensing, as well as geochemical soil, auger and shallow RAB drilling. Targets have been followed up with bedrock RC and diamond drilling, which has successfully grown the resource size to include BP33, Carlton, Lees-Booths, Ah Hoy, Hang Gong, Seadog, Penfolds, Bilatos and Sandras.

4.1 Production History

The Finniss Project commenced production in late 2022 following a rapid development phase designed to capture value during a period of strong lithium pricing. The development approach prioritised speed to market over full optimisation of cost and recovery outcomes, enabling early cash generation.

Initial mining was undertaken via open pit methods at the Grants deposit. The pit design resulted in a materially higher strip ratio than typical for hard-rock lithium operations, which contributed to a relatively high unit cost base. In addition, dilution from host rock, driven by the blasting of pegmatite and surrounding material in a single pass, negatively impacted feed grades and plant recovery.

Processing commenced in 2023 using a DMS circuit based on testwork at a commercial laboratory, incorporating a 6.3mm top size and three-stage separation with re-crush. Early performance was constrained by a finer-than-expected feed size distribution, equipment limitations, and screen capacity. Over the first six months, the plant averaged 46.6% global recovery and 11.7% yield, producing a 5.35% Li_2O concentrate.

Performance improved steadily as operational adjustments were implemented. These included an increase in crush size to 10mm, improved feed blending and process control, screen upgrades, and circuit reconfiguration. By April 2024, the plant achieved 64.4% global recovery and an 18.0% yield. These outcomes demonstrate the plant's ability to achieve 65.0% recovery when operating with a 1.40% feed grade.

For personal use only

5 Geological Setting

The Lithium deposits at the Finniss Lithium Project are hosted within rare element pegmatites of the broader Bynoe pegmatite field. The Bynoe Pegmatite Field is 15 km south of Darwin and extends for up to 70 km in length and 15 km in width (**Figure 5-1**). Over 100 pegmatites are known, with individual pegmatites varying in size from a few metres wide and tens of metres long up to tens of metres wide and hundreds of metres long. The pegmatites are predominantly hosted within the early Proterozoic metasedimentary lithologies of the Burrell Creek Formation and are usually conformable to the regional schistosity. The Bynoe pegmatites are classified as LCT (Lithium-Cesium-Tantalum) type and are believed to have been derived from the ~ 1845 Ma S-Type Two Sisters Granite that outcrops to the west. The Two Sisters Granite is considered to dip to the east under the Burrell Creek Formation.

5.1 Deposit Geology

The Grants pegmatite body is broadly lozenge-shaped, tapering from 20-40m wide in the middle to <5m at the northern and southern ends, plunging to the south at approximately 60 degrees. Parts of the body swell down-plunge while other parts contract. Overall, the pegmatite maintains a consistent shape and internal structure. There is little evidence for brittle structures or fault offsets.

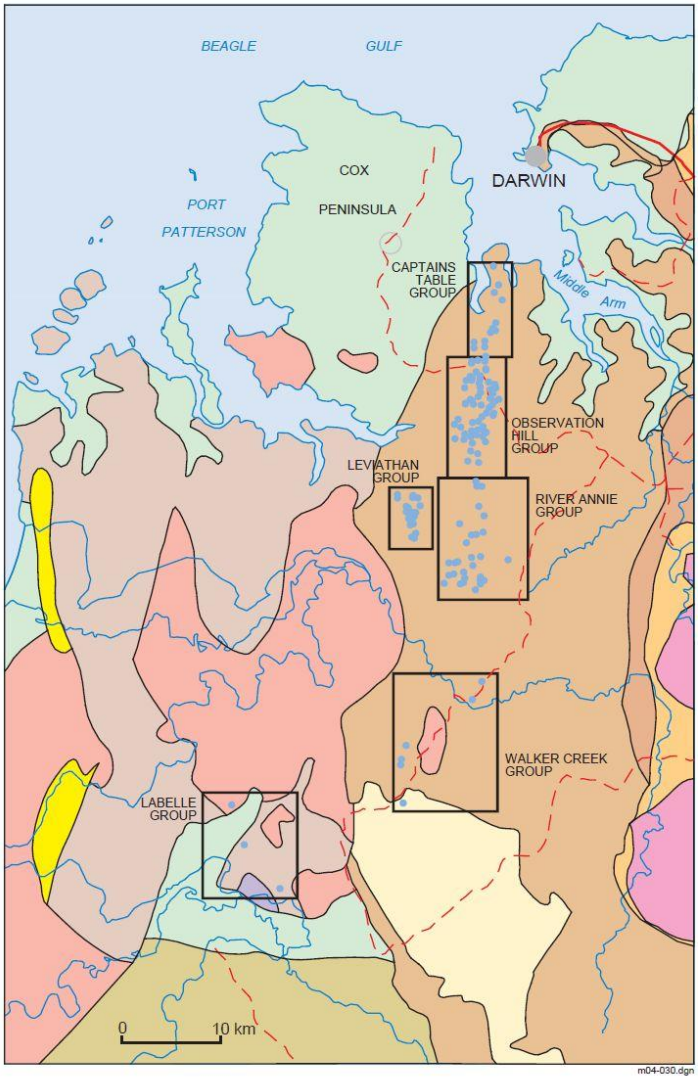
Mineralisation at BP33 is hosted within a large, dominant, sub-vertical pegmatite body and a smaller sill-like body on the northwestern side. The BP33 pegmatite is interpreted to be approximately 350m in strike length and up to approximately 40m in true width. There is a very strong steep southerly plunge component with a depth extent currently more than 800m. The orebody remains open at depth. In the north, the body strikes towards 045˚ and dips steeply to the east. Approximately halfway along the body to the south, the strike changes to due south, and the body dips steeply to the west. The pegmatite body also thins in a southerly direction, and the average grade of the mineralisation also decreases to the south.

The Carlton deposit is an NNE-striking, steeply east-dipping and south-plunging pegmatite body with a strike length of 280m and true width of up to 25m (average 15m). It has currently been modelled down-plunge to a depth in excess of 800m. A mineralised shallow dipping pegmatite sill exists at the southern end of the main pegmatite body.

Fresh pegmatite at Grants, BP33 and Carlton is composed of coarse grained spodumene in addition to quartz, albite, microcline, and muscovite (in decreasing order of abundance). Spodumene, a lithium-bearing pyroxene ($LiAl(SiO_3)_2$), is the predominant lithium-bearing phase. There is no consistent zonation to the pegmatites other than a thin (1-2m) quartz-mica-albite wall facies at the contact with the host rock.

For personal use only

Figure 5-1 Geology of the Finniss Lithium Project area



CENOZOIC

- Ferruginous soils, laterite, stream and marine alluvium

PALAEOZOIC

- Daly River Group: siltstone, dolomitic siltstone and limestone

NEOPROTEROZOIC

- Depot Creek Sandstone: sandstone and conglomerate

MESOPROTEROZOIC

- Moyle River Formation: arenite and intraformational conglomerate

PALAEOPROTEROZOIC

- Rare-element pegmatite
- Two Sisters and Wagait granites
- Wangi Basics: metagabbro, diorite and ultramafic rocks
- Welltree Metamorphics: schist and gneiss
- Burrell Creek Formation: siltstone, shale, phyllite, arenite and schist
- South Alligator Group: carbonaceous and ferruginous shale, carbonate and tuff
- Mount Partridge Group: shale, siltstone, sandstone, quartzite and marble

ARCHAEAN

- Rum Jungle Complex: granite, gneiss and schist

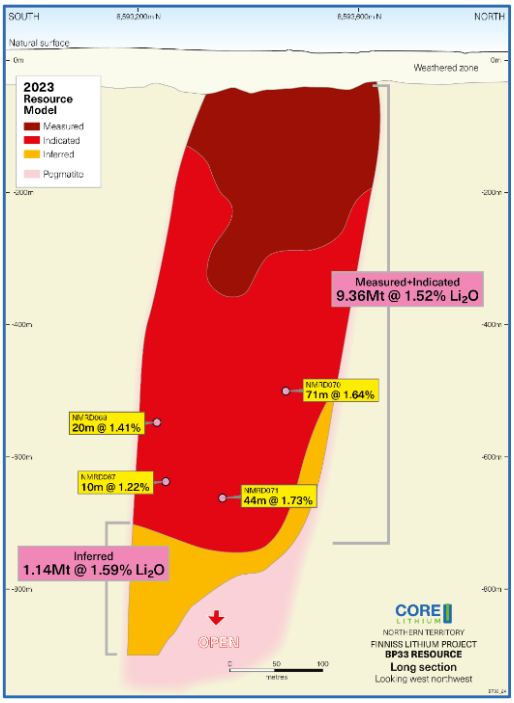
5.2 Geology and Geometry Context

To put the Finniss project into context, an understanding of the geology, the geometry of the deposit is critical.

Mineralisation at BP33 is hosted within a dominant, large, sub-vertical pegmatite body and a smaller sill-like body on the northwestern side. BP33 pegmatite is interpreted to be approximately 350m in strike length and up to approximately 40m in true width. There is a very strong steep southerly plunge component with a depth extent currently more than 800m. In the north, the body strikes towards 045˚ and dips steeply to the east.

Of note is the key variation of a steeply dipping body vs shallow dipping thinner bodies. This is extremely important as shallow dipping orebodies are proven significantly harder to mine, with higher costs, ore loss, and dilution increases, all of which impact the operational performance of the project. This contrasts to the Finniss ore bodies, which are predominantly sub-vertical, large, thick and homogeneous, allowing for much easier controls on mining and designs.

Figure 5-2 Geological and Geometric Context



For personal use only

For personal use only

6 Mining

Prior to the suspension of operations in 2024, mining of the Grants open pit was undertaken by a contractor, using conventional open pit mining methods with 120t and 200t class excavators and 90t class trucks on 5 m benches with 2.5 m flitches prior. Pre-strip of weathered and transitional material occurred within the top 40 to 50 m of vertical depth from surface before encountering fresh rock exposure of the ore. All material (ore and waste) was required to be drilled and blasted, except the oxidised pegmatite and phyllite waste, which varies in depth between 30 and 50 m from surface, which was predominately free dig. The Mining Contractor was also responsible for pit dewatering, pit surface water management, heavy and light vehicle maintenance, and day-to-day responsibility for the mining operation. Core undertook the overall site management and administration.

Upon restart of operations, initial ore is planned to be sourced from mining both the Grants and BP33 deposits via underground mining methods. It is expected that other Finniss deposits will be developed towards the end of the project life and will use certain relocated BP33 surface infrastructure items to minimise capital investment.

6.1 Grants Underground Mine

6.1.1 Grants Portal Location

The portal for the mine design is located at the southern end of the pit, adjacent to the existing haul road at approximately –40 m RL. This location provides efficient access to the Grants underground mine while allowing the lower levels of the pit to be used as a sump and water storage area. This setup facilitates the removal of the crown pillar at the end of the mine's life and, importantly, provides decline access to the Carlton deposit.

6.1.2 Mine Design

Various underground designs and mining sequences were considered part of this Study. Core's selected underground design utilises two mining areas of 25 m high stopes separated by a 15 m sill pillar and incorporating 30 m crown pillar. The mining sequence used is top-down from both mining areas concurrently. Stopes are to remain open, not filled. The crown pillar is sequenced to be mined from both ends, retreating towards the level access.

Table 6-1 summarises the Grants mine design criteria.

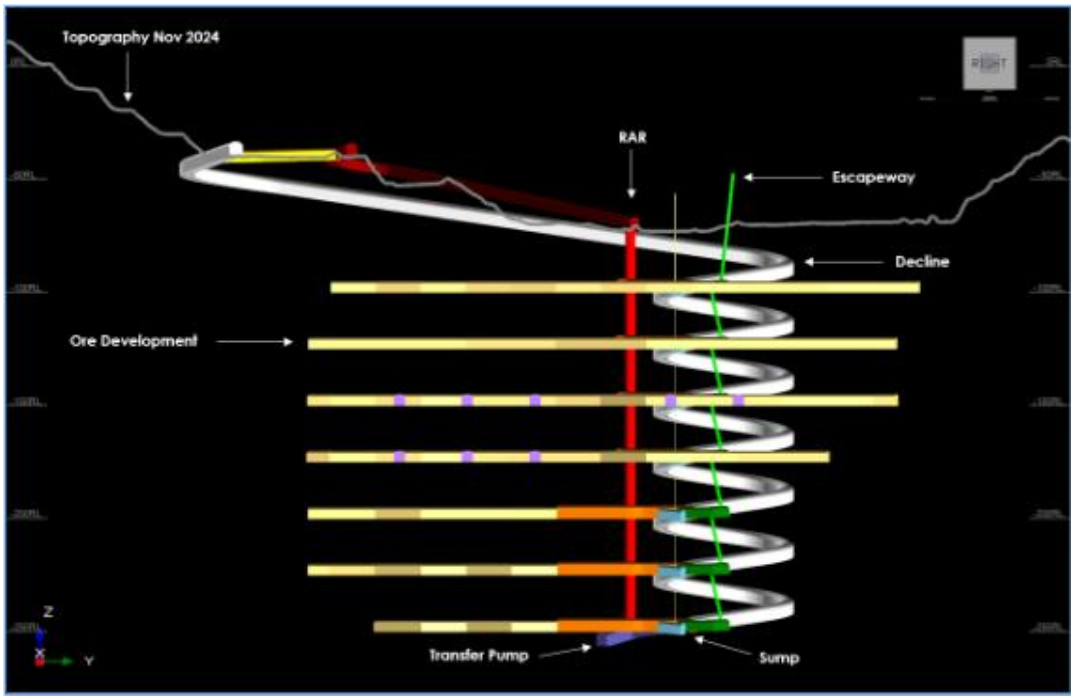
Table 6-1 Grants Mine Design Criteria

Key Mine Metrics	Value
Dimensions	
Decline	6.5m x 6.5m
Access	5.5m x 6.0m
Stockpile	5.5m x 5.5m
Ore drives	5.0m x 5.0m

For personal use only

The mine design and level layout are shown in **Figure 6-1** and **Figure 6-2,** respectively.

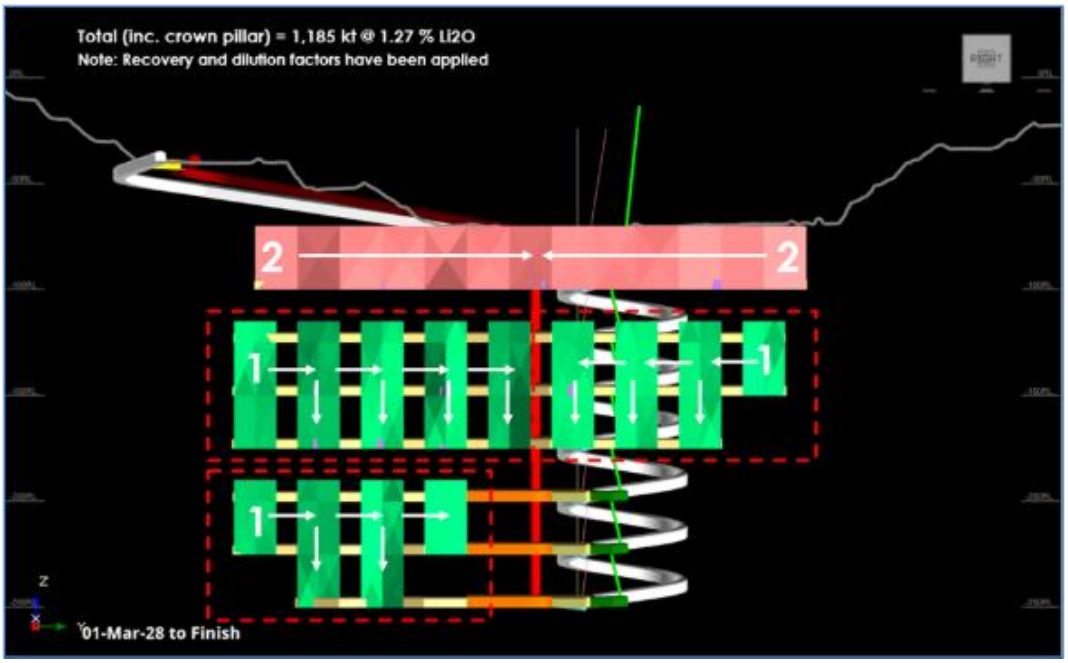
Figure 6-1 Grants Underground – Mine Design Layout



6.1.3 Stope Sequencing

Each level will be mined concurrently, with pillars to provide regional stability. The mining sequence designed was top-down from both mining areas concurrently with the crown pillar sequenced to be mined from either end, retreating towards the level access (**Figure 6-2**).

Figure 6-2 Grants Stope Mining Sequence



For personal use only

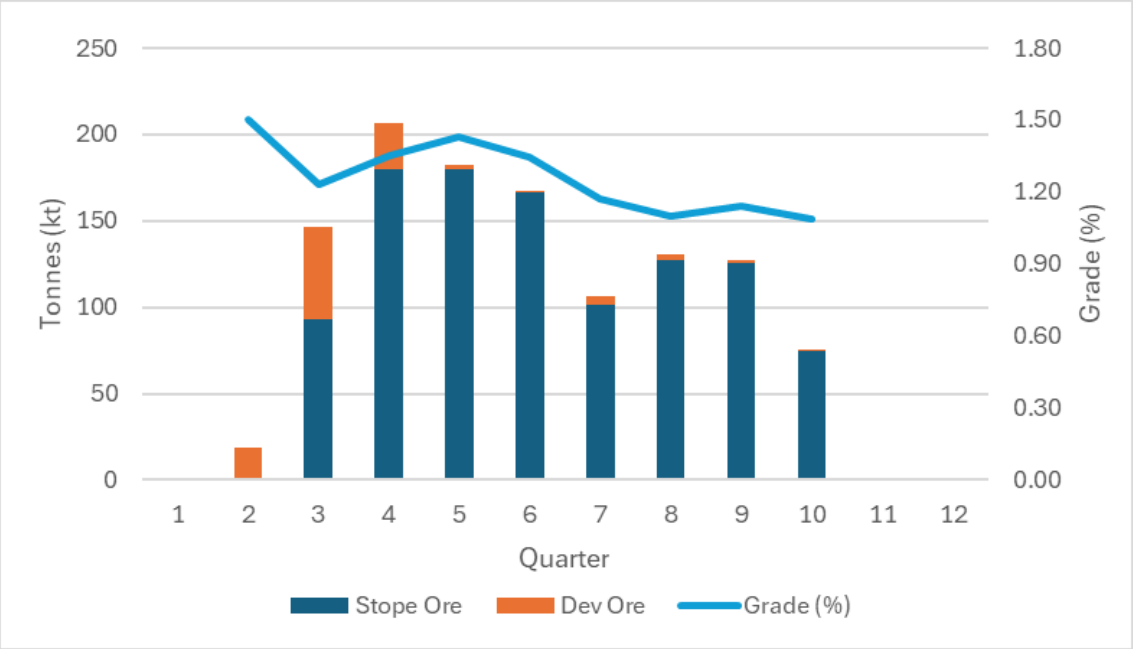
6.1.4 Ventilation

Based on the mine design, Grants will require 365m³/s of airflow over the life of mine.

6.1.5 Mine Schedule

The key outcomes of the Study mining and production schedule for Grants are summarised in **Table 7-2** and shown graphically in **Figure 6-3**.

Figure 6-3 Grants Mining Schedule[10]



6.2 BP33 Underground Mine

BP33 is planned to be mined using the Long Hole Open Stoping (LHOS) method in a combination of transverse and longitudinal configurations. Sublevels have been designed to 45 m with sill pillars every 90 m above 400 m depth and 30 m sublevels below **(Figure 6-4** and **Figure 6-5**). Dual access is planned for the ore body from the decline to allow flexibility in stope sequencing. Stopes are planned to be mined from two directions in a centre-out sequence commonly used in the industry, with variations between the north and south domains based on the geometry of the ore body.

Following completion of the stoping, each of the stopes will be backfilled by paste fill or a combination of paste and rock fill. Backfilling is planned to ensure geotechnical stability and maximise ore extraction.

Below is a summary of the mine design parameters and stope sequencing applied for the schedule as presented in this Report.

10. The amounts presented above for Stope Ore and Development (Dev) Ore and Grade are approximate estimates, reflecting the level of accuracy appropriate for a Scoping Study.

For personal use only

Figure 6-4 Plan View of BP33

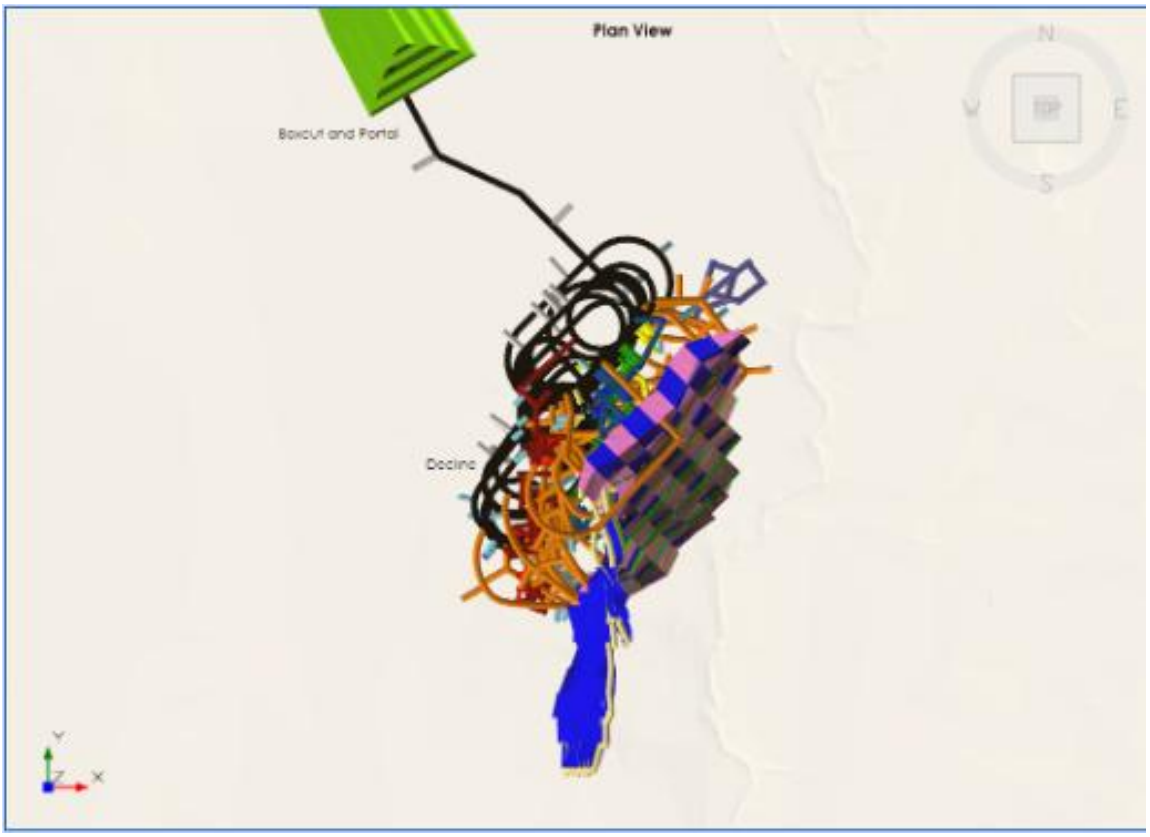
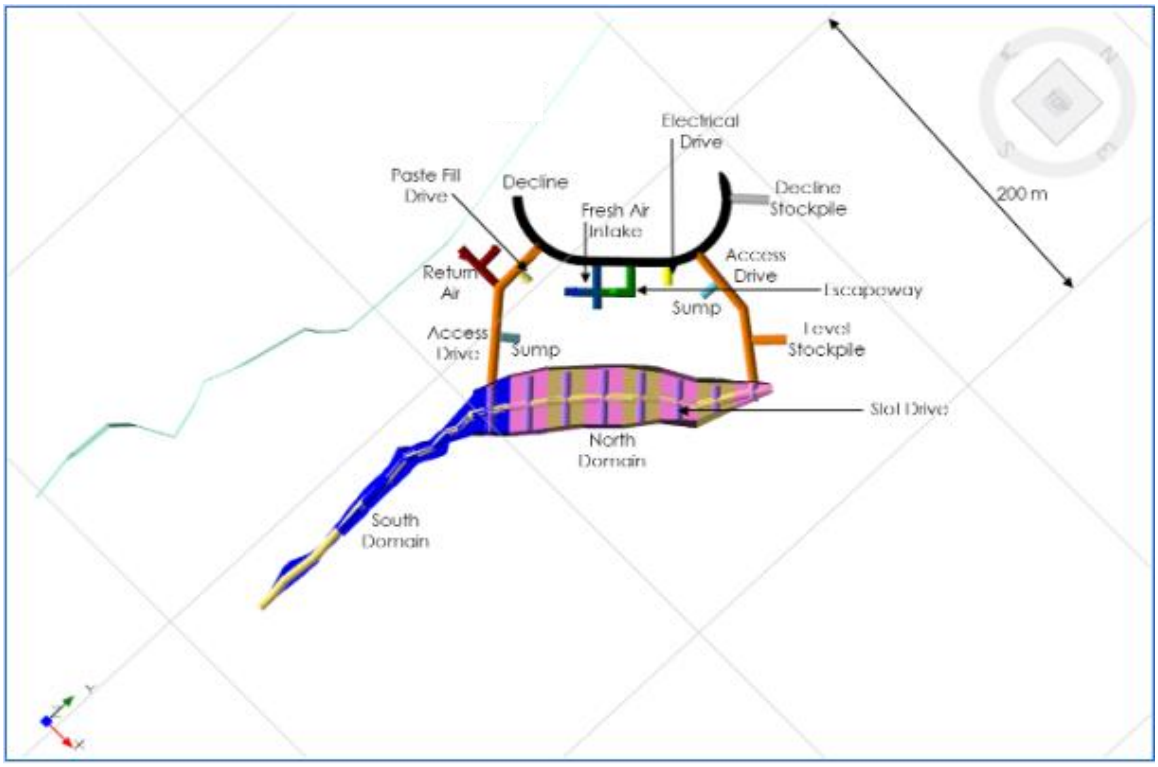


Figure 6-5 Typical Level Layout



For personal use only

Figure 6-6 Long Section View of BP33 stopes

6.2.1 Box Cut

The BP33 box cut was under construction when the Operation was placed into care and maintenance (**Figure 6-7**) and will be completed as part of restart.

Figure 6-7 BP33 Current Boxcut

For personal use only

6.2.2 Mine Design

The design criteria are summarised in **Table 6-2** and further detailed below.

Table 6-2 BP33 Mine Design Criteria

Key Mine Metrics BP33	Value
Dimensions	
Decline	5.5m x 6.0m
Access	5.5m x 6.0m
Stockpile	5.5m x 5.5m
Ore drives	5.0m x 5.0m
Total Development Metres	
Capital Lat Development	15,104 m
Operating Lat Development	10,830 m
Capital Vertical Development	2,066 m
Operating Vertical Development	7,273 m

6.2.3 Mining Schedule and Sequence

Based on the mine design, the stoping sequence was scheduled using Deswik software.

North Domain:

- Primary/secondary LHOS with primary stopes prioritised delaying backfill requirements by 12 months.
- Dual access to the ore body allows stopes to be mined in centre out sequence.
- North panels are split by a sill pillar, enabling concurrent production from different panels.
- 15 m sill pillars between panels (every 90 m) above 400 m depth from the surface, retrieved in retreat sequence without backfill.
- 30 m sill pillars between panels (every 90 m) below 400 m depth from the surface, retrieved in centre out sequence with backfill.
- Sill pillars are retrieved when the panel above and below is mined and backfilled.
- Paste backfills in primary stopes, and all stopes on the bottom level of each panel. WRF in secondary stopes between two paste-filled primary stopes.
- Troughed primary stopes to access and mine secondary stopes and to leave a rock draw point for the secondary stopes.

South Domain:

- Bottom-up LHOS in retreat sequence mined in panels, enabling concurrent production from different panels.
- 15 m sill pillars between panels (every 90 m) above 400 m depth from the surface, retrieved in retreat sequence without backfill.

The mine is divided into panels, each with a vertical extent of between 90 m for the top five panels and 120 m for the bottom panel. Development quantities for development by type are outlined in **Table 6-2**, with a total life of mine lateral development of approximately 26.0 km required and a total vertical development of approximately 9.3 km.

For personal use only

6.2.4 Ventilation and Cooling

Key notes of the Ventilation and Cooling study included:

- The airflow required for the BP33 project steadily ramps up from 100 m^3/s for the initial development phase to a maximum of 560 m^3/s during the full production phase.
- Due to the depth and scale of BP33, cooling will be required once stoping commences.

6.2.5 Backfill Strategy

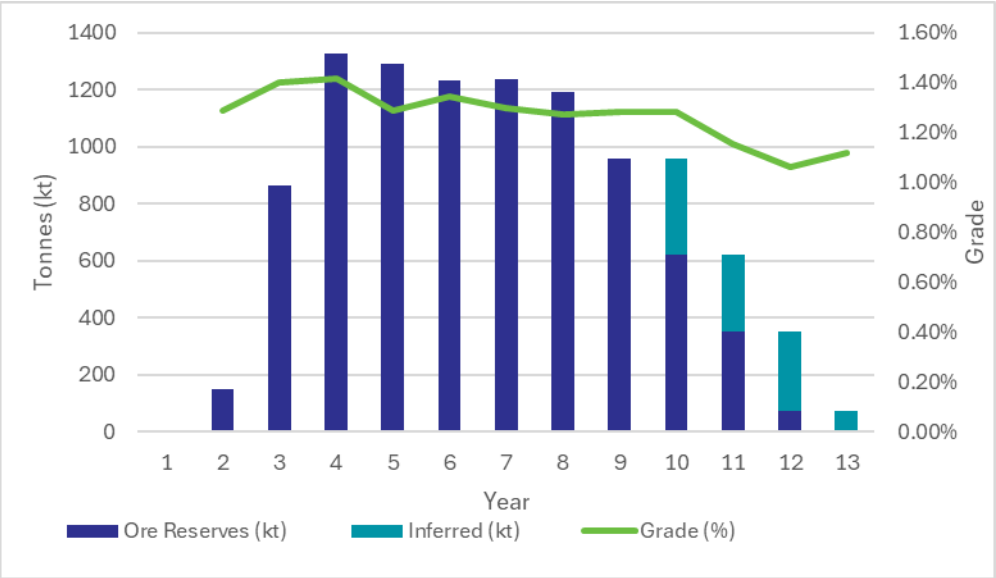
The backfill strategy is planned to be supported by 35,000 m^3/month which is an increase from the previous 25,000 m^3/month to sustain a mine production rate of 1.25 Mtpa from BP33.

The plan presented in this Study assumes the paste plant to be constructed with backfilling in Year 4 with all the paste fill material sourced from the dry stacked tailings from the processing plant.

6.2.6 Mine Schedule

The key outcomes of the Study mining and production schedule are shown in **Table 7-2**, which includes the annualised production mine life. These are shown graphically in **Figure 6-8**.

Figure 6-8 BP33 Mine Schedule



6.3 Carlton Underground Mine

The summary below is based on a Scoping Study level of accuracy of +/-30%, please refer to the disclaimers above.

Carlton is situated 1km from the Grants open pit. After completion of underground (UG) mine development, Carlton ore production is envisaged to reach a rate of ~400ktpa to 600ktpa of ~1.2% Li_2O ore to top-up and complement the ore feed into the Grants Processing Plant from BP33 UG. The Grants portal will be used as the primary means of ingress and egress for both personnel and mined material.

6.3.1 UG Mine Design

Conservative mine design parameter have been applied to all aspects of mine development. All lateral and vertical development profiles and specifications are shown in **Table 6-3**.

For personal use only

Table 6-3 Carlton Mine Design Criteria

Key Mine Metrics	Value
Dimensions	
Decline	5.5m x 5.7m
Access	5.5m x 5.5m
Stockpile	5.5m x 5.5m
Ore drives	5.0m x 5.0m
Total Development Metres	
Capital Lat Development	16,158 m
Operating Lat Development	15,173 m
Capital Vertical Development	1,873 m
Operating Vertical Development	6,779 m

6.3.2 Mining Sequence

Based on the mine design, the stoping sequence was scheduled using Deswik software. The mine is divided into panels, each with a vertical extent of between 60 m for the top two panels and 120 m for the bottom panels. Development quantities for development by type are outlined in **Table 6-3** with a total life of mine capital lateral development of approximately 16.0 km required and a total vertical capital development of approximately 1.9 km.

The mine panel for Carlton is shown in **Figure 6-9** and **Figure 6-10.** The backfill plant is planned to be commissioned before the production starts. Upon backfilling of primary stopes in the first panel, the secondary stopes will then be extracted.

The timeframe to development and production from Carlton is dependent on the completion of mining at the Grants underground.

For personal use only

Figure 6-9 Carlton and Grants Link

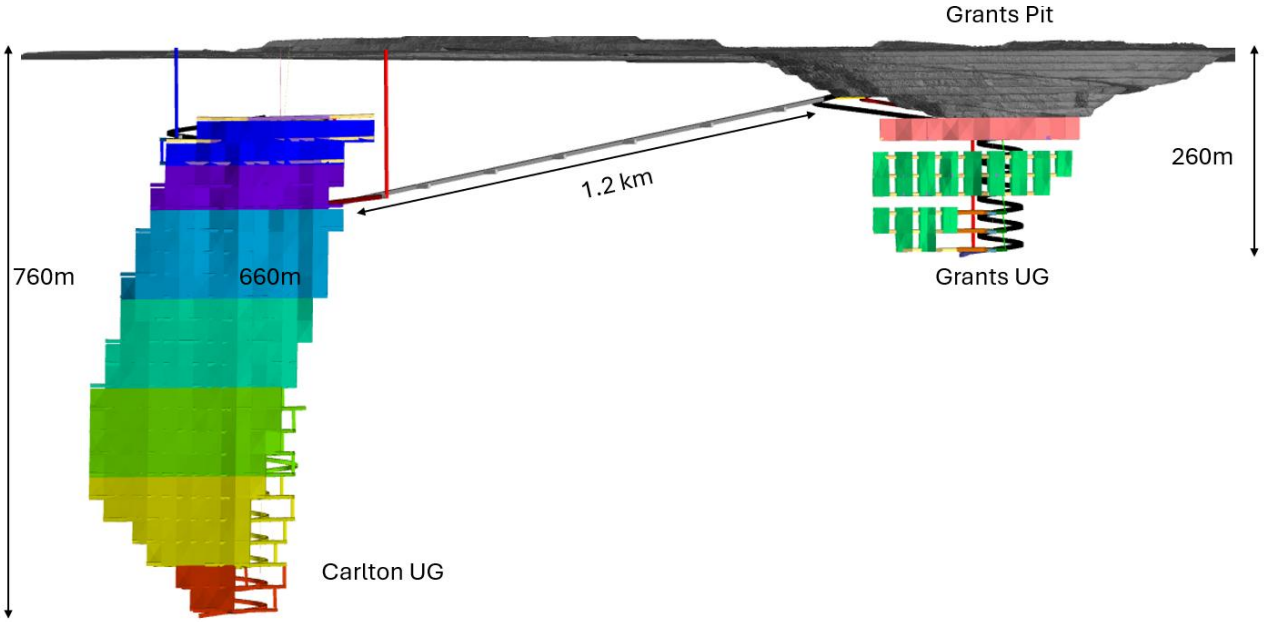
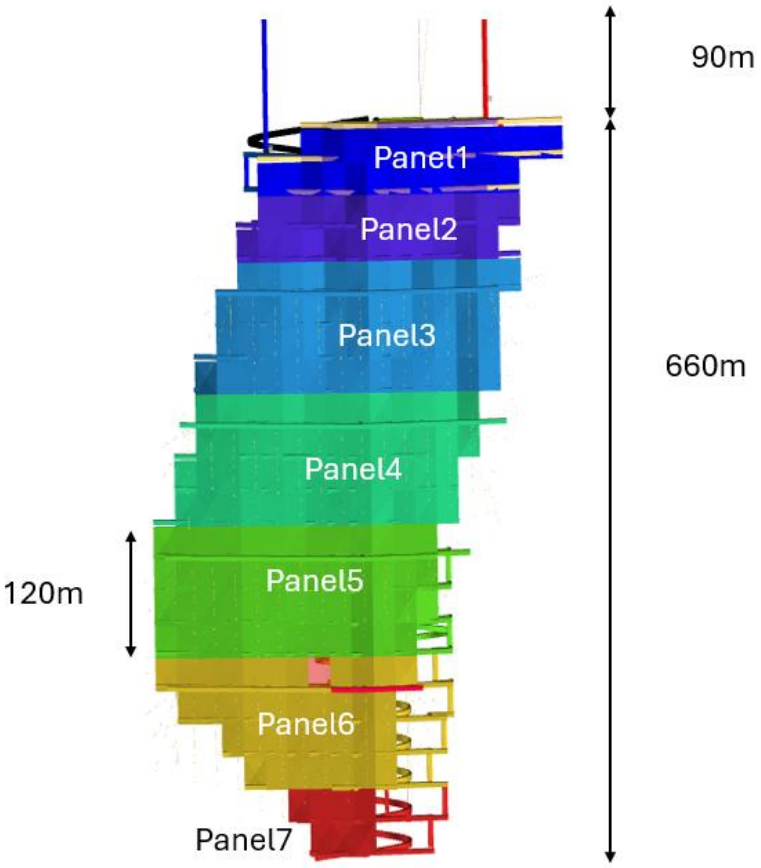


Figure 6-10 Carlton Panel Layout

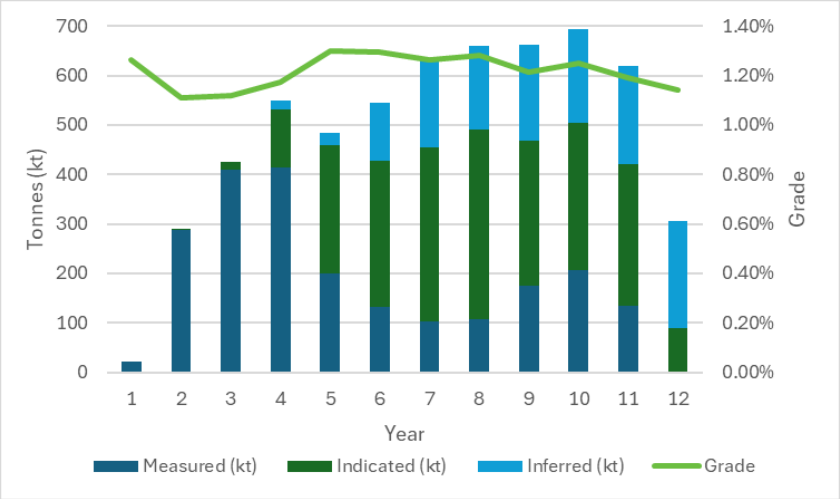


For personal use only

6.3.3 Mining Schedule

The key outcomes of the Carlton Scoping Study mining and production schedule are shown in **Table 7-2**. These are shown graphically in **Figure 6-11.**

Figure 6-11 Carlton Mine Schedule



6.3.4 Ventilation and Cooling

The airflow requirement for the Carlton is similar to Grants initially and steadily ramps up from 100 m^3/s for the initial development phase to 360 m^3/s during the initial production phase to support a production rate of 0.65Mtpa.

A refrigeration plant requirement is also factored into the capital and operating costs once production starts from Carlton.

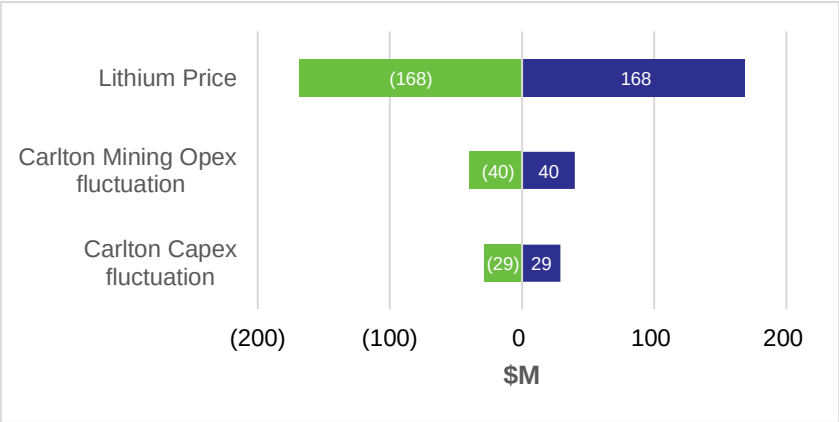
6.3.5 General Surface Infrastructure requirements

Carlton surface infrastructure footprint has been analysed and costed. This includes the use of Grant surface mining infrastructure, and the need for a tails dam lift in year 12. Of note, this tailings dam lift is already designed and approved as included in the previous Statement of Ore Reserves.

6.3.6 Carlton financial analysis and sensitivity

Sensitivities are applied to key assumptions. Favourable and unfavourable movements relative to free cash flow (FCF) of $313M (SC6 price of USD 1,330/t CIF) at +/-10% range, show in **Figure 6-12** below.

Figure 6-12 Carlton Scoping Study +/-10% Sensitivity



For personal use only

7 Consolidated Study production schedule

The Study evaluates a mine plan which is based on the Ore Reserves quantities, however includes Inferred material from the Grants and BP33 deposits, as well as the Measured, Indicated, and Inferred quantities from Carlton. The Study is presented at an overall Scoping Study level of accuracy, however, 94% of the initial 10 years quantities are Ore Reserves.

7.1 Study Physicals

The key physicals relevant to the Study have been summarised in **Table 7-1** and outlined annually in **Table 7-2** and graphically in **Figure 7-1** through to **Figure 7-3**. As can be seen in **Figure 7-1**, the Inferred material accounts for 12.9% of the total feed, Carlton totals 33% with both occurring in the second half of the Study schedule as shown in **Table 7-1.**

Table 7-1 Study Physicals

Parameter	Units (metric)	Metric
Active Mine Period	**Years**	**20**
Ore Processed (Feed total)	**kt**	**17,575**
Ore Reserves Processed	**kt**	**10,726**
Proved	kt	*3,424*
Probable	kt	*7,302*
BP33 Inferred	**kt**	**957**
Carlton Processed	**kt**	**5,892**
Measured	kt	*2,193*
Indicated	kt	*2,393*
Inferred	kt	*1,305*
Feed Grade (average)	**%**	**1.27**
Global Recovery	**%**	**78**
Concentrate Tonnes (SC6 eq)	**kt**	**2,911**

For personal use only

Table 7-2 Study Production plan

Mine	Centre		LOM	Year 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Grants	Reserves	Ore (kt)	1,153	372	587	195																	
		Li_2O (%)	1.31	1.31	1.29	1.3																	
BP33	Reserves	Ore (kt)	9,290		149	865	1326	1289	1230	1237	1193	957	620	352	73								
		Li_2O (%)	1.30		1.28	1.40	1.42	1.29	1.34	1.30	1.27	1.28	1.15	1.06	1.12								
	Inferred	Ore (kt)	957										337	268	279	73							
		Li_2O (%)	1.27										1.27	1.27	1.27	1.27							
	Total	Ore (kt)	10,247		149	865	1326	1289	1230	1237	1193	957	957	620	352	73							
		Li_2O (%)	1.30		1.28	1.40	1.42	1.29	1.34	1.30	1.27	1.28	1.28	1.15	1.06	1.27							
Carlton	M+I	Ore (kt)	4,586									22	289	426	532	459	428	455	491	469	504	421	90
		Li_2O (%)	1.23									1.26	1.11	1.12	1.17	1.30	1.32	1.29	1.29	1.24	1.26	1.20	1.13
	Inferred	Ore (kt)	1,306												18	25	117	180	169	194	188	200	215
		Li_2O (%)	1.19												1.22	1.35	1.20	1.19	1.25	1.15	1.21	1.17	1.14
	Total	Ore (kt)	5,892									22	289	426	550	484	545	634	660	663	693	620	305
		Li_2O (%)	1.22									1.26	1.11	1.12	1.18	1.30	1.30	1.26	1.28	1.22	1.25	1.19	1.14
Total Mined		Ore (kt)	17,292	372	735	1060	1326	1289	1230	1237	1193	979	1246	1046	902	557	545	634	660	663	693	620	305
		Li_2O (%)	1.27	1.31	1.29	1.35	1.42	1.29	1.34	1.30	1.27	1.28	1.24	1.14	1.13	1.30	1.30	1.26	1.28	1.22	1.25	1.19	1.14
Processing	Feed	Tonnes	17,575		981	984	1199	1199	1199	1202	1199	1199	1199	1202	1199	693	545	634	660	663	693	620	305
		Li_2O (%)	1.27		1.32	1.36	1.45	1.27	1.33	1.33	1.25	1.29	1.26	1.14	1.09	1.13	1.30	1.26	1.28	1.22	1.25	1.19	1.14
		Li_2O (kt)	222.4		13.0	13.4	17.4	15.2	15.9	16.0	14.9	15.5	15.1	13.7	13.7	7.9	7.1	8.0	8.5	8.1	8.7	7.4	3.5
	LOM Recovery (%)		78		77	78	79	79	80	80	79	80	80	79	70	77	79	79	79	79	79	79	79
	SC6eq (kt)		2,911		167	174	228	201	211	212	197	205	201	180	157	100	93	106	112	106	114	97	46

For personal use only

Figure 7-1 Study Mining Schedule

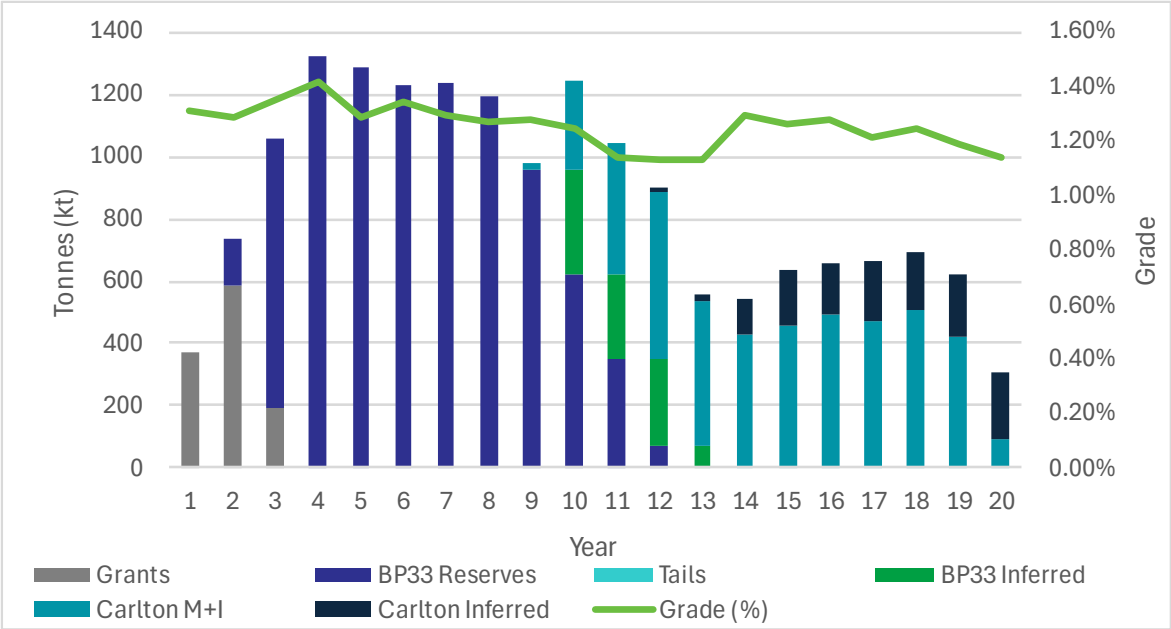


Figure 7-2 Study Processing Feed Schedule

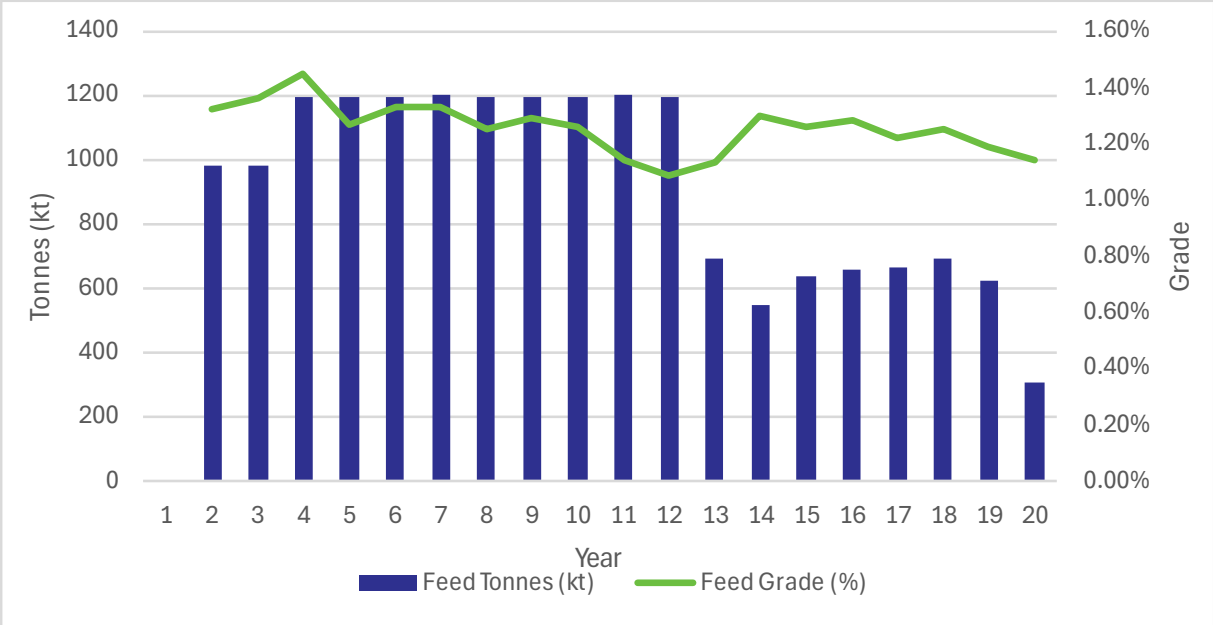
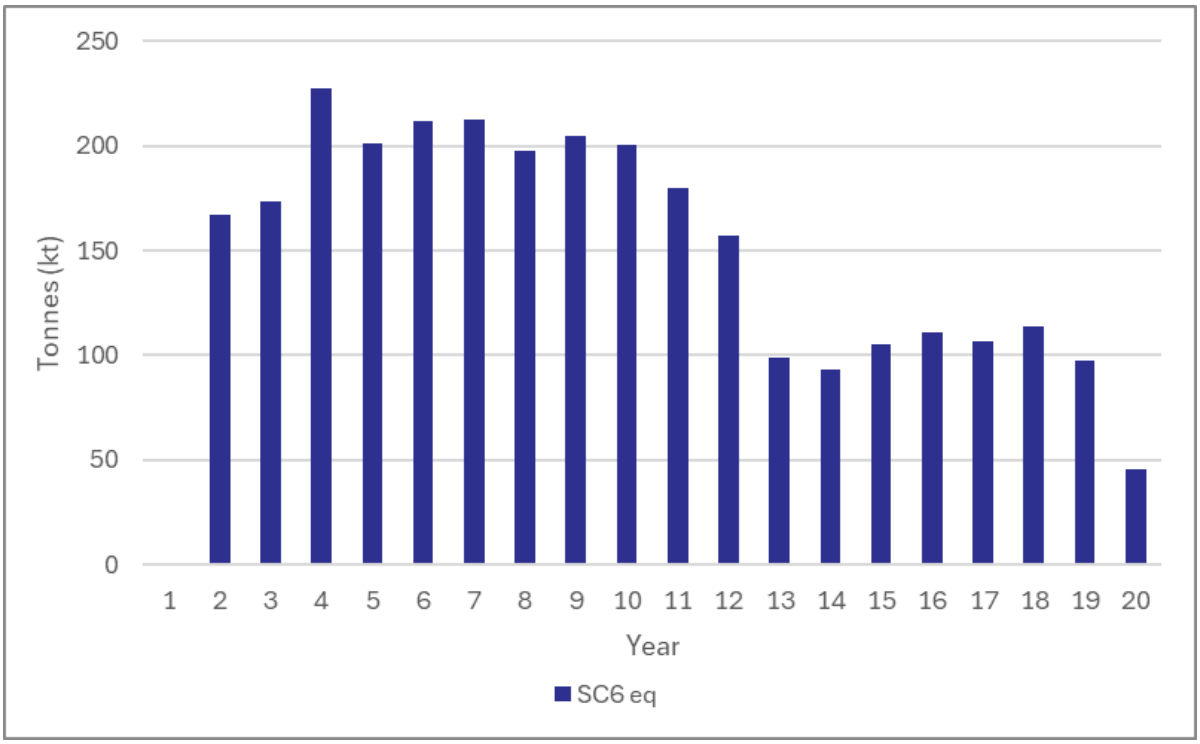


Figure 7-3 Study Concentrate Produced



For personal use only

For personal use only

8 METALLURGICAL TESTING AND PROCESSING

Core has undertaken a comprehensive review of the historical processing performance at Finniss, drawing on operational data, external engineering support and recent pilot-scale testwork. The objective of this work was to inform a revised plant flowsheet capable of increasing throughput, improving recovery, and reducing unit operating costs.

The Study incorporates this work into an optimised DMS-based flowsheet. Key improvements include increasing the plant feed top size, closing the rolls crusher circuit, and incorporating a gravity classification circuit to treat ultrafine material previously reporting to tails. These modifications are expected to deliver increased throughput and improved global recoveries, without requiring flotation or major capital outlay.

Importantly, all changes can be implemented within the existing plant footprint and approvals envelope. Pilot-scale testwork was conducted using representative composite samples to validate the proposed flowsheet and operating parameters. The results confirm the flowsheet's ability to achieve a global recovery of up to 80% and support the Study production targets.

The updated flowsheet supports a nameplate throughput of 1.2Mtpa, up from the original 1.0Mtpa. The revised processing assumptions are outlined in **Table 8-1**.

Table 8-1 Overall Yield and Recovery

Description	Units	Validated by Testwork
Global Li_2O recovery	%	78
Global Yield	%	25

8.1 Recent Testwork

Pilot Scale DMS Testwork

A pilot-scale testwork program was undertaken to validate the updated processing flowsheet and support key design assumptions in the Study. Composite samples were prepared to reflect representative dilution scenarios for both Grants and BP33 deposits.

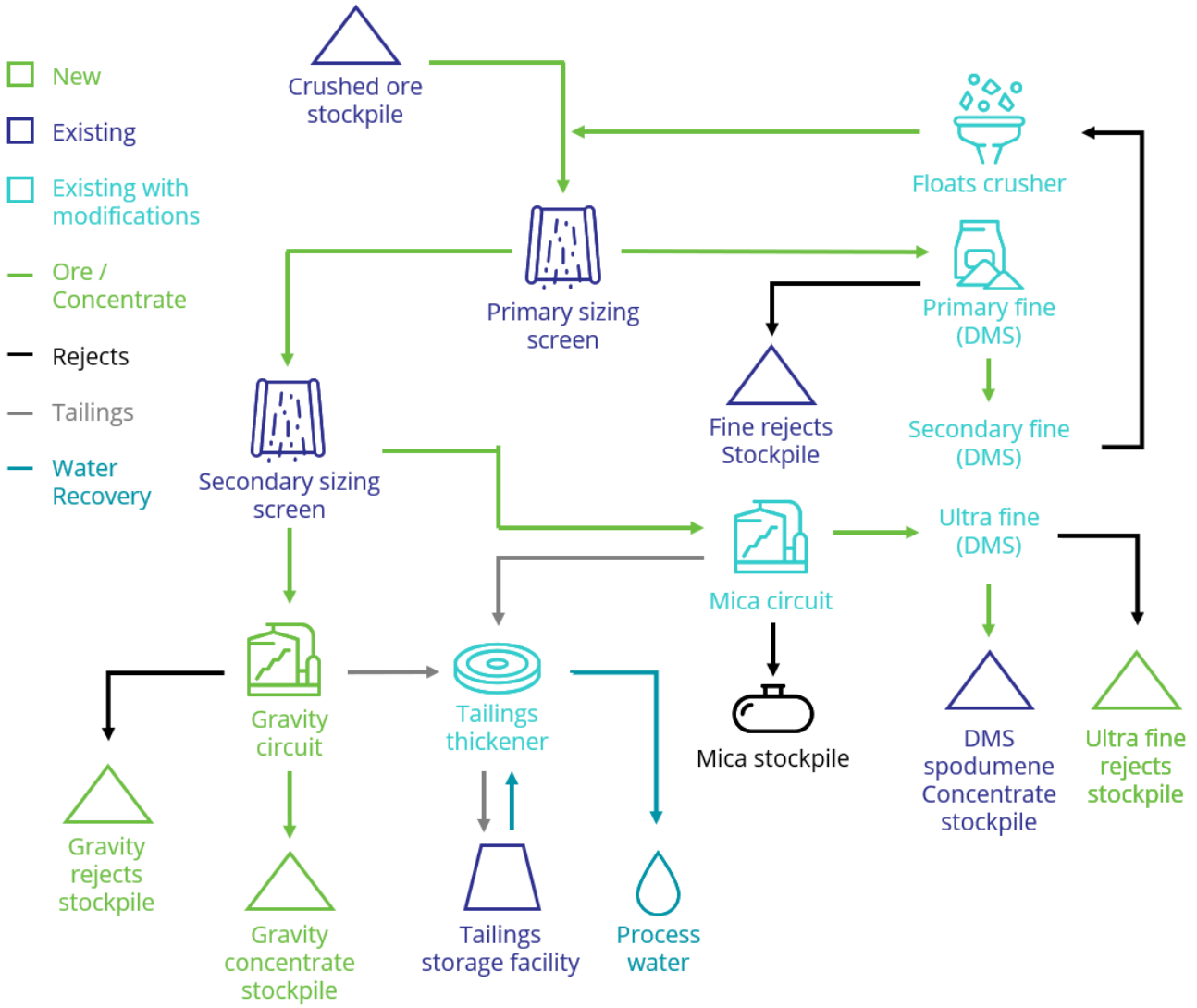
Testing was conducted across multiple size fractions, with each processed through a two-stage DMS circuit. The test program was designed to assess optimal size distribution, evaluate recovery potential, and inform recovery and yield estimates under realistic plant feed conditions.

The results demonstrated strong correlation between testwork outcomes and expected plant performance and were used by external engineers to inform the updated recovery and throughput assumptions in the Study. The test program also confirmed that coarser crushing and improved screening can increase the proportion of feed reporting to DMS and enhance overall recovery.

Gravity Classifier

Pilot-scale testing of a gravity classification circuit was undertaken as part of the Study to evaluate the potential to recover lithium from fines previously sent to tailings. Initial results have confirmed the circuit's ability to generate a consistent intermediate-grade concentrate suitable for sale or blending.

Figure 8-1 Proposed Process Flowsheet



.

For personal use only

For personal use only

9 INFRASTRUCTURE AND APPROVALS

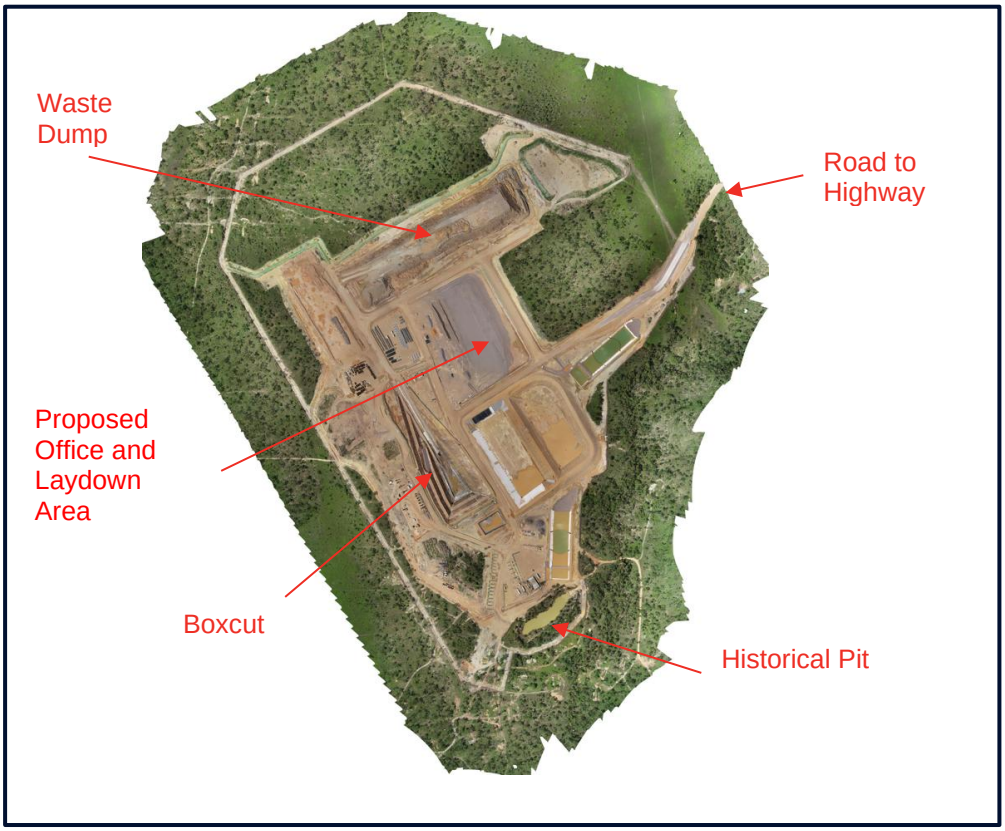
At the time operations were suspended, key infrastructure and services necessary to support mining, processing, and initial underground development at BP33 were largely established. The site benefits from direct access via sealed road to a major Northern Territory highway, enabling commuting from Darwin and surrounding regional communities. This existing infrastructure provides a strong foundation for the planned restart, with targeted upgrades identified through post-suspension reviews and engineering studies.

The Operation is supported by a comprehensive suite of onsite and offsite infrastructure, including:

- A site-wide communications network
- Access and internal haul roads
- Administrative offices and planned change house facilities
- Warehousing and workshops
- Crushing and processing infrastructure
- Explosives storage
- Water supply infrastructure, including distribution networks and dams
- Onsite power distribution system
- Laboratory and fuel storage facilities
- Health and safety offices, including a mine rescue area
- Waste storage and management facilities for operational and miscellaneous waste

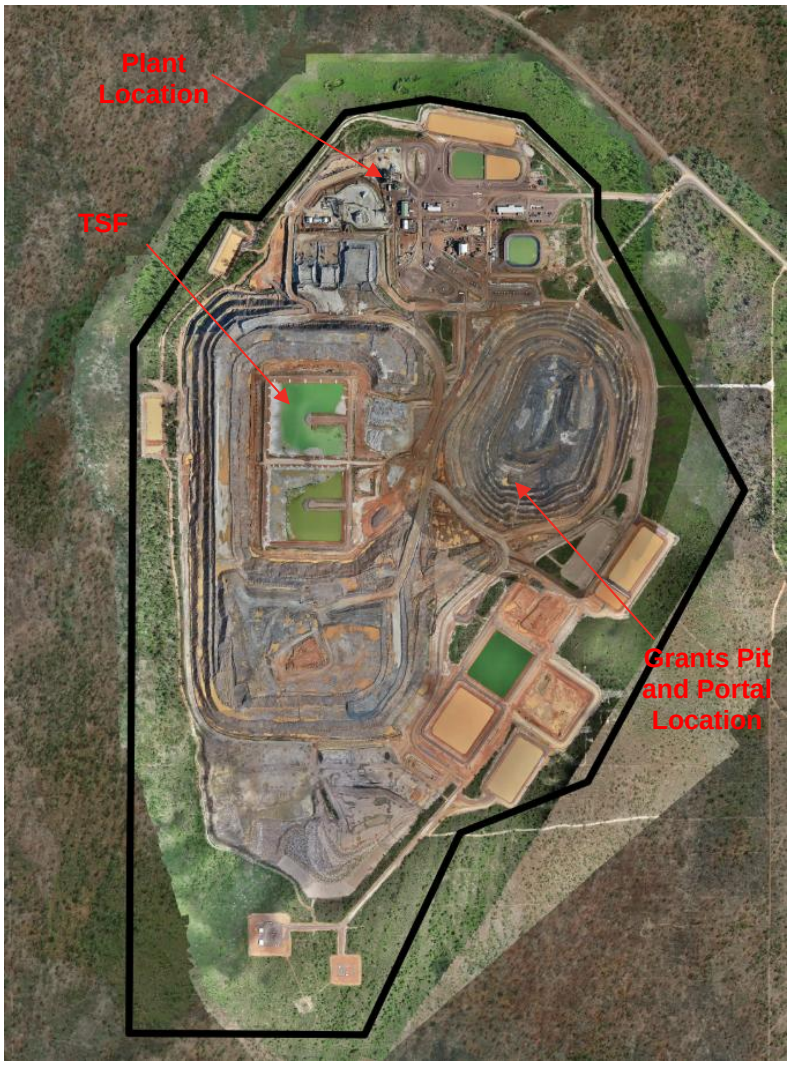
This infrastructure will be leveraged and, where necessary, upgraded to support a cost-effective and efficient restart of operations.

Figure 9-1 BP33 Infrastructure Layout



For personal use only

Figure 9-2 Grants Infrastructure Layout



While the infrastructure is predominately in place, new infrastructure is required to be constructed to support the restart; this includes:

- Modifications to the existing process plant as noted in **Section 8**.
- Backfill paste plant to support BP33 underground mining.
- Grants and BP33 ventilation systems.
- Various BP33 mine and surface infrastructure.

9.1 Current Tails Storage Facility

The current capacity of the TSF is estimated to be 316 ML, including both cells, which have been previously constructed. This is considered suitable to support the operations for at least 12 years, at which time a tails lift will be required. The design and approval of this is already in place and costed.

9.2 Site to Port Facilities

Concentrate product from the DMS plant will be stockpiled on a product pad adjacent to the plant and loaded into covered quad road trains for haulage to East Arm Port. The logistics operation will run 24/7.

The 88 km route to the port follows Cox Peninsula Road, Stuart Highway, Tiger Brennan Drive, and Berrimah Road. The transport plan has been developed with consideration of regulatory requirements, community impact, and safety, and is supported by third-party assessments.

9.3 Power Supply

The mine site power requirements will be met by diesel-powered generators. Alternative renewable sources of energy are not considered as part of the Study and may be included in future studies to confirm power demand and supply.

9.4 Water Supply

The Grants site is supported by an established water infrastructure network constructed during previous operations. This network comprises raw water and potable water storage tanks, distribution pipelines, Irrigation land areas and sewage treatment systems. Water for prior operations was sourced primarily from Observation Hill Dam (OHD) and supplemented by reclaimed water throughout the network.

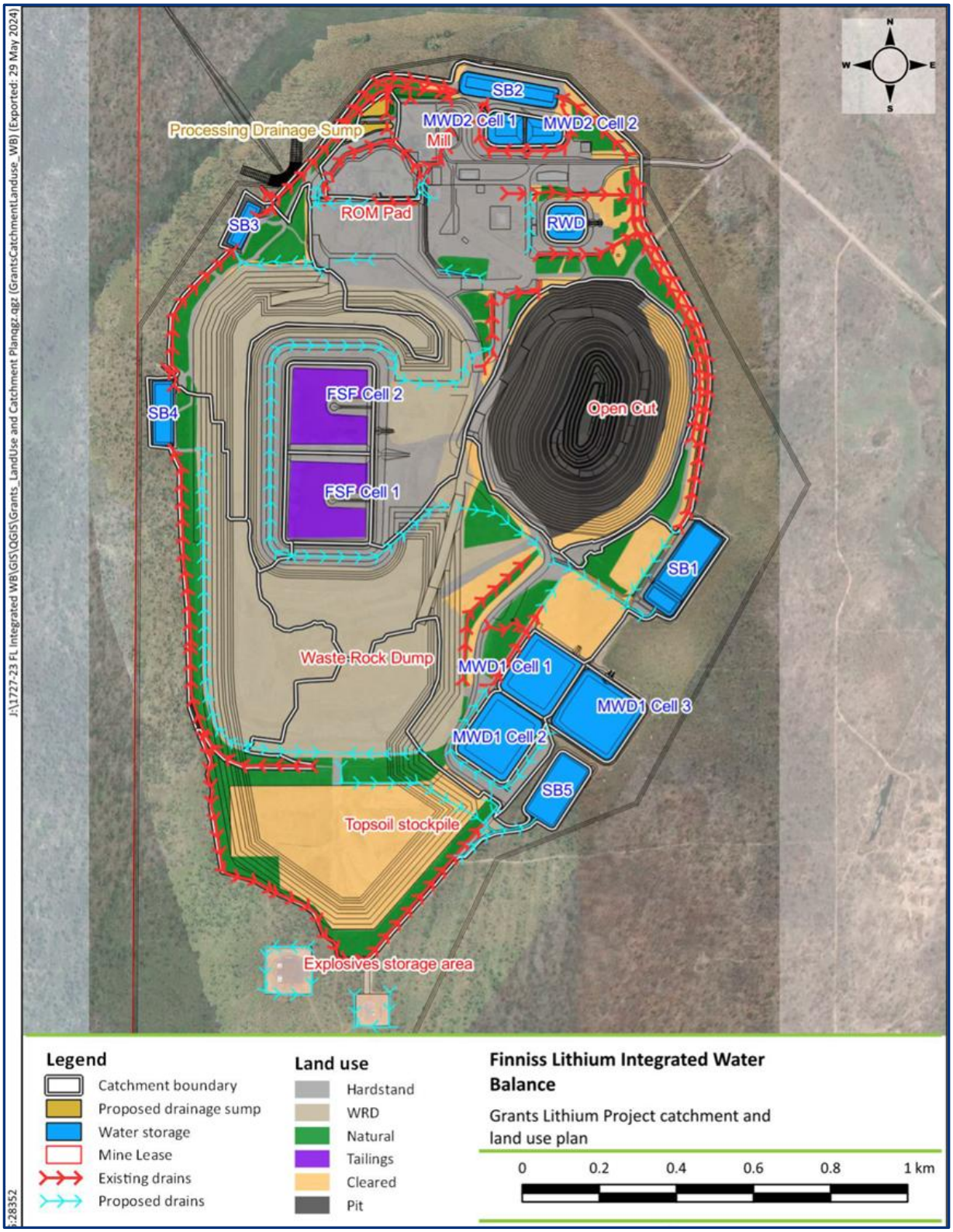
The Operation previously used the OHD as water supply storage in addition to the onsite water storage dams. Water from OHD is transferred to the Grants storage via an underground pipeline to meet onsite demands. This dam was constructed to supply water for tin and tantalite mining and ore processing that occurred in the 1980s and 1990s and has a current estimated capacity of 375 ML.

Based on the changed mine plan and plant flowsheet an updated water balance was undertaken in April 2025. This revised water balance indicates that with expected dewatering rates from BP33, additional supply from Observation Hill and surface water storage dam facilities, the Operation will have sufficient positive water balance. Of note, this does not include the dewatering from the Grants UG which will increase supply during the dryer months. An updated water balance is planned to confirm this assumption.

For personal use only

For personal use only

Figure 9-3 Water Supply and Storage Network



For personal use only

9.5 Flood Risk

Significant work has been undertaken to ensure learnings from Grants and improvements to operational functionality and efficiency are incorporated into the basis of wet season water management design and operation of BP33. Key items of work undertaken include:

- Revision to the Water Management Plan (WMP) to improve functionality and flexibility of operational water management. Key to this was the development of a pragmatic, science-based approach to the management of sediment and mine-affected water during early works construction and (eventually) decline works in wet season months.
- Update of the site water balance to reflect changes to the design and basis of operation for BP33 to determine potential water security/excess issues. The update assessed the need and indicative schedule for the discharge of excess mine water to the environment during monsoonal rain conditions.
- Revision and update of the Erosion and Sediment Control Plan (ESCP) to reflect revised site conditions and improve controls during clearing, construction, and operation.
- The incorporation of learnings from Grants and sediment basins was revised and specified as Type B High-Efficiency Sediment (HES) basins that incorporated auto-dosing technology. These basins are best suited to the wet/dry tropics over the conventional basins originally specified.
- Inclusion of tested water management strategies employed at Grants operations to facilitate controlled offsite discharge.

9.6 Environmental and Approvals

The Grants Mine was operating with all required approvals when works were suspended in 2024. At the time of suspension, approvals were in place for the development of the BP33 underground mine. To align with the update mine plans, minor amendments are currently underway. Core does not envisage any issues with the granting of the required approval.

For personal use only

10 Capital and Operating Costs

The capital and operating costs outlined below reflect the Study Schedule, which is summarised in **Section 7**. The below cost information has been provided by various third parties and reviewed by Core. Noting the following:

- Costs are presented in AUD unless otherwise denoted;
- All costs are real with no inflation or escalation applied;
- Capital and operating cost estimates are based on a first principles build-up or actuals from operations.

This section provides an overview of annual unit operating and capital costs .

10.1 Study Operating and Capital Costs

The capital cost estimate for the Operation is based on the outcomes of the planning process and includes a pre-production capex of $175 – $200M. **Table 10-1** shows operating costs per cost centre as well as per tonne SC6 equivalent produced. **Table 10-2** shows capital costs breakdown by item and proposed range inclusive of contingency.

Table 10-1 Unit operating costs (FOB SC6 eq) by cost centre

Cost Centre	Low	High
Mining Costs ($/t mined)	63	72
Processing Costs ($/t processed)	40	46
Site G&A ($/t processed)	9	10
Transport ($/t product tonne)	22	25
Unit operating costs (SC6 eq)*	**690**	**785**

**Unit operating cost (FOB excluding royalties) includes mining, processing, haulage, port charges, and site based general and administration costs. It is calculated on an SC6 equivalent basis. The range disclosed above is inclusive of relevant contingency.*

Table 10-2 Pre-production Capital Cost

Pre-production Capital Cost	Low ($M)	High ($M)
Grants Underground Infrastructure	40	50
BP33 Underground Infrastructure	110	120
Plant and site infrastructure Upgrade	25	30
Total Pre-production Capital Cost	**175**	**200**

The range disclosed above is inclusive of relevant contingency.

Sustaining capital after the pre-production period is expected to be within the range of $20-$22 per tonne mined.

10.2 Royalties

The Company has two separate royalty obligations.

- Lithium Royalty Corp (LRC) has a 2.5% gross revenue royalty from the sale of products from the Finniss Lithium Project. This royalty applies to the Grants, BP33, and Carlton deposits, and certain other resource deposits within the Company. However, it does not apply to the Blackbeard project. The applicable prospects noted earlier are held as security for the transaction.
- The Northern Territory mining royalties, specifically the Mineral Royalty Act 1982 (NT) (MRA82). The royalty payable is the greater of i) 20% of the net value, less $10,000 or ii) 2.5% of gross production revenue.

Subsequent in 2024, the NT Government introduced Mineral Royalty Act 2024 (MRA24), an ad valorem scheme that is simpler, and competitive with other Australian states. MRA82 continues to be applied to any mineral extracted from a tenement that is integrated with an existing production unit. If the tenement is not integrated with any grandfathered production units, royalties for the tenement are calculated under the new MRA24.

Core is able to apply to be assessed under MRA24, with further work underway to determine the optimal regime for the Operations.

For personal use only