Definitive Feasibility Study underscores global strategic value of Browns Range Heavy Rare Earths Project, demonstrates its technical and financial viability.

Australian heavy rare earths-focused company Northern Minerals Limited **(ASX: NTU) (Northern Minerals** or **Company)** is pleased to announce the outcomes of a Definitive Feasibility Study (**DFS)** for the Company's 100%-owned Browns Range Heavy Rare Earths Project (**Browns Range** or **Project**), located in the East Kimberley region of Western Australia.

DFS Highlights

Strategic heavy rare earth element (HREE) asset underpinned by Project's technical and financial credentials

- The Global shift towards reducing carbon emissions and adopting renewable energy technologies requires scalable and stable supply of critical minerals such as heavy rare earth elements.
- These HRREs components are used in numerous applications such as clean energy technologies, advanced defence systems, medical applications, humanoid robotics, automotive applications and consumer electronics.
- China overwhelmingly dominates HREE production, controlling nearly all global output and refining capacity (~99%), the Browns Range Project is seeking to loosen this global stranglehold over these critical transition elements.
- Ongoing geopolitical landscape has reinforced the strategic nature of HREE projects like Browns Range and the need for the development of an Australia based supply chain.
- Browns Range's value is underscored by actions by governments around the world to reduce reliance on single country supply chains through policies such as the Australian Federal Government's Critical Minerals Strategy including the introduction of its proposed critical minerals stockpile, the U.S. Defence Production Act and the EU Critical Raw Materials Act.
- Located in the Tier 1 mining jurisdiction of Western Australia, the DFS outlines the Projects technical and financial viability and highlights the strategic significance of the Project as a near-development source of dysprosium and terbium (Dy/Tb), two of the most critical HREE required for high performance permanent magnets ubiquitous in clean energy technologies.
- The Wolverine HREE deposit contains one of the highest known proportions of Dy/Tb among rare earth element deposits outside of China with the DFS outlining that the Project is forecast to produce ~8% of the current global Dy/Tb supply[1].The Project is one of the most advanced pure-play HREE projects of scale outside of China and the only one in Australia, with first production targeted from 2028 to meet a forecast global shortfall in Dy/Tb supply.

[1] CRU REE Special Report 2025

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Offtake arrangements with Tier 1 partner

- The Company has a long-term supply agreement with Iluka Resources (ASX: ILU) (Iluka Supply Agreement) for a binding contract to supply 30,500 tonnes of Total Rare Earth Oxides (TREO) contained within a 20-30% xenotime concentrate to Australia's first fully integrated rare earths refinery at Eneabba, also in Western Australia.
- Strategic product synergy, as the HREE-rich concentrate from Browns Range will enhance Iluka's rare earth portfolio, strengthening Australia's critical minerals capabilities
- Northern Minerals will contribute to Australia's efforts to establish a fully domestic value chain, reducing Western dependency on Chinese processing and setting a benchmark for secure, sovereign supply chains.

Ore Reserve estimate

- The Ore Reserve Estimate (ORE) for Browns Range is 5.18 Mt at 0.88% TREO for 45,800 t of TREO, reported in accordance with the JORC Code[2]
- Dy/Tb accounts for ~70% of the Browns Range total rare earths basket value[3].
- The ORE is based on the outcomes of the DFS and the Mineral Resource estimate update announced 16 January 2025[4]
- The ORE is classified as 100% Probable Ore Reserve

Mine Plan

- The Project mine plan includes open pit mining transitioning to underground mining with production predominantly via end-on longitudinal sublevel caving.
- The Project is expected to include 12 years of mining, supporting an 11-year Life of Mine (LOM) defined as the period from first to final concentrate production.
- Detailed mine plans, including mine design and scheduling, have been developed for two production scenarios as follows:
    - The Production Target mine plan, which underpins the DFS and financial valuation for the Project, and
    - The Ore Reserve mine plan, which supports the Ore Reserve estimate.
- The Ore Reserve estimate is a subset of the Production Target estimate.

DFS outlines a technically robust project

- A robust and industry proven flowsheet has been developed by extensive bench scale and pilot plant test work which validated the metallurgical performance of processing feed from the Wolverine deposit.
- The Company constructed, commissioned and operated the Browns Range Pilot Plant from 2017 to 2021, producing and selling to international markets ~1,000 tonnes of Mixed Rare Earth Carbonate.
- Completion of comprehensive specialist studies support the Project mine plan.
- CAPEX/OPEX has been developed in accordance with an AACE Class 2 estimate
- Front-end Engineering and Design (FEED) activities have commenced, supporting progress toward project delivery and development readiness.
- The Browns Range project site has an operational camp and airstrip, which will assist in accelerated commencement of construction.

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[2] Joint Ore Reserves Committee (JORC), 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
[3] Based on average individual REO prices in 2024
[4] ASX Announcement 16 January 2025, "2025 – Wolverine Mineral Resource Estimate"

Key Project economics and assumptions

- Project economics are based on the Production Target mine plan, which is underpinned by the Wolverine ORE and Mineral Resource Estimate (MRE) and Browns Range Pilot Plant (BRPP) stockpiles and, project an initial mine life of ~11 years.
- Project forecast pre-production capital is A$592 million including A$77.5 million in contingency.
- Project forecast operating costs are ~A$129M per annum with C1 operating cost of A$31.25/kg TREO (excluding corporate costs).
- Project production plan forecast to produce ~17,500 tpa of xenotime concentrate at ~25% TREO, containing ~4,350 tpa TREO.
- The Project forecast delivers an average annual EBITDA of A$175 million, a pre-tax NPV8 of A$187 million and a pre-tax ~IRR of 12%, with a seven year payback using Base Case pricing forecasts by CRU International Limited (CRU)[5], achieving a US$107/kg TREO Browns Range average LOM basket price (the Projects current implied TREO basket price is US$50.90/kg TREO[6]).
- The Base Case forecast by independent analysts CRU assumes that magnet REO prices will increase over the next decade as the market enters a sustained market deficit due to rising demand and slow supply response outside of China.[7]
- The Divergence Case forecast by independent analysts CRU outlines a potential price upside scenario for non-China supply to satisfy ex-China demand supported by recent trade restrictions, geopolitical factors and government policies and regulations focusing on establishing new supply chains outside of China.
- The Divergence Case forecast delivers a Project pre-tax NPV_8 of A$705 million and pre-tax IRR of 21%, with a 5.6-year payback.
- The Production Target and forecast financial information derived from the Production Target referred to in this release are underpinned by Probable Ore Reserves (approximately 85%) and Inferred Mineral Resources (approximately 15%). 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 or forecast financial information reported will be realised. The Production Target is based on Mineral Resource and Ore Reserve estimates which have been prepared by Competent Persons in accordance with the JORC Code 2012.

Sound ESG credentials

- The Project is based on 10+ years of baseline environmental surveys and data collection
- It also incorporates 10+ years of cultural heritage surveys and monitoring
- The Project has executed Native Title Agreements with the Traditional Owner groups.
- Heritage surveys are mostly complete for the Project footprint with all key primary approvals granted and all secondary approvals in place for construction commencement.
- The Company has an approved Australian Industry Participation Plan in place to support local engagement prioritising the East Kimberley community.

Strong government agencies interest

- The Company has and continues to receive strong interest from government agencies in Australia and other countries keen to establish new and sustainable rare earth supply chains.

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[5] CRU REE Special Report 2025
[6] Based on the forecast REO assemblage contained within the Company's Xenotime concentrate based on Asian Metal Index pricing for separated RE oxides as at 26 August 2025
[7] Please refer Key Risks – Volatility of the Price of Rare Earth Elements in the Browns Range Heavy Rare Earth Definitive Feasibility Study Executive Summary in Appendix 1

- Project finance discussions are ongoing with export credit agencies in Australia, the US and Europe.

Ongoing work programs

- The Wolverine deposit remains open at depth, providing opportunity for potential resource expansion.
- The Company is undertaking technical work programs to confirm the viability of incorporating satellite deposits as blending material in the first 30 months of processing operations.
- The Company is actively engaging in growth and exploration activities, including new data acquisition, geological interpretation and targeting, and ongoing drilling programs seeking to define resources for a potential extension to the Project

Commenting on the Browns Range Definitive Feasibility Study, Northern Minerals Managing Director and CEO Shane Hartwig said:

"The completion of this Definitive Feasibility Study is a major milestone for Northern Minerals and reaffirms the strategic potential of Browns Range as a globally significant, near-term source of critical heavy rare earths."

"The DFS outlines a commercially viable, technically robust project with significant upside potential, conditional on ongoing work programs and the strong forecast HREE prices being realised. With the Iluka offtake deal, supportive governments in Australia and overseas and key approvals received, we are well positioned to move with confidence to the next stage of Browns Range's development. "

"Rare earth pricing structures remain opaque given the dominance of Chinese supply and until recently have yet to factor in the strategic imperative recognised and articulated by governments in the US and Europe for rare earth supply chains based outside of China. Whilst certain reported index prices for heavy rare earths like Dysprosium and Terbium remain subdued, leading industry experts are forecasting a significant supply deficit to emerge by 2028. Browns Range is one of the most advanced HREE project in the world, ideally positioning Northern Minerals to capitalise on this forecast supply deficit."

"The current Browns Range project shape contained within the DFS is based only on the Wolverine Mineral Resource Estimate. The Company will continue to undertake ongoing exploration across the broader significant Project tenure to expand the development profile of the Project."

"The global push to decarbonise is undeniable and irreversible, reinforcing the strategic value of projects like Browns Range to supply the raw materials that will enable the energy transition."

"This DFS lays the foundation for bringing Browns Range into production, with our focus now shifting to securing the right funding solution to enable construction commencement in line with our schedule as Northern Minerals sets about delivering long-term, sustained value for our shareholders."

Cautionary Statement

The Definitive Feasibility Study referred to in this announcement has been undertaken to determine the viability of Northern Minerals' Browns Range Heavy Rare Earth Project based solely on the development of the Wolverine deposit via open pit and underground mining methods (the Project).

The DFS is a technical and economic assessment of the potential viability of the Project. It is based on detailed technical, economic and geopolitical assessments to a level that the Company believes is sufficient to support estimation of Ore Reserves. Northern Minerals has previously commissioned and released the 2015 Feasibility Study (Previous Study). While geological and metallurgical observations and data from the Previous Study have been leveraged to inform the outcomes of the DFS, Northern Minerals considers the Previous Study to be superseded by the DFS. Cost, pricing and other financial assumptions applied to derive economic outcomes under the Previous Study are historical and do not apply in the current markets for commodities, or more-specifically, rare earth products. These assumptions have been revised as reported in the DFS, and Northern Minerals directs investors to rely solely on these updated assumptions with respect to any investment decision concerning the Company.

The DFS is based on existing Mineral Resources and the presently reported Probable Ore Reserves defined within the Project. The Mineral Resources and Ore Reserves underpinning the estimated life of mine production under the DFS (Production Target) have been prepared by a competent person or persons and reported in accordance with the JORC 2012 Code. The Production Target comprises Measured (~2%), Indicated (~84%) and Inferred Mineral Resources (~14%). Investors are cautioned that there is a low level of geological confidence in Inferred Mineral Resources and there is no certainty that further drilling will result in the determination of Measured or Indicated Mineral Resources, or that the Production Target will be realised. Of the Mineral Resources scheduled for extraction in this Production Target, approximately 85% is classified as Probable Ore Reserves. The proportion of Inferred Mineral Resources is not a determining factor for viability of the Project.

The DFS outcomes are based on the range of material assumptions regarding modifying factors outlined in this announcement. Among these material assumptions are the Company's prospects of securing further debt and equity funding of at least A$592M. Investors should note that there is no certainty Northern Minerals will be able to raise the required amount of funding when needed and that access to such funding may be subject to conditions that may or may not be within Northern Minerals' control. It is also possible that said funding may only be available on terms that may be dilutive to or otherwise effect the value of Northern Minerals' shares. It is also possible that Northern Minerals could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Project. This could materially reduce Northern Minerals' proportionate ownership of the Project. While Northern Minerals considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated by the DFS will be achieved.

The DFS further assumes the Iluka Supply Agreement remains on foot to supply up to and beyond the total contracted quantity of 30,500 t contained TREO. The Iluka Supply Agreement is subject to conditions precedent required to be satisfied by certain dates, some of which have passed as at the date of this Announcement, which may entitle the parties to terminate the Iluka Supply Agreement. Northern Minerals and Iluka are in discussions to facilitate satisfaction of the conditions outstanding or agree suitable extensions when appropriate to the relevant satisfaction dates. Neither party has exercised, nor indicated that they will exercise, their termination right as at the date of this Announcement. There can be no guarantee that outstanding conditions will be satisfied or a suitable extension to the relevant satisfaction dates will be reached. Please refer

Key Risks "Iluka Supply Agreement" in the Brown Range Heavy Rare Earth Definitive Feasibility Study Executive Summary in Appendix 1.

Northern Minerals has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and for holding the expectation that it will be able to complete the development of the Project.

Introduction

Northern Minerals is pleased to announce the completion of a DFS for the commercial-scale development of the Company's 100%-owned Browns Range Heavy Rare Earths Project.

Northern Minerals commenced HREE-focused exploration on the Browns Range Dome region in 2010 and to date has focused on targets in WA with mineral resources identified in six deposits across the Company's granted mining and exploration leases. The most advanced of these deposits, Wolverine, forms the basis of the DFS.

Work completed in this DFS builds on previous studies commissioned by the Company, including in 2015, and lessons learnt from the Browns Range Pilot Plant (BRPP) operations. Northern Minerals' project development, exploration and technical services teams, working in conjunction with specialised independent consultants have developed a bottom-up cost estimate in accordance with an Association for the Advancement of Cost Engineering (AACE) Class 2 estimate.

Key DFS Work Programs and Assumptions

The DFS confirms the Project's economic and technical viability for development of a mining and processing operation to produce a xenotime concentrate rich in dysprosium and terbium (Dy/Tb).

Since the Equity Raising in September 2024[8], the Company has completed a substantial work program to de-risk the mining and processing component of the Project and deliver revised project costings built on updated vendor pricing. This included:

- Wolverine Mineral Resource Estimate (MRE) updated to an estimated 7.3 Mt @ 0.96% TREO for 70,500 t of contained TREO.
- Revised mining study based on updated MRE.
- Further metallurgical variability test work.
- Optimisation of the process plant flow sheet and resultant equipment selection.
- Initial due diligence with an Independent technical Expert (ITE) completed.

Key DFS Outputs

A summary of the Project physicals, revenue and operating costs as well as financial outcomes are shown in Table 1, Table 2 and Table 3. Project physicals and financials are based on the Production Target mine plan underpinned by the Wolverine MRE and ORE.

Table 1 Project Physicals

Physicals	Units	Value
Ore mined	kt	5,870
Ore processed (including stockpile)	kt	6,120
LOM	years	11
Head grade	% TREO	0.88
Concentrate production	t (dry)	181,000
Average concentrate production (steady state)	tpa	17,500
Concentrate grade	% TREO	25

[8] Refer to Equity Raising Presentation – 16 September 2024 available at https://northernminerals.com.au/investors/

Average TREO recovery to concentrate	%	84
TREO production	t	45,000
Average TREO production	tpa	4,350
DyTb % in TREO	%	10.7

The information presented in Table 2 and Table 3 is based on two sets of rare earth pricing forecast published in July 2025 by CRU, a highly regarded independent market analyst:

1. CRU base case (Base Case)
2. CRU price divergence scenario (Divergence Case).

The financial outcomes of the Project under the Base Case, are sufficiently robust to support development of a strategic project of this nature. Significant upside is demonstrated under the Divergence Case and higher pricing environments.

Table 2 Project Revenue and Operating Costs

Revenue and operating costs	Units	Base Case	Divergence Case
Average TREO basket price (applied to Iluka Supply Agreement)	US$/kg TREO	107	138
Dy oxide price (LOM average)	US$/kg	636	820
Tb oxide price (LOM average)	US$/kg	2,761	3,566
Revenue	A$M	3,270	4,270
Average revenue – per annum	A$M	343	450
LOM free cashflow (ungeared, post-tax)	A$M	635	1,335
EBITDA	A$M	1,695	2,690
Average EBITDA – per annum	A$M	175	272
C1 operating costs	A$/kg TREO	31.25	31.25
All-in Sustaining Costs (AISC)	A$M	2,020	2,119
AISC	A$/kg TREO	44.70	46.90

Note:

- *Figures are subject to rounding.*
- *Average revenue and EBITDA are calculated as the arithmetic annual averages during steady state production.*
- *DFS financial assessment has assumed that the Iluka Supply Agreement pricing structure remains in place for and after the total contracted quantity of 30,500 t contained TREO has been delivered to Iluka under the terms of the agreement. It has also been assumed that any annual production volumes in excess of the 5,500 tpa maximum annual quantity are subject to Iluka exercising its right of first refusal and purchasing the excess volumes as per the agreement pricing structure.*

While these two pricing cases differ materially, both are considered credible, reflecting the inherent uncertainties in today's rare earth oxide (REO) market environment, particularly in the medium to heavy rare earth category where the Chinese Government announced a broad package of export curbs in April 2025 that includes not only mined minerals such as dysprosium and terbium but also permanent magnets. These curbs impacted global supply chains in Western automakers and defence contractors and underscored China's near monopoly on rare earth mining and processing.

Northern Minerals notes that both pricing cases sit above current market pricing for Dy and Tb oxides. The Projects current implied TREO basket price is ~US$50.90/kg[9]. Rare earth supply is geographically concentrated and the rare earth pricing structure is opaque due to most sales negotiated on a contract basis between miners and downstream manufacturers. There is no commodity exchange for rare earths and Chinese market prices are generally taken as reference for negotiations. The Asian Metal Index is the primary market price reference index, and its fluctuations have historically been heavily influenced by Chinese policy decisions rather than supply-demand fundamentals.

The Company has observed that this index is most susceptible to global government policy actions rather than free market dynamics. For that reason, the Company does not consider the current market pricing as necessarily a reliable indicator of the medium to long-term market fundamentals expected to influence the pricing of concentrate sourced from Browns Range.

In addition, Northern Minerals considers the inclusion of financial outcomes for the Project under the Divergence Case provides investors with a potential upside case reflecting evolving global rare earth markets, and the potential positive impact. This is evidenced in the recently announced public-private partnership between the owner of Mountain Pass rare earth mine, MP Materials (NYSE: MP) and the U.S Department of Defense, providing a floor price, and supporting the emergence of a two-price market.

The Company notes the terms of the Iluka Supply Agreement includes an upside price sharing mechanism based on the average realised price Iluka receives for the rare earth elements contained within NTU's xenotime concentrate. These arrangements allow NTU to benefit from the emerging two-price market.

Table 3 Browns Range Project Financial Outcomes

Financial Metrics	Units	Base Case	Divergence Case
Pre-tax $NPV_{8\%,\ real}$	A$M	187	705
Pre-tax IRR	%	12%	21%
Post-tax $NPV_{8\%,\ real}$	A$M	74	443
Post-tax IRR	%	10%	18%
Payback from first production (post-tax)	yrs	7.0	5.6

[9] Based on the forecast REO assemblage contained with the Company's Xenotime concentrate at current published Asian Metal Index pricing for separated oxides as at 26 August 2025

Project Overview

The Project comprises the development of a heavy rare earth elements (HREE) mining and mineral processing facility approximately 160 kilometres (km) southeast of Halls Creek, WA. The Company holds granted tenure over the Project area and the mineral rights to an extensive area of exploration tenements surrounding the Project, both within WA and across the border in the Northern Territory.

The Project is located within the Company's WA tenements on the margins of the Browns Range Dome, a major geological structure with an outcrop spanning approximately 60 km x 30 km (1,500 km^2) across the WA and Northern Territory border.

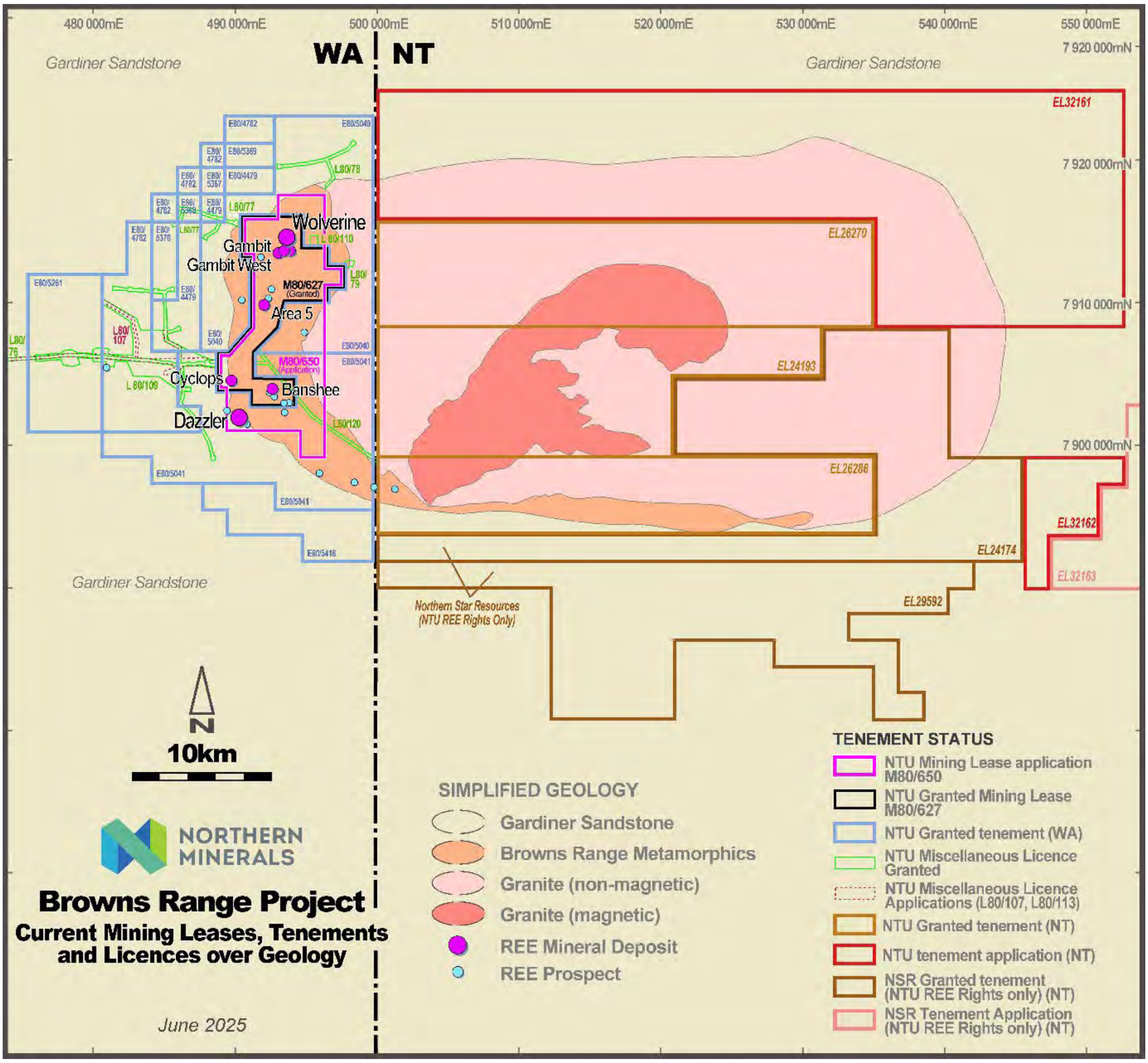

Figure 1 Browns Range geology and location of deposits

Infrastructure

The Browns Range project site has existing non-process infrastructure which was constructed as part of the BRPP in 2017. The existing infrastructure will be retained and expanded where possible to minimise project cost, risk, and construction duration, allowing the rapid mobilisation of initial construction activities to support the commencement of the full-scale Project. The proposed new and expansion infrastructure is detailed in Table 4.

Table 4 Browns Range proposed infrastructure

Item of Infrastructure	Summary
Access road	• The existing Mine Access Road is ~50 km long and will be realigned and upgraded where required • Access to the Project is along the Duncan and Gordon Down Roads (approximately 156 km) from the town of Halls Creek where it joins the Western Australian State Highway
Airstrip	• Existing airstrip will be extended to 2,000 m to suit aircrafts of 76-seat capacity • Refuelling and terminal facility
Accommodation village	• Village located ~1.3 km south of the process plant and ~900m north of the airstrip will be expanded to 352 en-suite rooms with associated facilities
Power supply	• Hybrid diesel-solar power station with a N+1 redundancy • Installed capacity of 28.5 megawatts for a total power demand of 11 megawatts • Up to 44% renewable energy penetration (solar)
Fuel storage	• On-site fuel storage of 1.8 million litres • Allows up to two months of fuel storage on site
Water supply and treatment	• Water demand of 1.3 gigalitres per annum • Water will be from a borefield and associated water conveying infrastructure ~13.5 km from the process plant • Water is of good quality and requires very little treatment
Communications	• No permanent communications infrastructure is available due to the remoteness of Project area • Low-orbit satellite technology will provide a communications link at 900 Mbps to 1 Gbps

A plan of the proposed infrastructure is shown in Figure 2.

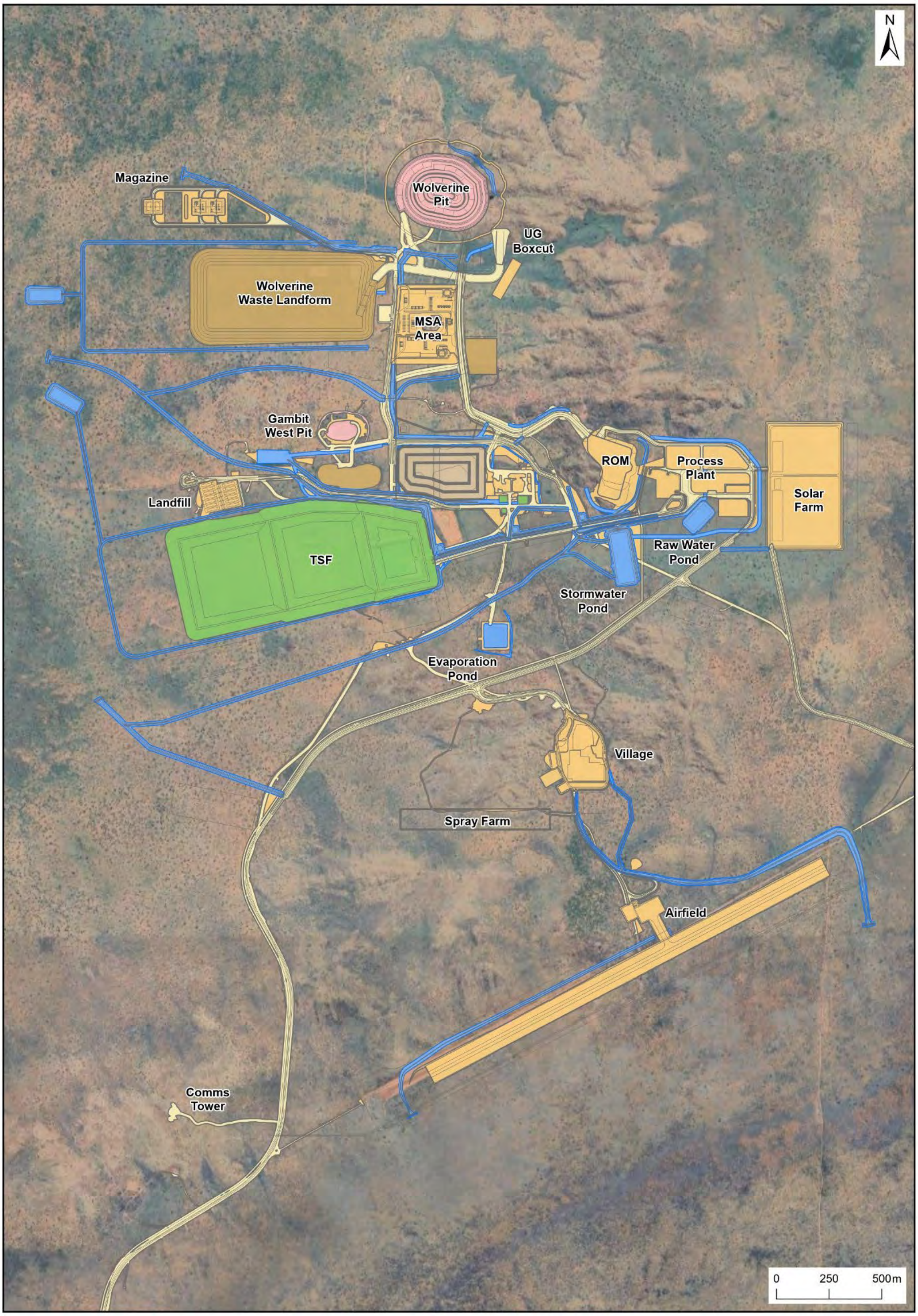

Figure 2 Browns Range existing and proposed new and expanded infrastructure

Government Support

The Project has received recognition and support from various Australian government entities at the Federal, State, and local levels. In WA, key agencies have provided guidance on permitting, land access and environmental approvals. Northern Minerals has also engaged with the WA Government to ensure alignment with the State's strategic priorities in resources development, regional employment, and economic diversification. In addition, relevant Commonwealth agencies have indicated their interest in supporting projects that contribute to critical minerals supply chains, export capacity, and national energy transition goals.

International government agencies have expressed interest in the Project due to its potential to contribute to global supply security for critical resources. Northern Minerals has engaged with export credit agencies, and international investment bodies in response to inbound interest to explore possible avenues of cooperation. Such engagement includes discussions around financing support, and participation in broader strategic initiatives between Australia and international partners. This international interest reflects the expected position of WA as a reliable and stable supplier of key raw materials to global markets.

Mineral Resource

The Project is underpinned by the Wolverine MRE[10], with supplementary material from the existing Pilot Plant stockpile MRE [11].

Table 5: Mineral Resource estimate (informing the Ore Reserve) as at 15 January 2025 reported above a 0.15 % TREO cut-off grade.

Deposit	Classification	Tonnage Mt	TREO	Dy_2O_3	Y_2O_3	Tb_4O_7	HREO / TREO	TREO
			%	kg/t	kg/t	kg/t	%	t
Wolverine	Measured	0.1	0.91	0.84	5.4	0.12	92	1,000
	Indicated	4.9	1.13	1.00	6.72	0.15	91	54,400
	Inferred	2.4	0.63	0.54	3.6	0.08	87	15,100
	Subtotal	*7.3*	*0.96*	*0.84*	*5.66*	*0.12*	*90*	*70,500*
Pilot Plant Stockpiles	Measured	0	0	0	0	0	0	0
	Indicated	0.16	0.95	0.83	5.5	0.12	89	1,500
	Inferred	0.03	0.26	0.20	1.35	0.03	79	90
	Subtotal	*0.2*	*0.82*	*0.71*	*4.71*	*0.1*	*88*	*1,600*
Total	Measured	0.1	0.91	0.84	5.40	0.12	92	1,000
	Indicated	5.1	1.12	0.99	6.68	0.15	91	56,000
	Inferred	2.4	0.63	0.54	3.57	0.08	86	15,200
	Total	**7.5**	**0.96**	**0.84**	**5.64**	**0.12**	**90**	**72,200**

Notes:

- *Rounding may have caused computational discrepancies.*
- *TREO = Total Rare Earth Oxides – La2O3, CeO2, Pr6O11, Nd2O3, Sm2O3, Eu2O3, Gd2O3, Tb4O7, Dy2O3, Ho2O3, Er2O3, Tm2O3, Yb2O3, Lu2O3, Y2O3.*
- *HREO = Heavy Rare Earth Oxides – Total of Sm2O3, Eu2O3, Gd2O3, Tb4O7, Dy2O3, Ho2O3, Er2O3, Tm2O3, Yb2O3, Lu2O3, Y2O3.*
- *HREO % = HREO/TREO*100*

[10] ASX Announcement 16 January 2025, "2025 – Wolverine Mineral Resource Estimate"
[11] ASX Announcement 28 September 2018 "Mineral Resource and Ore Reserve Update – Post Trial Mining Operations at June 30 2018"

Mining Methodology

Mining at Browns Range will be undertaken by open pit mining using conventional drill/blast and load/haul, followed by underground mining using standard mobile underground fleets and decline access with production predominantly via end-on longitudinal sublevel caving. The selected mining methods are appropriate for the deposit based on orebody geometry, geotechnical setting, and economic considerations. Unit processes are well-known and widely used.

Mining will commence as a single-stage cutback to the existing Wolverine trial pit (for approximately two years of mining) and progress to underground mining once the open pit is exhausted.

The Production Target estimate underpins approximately 12 years of mining, which is planned to commence 12 months prior to the first crusher feed. A total of ~6.12 Mt of probable reserve and inferred resource is planned to be mined at a grade of 0.88% TREO from the Wolverine deposit and BRPP Stockpile to support an initial ~11-year LOM.

Figure 3 breaks down the forecast mining production by material category and Table 6 presents the forecast mining production aligned with the Production Target plan.

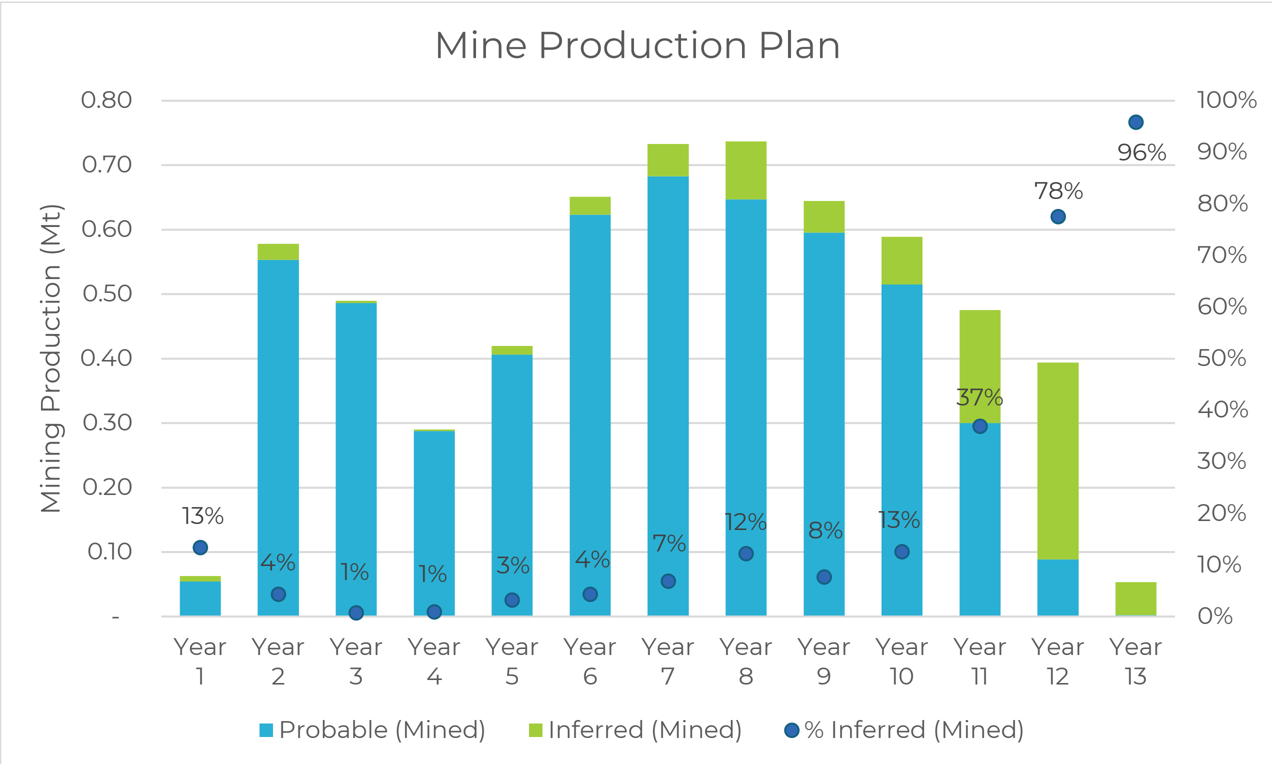

Figure 3 Forecast mine production plan by material category

Waste material from open pit mining will be used for construction activities and Sub Level Caving (SLC) topfill, with the remainder to be stored using ex-pit dumps. Underground production activities are planned to commence following completion of open pit mining. Production is scheduled to ramp-up over approximately 24 months.

Table 6 Forecast mine production plan

	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
Total movement (Mt)	**17.20**	5.10	5.59	0.96	0.39	0.53	0.75	0.81	0.79	0.71	0.65	0.48	0.39	0.05
Mined waste (Mt)	**11.08**	5.04	5.01	0.47	0.10	0.11	0.09	0.07	0.06	0.07	0.06	0	0	0
Mined production (Mt)	**6.12**	0.06	0.58	0.49	0.29	0.42	0.65	0.73	0.74	0.64	0.59	0.48	0.39	0.05
Mined TREO grade (%)	**0.88**	0.49	0.62	1.04	0.72	0.77	0.88	0.82	0.96	1.02	0.92	1.02	0.96	0.55

Notes:

- *Rounding may have caused computational discrepancies.*

Ore Reserve Estimate

The DFS has assessed modifying factors for mining, metallurgical, processing, engineering, economic, marketing, legal, environmental, social, and governmental considerations to a sufficient level of accuracy to release an ORE classified in accordance with the guidelines of the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (the JORC Code, 2012).

The ORE, presented in Table 7 is a subset of the Production Target estimate, and represents approximately 85% of the Project's total mining production tonnage.

Table 7 Ore Reserve estimate

Deposit	Category	Ore Mt	TREO %	TREO t	Dy_2O_3 kg/t	Tb_4O_7 kg/t	Y_2O_3 kg/t
Wolverine							
Open Pit	Probable	0.80	0.72	5,800	0.65	0.09	4.27
Underground	Probable	4.19	0.92	38,500	0.81	0.12	5.47
BRPP Stockpile							
Stockpile	Probable	0.2	0.77	1,500	0.67	0.09	4.46
Total	**Probable**	**5.18**	**0.88**	**45,800**	**0.78**	**0.12**	**5.25**

Notes:

- *Rounding may cause some computational discrepancies.*
- *Ore tonnes rounded to nearest 10,000 tonnes. Dy2O3, Tb4O7 and Y2O3 grades rounded to nearest 0.01 kg/t. TREO % rounded to the nearest 0.01 %. TREO t rounded to the nearest 100 t.*
- *TREO = Total Rare Earth Oxides – La2O3, CeO2, Pr6O11, Nd2O3, Sm2O3, Eu2O3, Gd2O3, Tb4O7, Dy2O3, Ho2O3, Er2O3, Tm2O3, Yb2O3, Lu2O3, Y2O3.*
- *BRPP stockpile is an existing discrete parcel of mined ore, including a portion of Inferred Mineral Resource material. The Inferred portion is circa 16% of the stockpile ore tonnes (<1% of total ore tonnes) and has been attributed zero metal grades.*

Summary of Information Material to Ore Reserves (ASX Listing Rule 5.9.1)

Entech Pty Ltd (Entech) prepared a DFS level technical mining study on behalf of Northern Minerals. As part of this study Entech developed a mine plan for Wolverine. Entech also estimated costs for mining operations including quotations from mining contractors and reviewed and validated all other inputs provided by Northern Minerals (including general and administrative costs, processing costs and recoveries, other overhead costs, metal pricing) as being suitable to support the ORE.

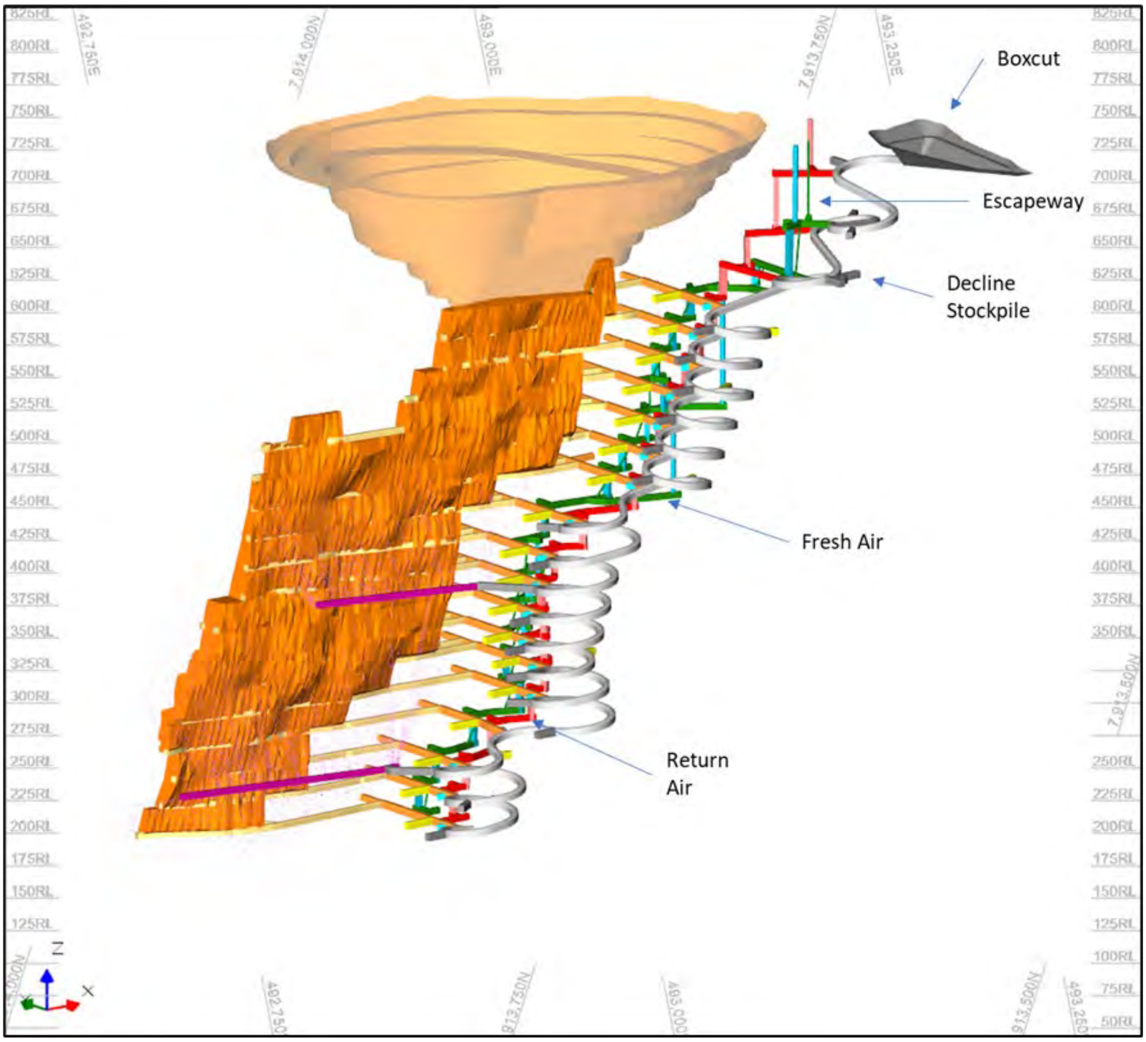

Figure 4: Ore Reserve – Proposed Wolverine Mine Layout

Other information relating to the ORE is provided below, in accordance with ASX Listing Rule 5.9.1.

Material Assumptions and Outcomes

The Ore Reserve reflects the portion of the Measured and Indicated Mineral Resource that can be economically extracted by open pit and underground mining methods considering appropriate modifying factors.

Information on product pricing, exchange rate, royalties, processing cost estimates, and other owner's cost estimates were defined by Northern Minerals and provided to Entech to inform the ORE.

REO basket pricing was adopted for the DFS based on forecast long-term REO prices provided by external market forecaster CRU. NTU maintains internal corporate guidance on exchange rates based on current exchange rate and compilation of external advice. The applied royalty comprises State Government and other royalties.

Financial modelling of the ORE demonstrates a positive economic outcome on a Net Present Value (NPV) basis. The economic outcomes are most sensitive to revenue side factors (positive NPV across a range of +10% / -5%) and these future commodity prices are not guaranteed.

Entech advise that the mining aspects that underpin the Ore Reserve are technically feasible and economically viable across an appropriate sensitivity range for the key inputs, including product pricing, costs, and processing recoveries.

Criteria for Classification

Mineral Resource estimates for the Wolverine deposit and the BRPP stockpile, which were reported to the market in January 2025, formed the basis for the conversion to the Ore Reserve. Mineral Resources are reported inclusive of the Ore Reserves.

The Ore Reserve is based on the Measured and Indicated portions of the Wolverine MRE, and the Indicated portion of the BRPP stockpile.

The Ore Reserve is attributed a confidence classification of "Probable" Ore Reserve in its entirety. There is a degree of uncertainty associated with the Mineral Resource estimate and the modifying factors.

Mining Method and Assumptions

Open pit mining using conventional drill/blast and excavator/truck methods has been assumed. Underground mining using conventional mobile underground fleet and decline access has been assumed, with production predominantly via end-on longitudinal sublevel caving. The selected mining methods are considered appropriate based on orebody geometry, geotechnical setting, and economic considerations; unit processes are well-known and widely used.

Open pit dilution and ore loss factors were built in through re-blocking of the open pit model blocks, to appropriately represent the selective mining unit.

Underground production dilution and ore loss were reported from cave flow modelling. An additional 10% ore loss was applied post-cave flow modelling to account for operational effectiveness. No dilution or mining loss factors have been applied to ore drive development.

The BRPP stockpile will be reclaimed and transported to the new process plant. No additional dilution or loss factors have been applied to the stockpile.

Processing Method and Assumptions

The DFS process flowsheet includes crushing, grinding, magnetic separation, flotation, and filtration to produce a mineral concentrate, which is then dried and bagged for transport off site. The process stages are based on well understood conventional unit operations and supported by learnings from BRPP operations.

Processing recovery factors, including recovery factors applied to impurity elements, were developed from metallurgical test work data and have been considered as a modifying factor.

Cut-off Grades or Quality Parameters

A Net Processing Revenue (NPR) function was modelled at the block level, based on in situ REE grades, processing recoveries, estimated costs (processing, general and administration), royalties, exchange rate and product price.

The NPR represents an estimate of the economic value of a block based on the revenue from recovered REEs, once processing and other downstream costs have been accounted for. It is used in conjunction with the estimated mining costs to identify blocks which are economically extractable.

Estimation Methodology

Mineral Resource material was converted to Ore Reserves after completing an optimisation process, detailed mine designs and mining schedules, and associated financial assessment as part of the DFS.

While the Ore Reserve is primarily based on Measured and Indicated Mineral Resources, the mine design necessitates the inclusion of approximately 3% by mass of material classified as Inferred Mineral Resources. The cost of mining and processing this Inferred material has been accounted for. However, it is attributed zero metal grades and does not contribute to payable metal.

Material Modifying Factors

A summary of the material modifying factors is provided in Table 8.

Table 8: Summary of the material modifying factors

Item	Unit	Value
Mining Cost		
Open Pit (average, varies with depth and rock type)	A$/t rock	10
Underground Operating	A$/t ore	120
Mining Ore Loss		
Open Pit Wolverine	%	7
Underground Wolverine SLC	%	17
Underground Wolverine Ore Drive	%	nil
Mining Dilution		
Open Pit Wolverine	%	8
Underground Wolverine SLC	%	27
Underground Wolverine Ore Drive	%	nil
Processing		
Ore Processing Input Target	tonnes per	650,000
Processing Recovery Average	%	84
Financial		
Ore Related Downstream Costs (including Processing,	A$/t ore feed	130
Average TREO product price (basket price)	US$/kg TREO	107
Basis of Cut-off – Open pit (to assign ore within the economic mining envelope determined by pit optimisation)	NPR A$/t	To process: NPR>0 (fully costed) NPR>(47) (Incremental) and validated with final DFS cost and revenue
Basis of Cut-off – Underground (to define the economic mining envelope)	NPR A$/t	Preliminary design: NPR>90 (fully costed) NPR>50 (incremental), and validated with final DFS cost and revenue
Royalties	%	4.5
Exchange Rate	A$:US$	0.65

Notes:

- *$ figures are rounded to two significant figures.*

Status of Environmental Approvals

Baseline studies have informed environmental impact assessments to support key regulatory approvals. Ministerial Statement 986 was issued in October 2014, with Section 45C variations approved since as required.

The Project has three times been determined to be "not a controlled action" under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

Secondary environmental approvals are progressing to support the full-scale Project development timeline.

Status of Mining Tenements and Approvals

All tenements required under the proposed DFS production plan for development of the Project are granted. All regulatory work programs, rental payments, and reporting obligations have been and continue to be met. The tenements are all in good standing. The Ore Reserve and proposed mining operation are located on M80/627.

All key primary regulatory approvals for the Project are in place, and outstanding secondary approvals and licences to operate are considered by Northern Minerals to be in line with expected process timelines and on track with respect to the Project schedule.

Status of Other Government Factors

Northern Minerals has Native Title Agreements in place with the Jaru and Tjurabalan Peoples, who hold determined native title over the Project area.

Northern Minerals has undertaken archaeological heritage and ethnographic surveys for the Project development footprint. Survey findings have been taken into account and agreed management plans are in place.

Infrastructure Requirements for Selected Mining Methods

Required mining infrastructure has been allowed for in the DFS capital and operating cost estimate and is considered typical for a modern mining operation in this jurisdiction.

Infrastructure Requirements for Transportation to Market

Final product transportation will be via road transport from the Browns Range site to Eneabba, utilising a mine access road, Shire roads, and State highways. Upgrades to the mine access road and its ongoing maintenance are included in the DFS cost estimates.

Processing

Northern Minerals has been conducting metallurgical test work since 2010, with a continuous pilot trial conducted at SGS Lakefield in 2014 to support flowsheet development for the 2015 DFS. The optimal flowsheet was determined to be crushing, grinding to a p80 of 63 µm, magnetic separation and flotation.

A 1/10th scale, 10 tph pilot plant based upon the 2015 DFS was constructed on site at Browns Range (BRPP) and operated for approximately three years between 2018 and 2021. The BRPP was developed as a proof-of-concept demonstration plant to reduce technical risk for a full-scale commercial process plant.

Since 2022, further vendor test work was completed to refine equipment design and selection. A Wolverine metallurgical variability test work program in 2024 demonstrated consistent performance with spatial and lithological variation.

The process plant is designed to process ~650,000 dry tonnes per annum to produce ~17,500 tonnes per annum of xenotime concentrate product with a grade of ~25% TREO, and an overall process TREO recovery of ~84%. The process plant will operate seven days a week, 24 hours per day, at 84 tph (dry) with 90% utilisation. This method will result in an average processing cost of A$12.00/kg TREO over the LOM.

Table 9 processing summary

	Unit	LOM
LOM Processing Summary		
Life of Mine	Years	11
Total process feed (incl' stockpile)	Mt	6.12
Total TREO Production	t	45,000
Total Dy Oxide Production	t	4,230
Total Tb Oxide Production	t	630

The rare earths in the Browns Range deposits are predominantly in the mineral xenotime. The xenotime in the feed ore with LOM grade ~0.88% TREO is liberated through primary jaw crushing and two stages of grinding in a Semi Autogenous Grinding (SAG) mill and ball mill. Three stages of wet high intensity magnetic separation (WHIMS) upgrade the feed to produce a xenotime-rich magnetic concentrate with a grade of ~4% TREO. Flotation using selective reagents then further upgrades the magnetic concentrate to produce xenotime concentrate product with a grade of ~25% TREO. The xenotime concentrate product is then thickened, filtered, dried, and bagged for transport and sale to Iluka.

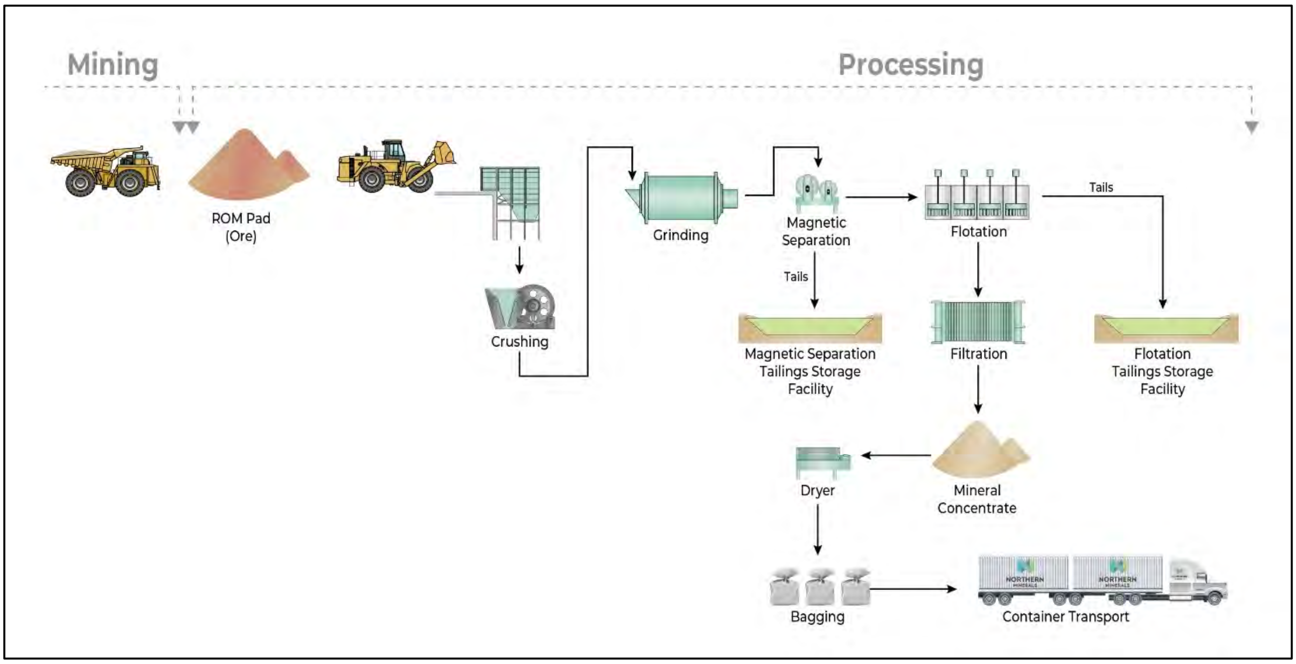

Figure 5 Process flowsheet

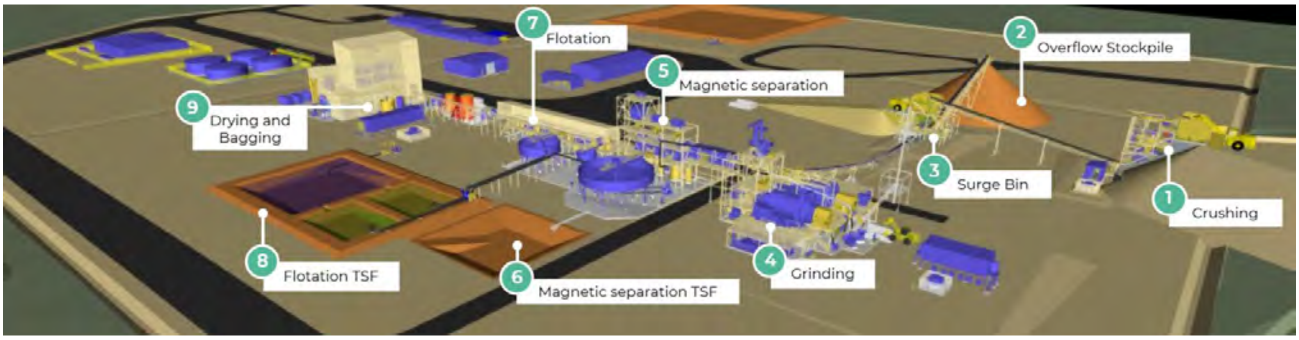

Figure 6 Plant layout

Access and Approvals

Tenure

There are four tenements required under the proposed DFS production plan, all of which have been granted. The Project's main site lies within the mining lease M80/627. Proposed ancillary infrastructures lie within three granted miscellaneous licences (L80/076, L80/109 and L80/111).

Land Access

The Gordon Downs pastoral lease is held by Heytesbury Pastoral Group (Heytesbury). Road Sharing and Water Sharing Agreements are in place with Heytesbury to facilitate access to site and the drawing of water from local aquifers subject to all relevant regulatory approvals. No other further consents are required from Heytesbury.

Native Title

The Company has executed Native Title Agreements with the Jaru Aboriginal Corporation RNTBC on behalf of the Jaru native title holders and the Tjurabalan Native Title Lands Aboriginal Corporation RNTBC on behalf of the Tjurabalan native title holders. These agreements provide Northern Minerals consents and access to country to develop and operate the Project, while at the same time ensuring the Jaru and Tjurabalan People benefit, both socially and economically, from the Project's development.

Browns Range has undergone comprehensive archaeological heritage and ethnographic surveys for the Project development footprint which are significantly complete with no areas of concern identified.

Commonwealth Government

The Project has twice been referred to the Federal Department of the Environment (now the Department of Climate Change, Energy, the Environment and Water (DCCEEW)), first in 2014 and again in 2019. Both referrals were determined not to be controlled actions under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), and, accordingly, no approval or formal assessment was required by the Commonwealth.

Due to changes in the process flowsheet since these referrals, the resultant storage of the concentrate at site triggered a mandatory referral under the EPBC Act as a potential nuclear action. Northern Minerals submitted a third referral to DCCEEW in April 2025 which was determined to be "not a controlled action - particular manner" on 14 August 2025.

Western Australian State Government

The Project has been assessed by the WA Environmental Protection Authority (EPA) and was approved by the WA Minister for the Environment on 20 October 2014 under Ministerial Statement 986, with a small number of conditions.

Minor changes to Ministerial Statement 986 have been approved under section 45C of the Environmental Protection Act 1986. The granting of Ministerial Statement 986, together with the requisite project tenure under the Mining Act 1978, allows secondary approvals such as permits and licences, to be issued under subordinate legislation. These include permits and licences required under the *Mining Act 1978*, the *Environmental Protection Act 1986*, the *Radiation Safety Act 1975*, and the *Rights in Water and Irrigation Act 1914*.

Pricing Assumptions and Forecast Methodology

Northern Minerals has developed a discounted cashflow model that reflects all inputs finalised for preparation of the DFS, including the mine production plan, and capital and operating cost estimates. The Project economics are driven by the projected basket value of the Browns Range concentrate and based on forecasted prices of contained REOs within the concentrate. The Project basket value will be principally driven by trends in Dysprosium and Terbium, estimated to make up ~70% of the product basket by value[12]. The Iluka Supply Agreement provides for pricing of the concentrate on a fixed-price component, based on contained REO and an upside price-sharing mechanism based on Iluka's realised selling price as well as adjustments for impurities.

The economics of the DFS are based on REO price forecasts published in July 2025 by CRU, a highly regarded independent market analyst. The forecasts are applied to Iluka's realised selling price for the full product basket within the Iluka Supply Agreement pricing structure.

The Iluka Supply Agreement is subject to conditions precedent required to be satisfied by certain dates, some of which have passed as at the date of this Announcement. Northern Minerals and Iluka are in discussions to facilitate the satisfaction of the conditions outstanding or agree suitable extensions where appropriate to the appliable satisfaction dates. For further details see the risks disclosure under the heading 'Iluka Supply Agreement' in the Executive Summary which is included with this document as Appendix 1.

The current market prices for dysprosium and terbium oxide are below the prices which may be achieved under CRU's forecast. Northern Minerals notes that its Average TREO basket price (applied to Iluka Supply Agreement) at current market prices is US$50.90/kg TREO. Northern Minerals does not consider current market pricing as reflective of the medium to long-term market fundamentals expected to influence HREE pricing.

Applying CRU's Base Case pricing forecasts to the Projects forecast production schedule outlines a LOM average basket price of US$107/kg TREO, which Northern Minerals considers reasonable on account of a favourable outlook expected for the key factors influencing the global market for HREEs:

- **Growth in global demand for HREE products**: Sustained long-term demand increase due to be felt for HREE elements like dysprosium and terbium (Dy/Tb) which are critical for the production of high-performance permanent magnets widely applied in internal combustion, hybrid and electric vehicles, wind turbines, specialist defence applications and emerging technologies such as humanoid robotics.
- **Widening of structural supply deficits**: Traditional dominance by China expected to be significantly subdued in the medium to long term, primarily driven by an expected

[12] Based on 2024 average prices

continuation in the tightening of defence-relevant rare earth elements like Dy and Tb exports from China.

- **Heightened geopolitical factors**: An evolution in the world economy's reliance on a single-sourced material, already evidenced by initiatives delivered under the U.S. Defence Production Act and the EU Critical Raw Materials Act, presents a clear opportunity for the US, EU and other major global trading partners to de-risk and diversify their supply of national security-adjacent materials matters like, Dy and Tb. The establishment of new supply sources is prefaced on incentive prices being met, with Browns Range strategically positioned to enjoy this potential upside.

Northern Minerals and CRU expect magnet REO prices to rise over the next decade as growing demand creates a sustained supply deficit, particularly outside of China. Chinese export controls may trigger government policies in other countries to boost non-China supply chains, leading to higher development costs and potential price premiums for non-China REEs. This could result in a two-tiered market with divergent prices as supply chains are developed and end users demonstrate a willingness to pay more for ex-China material. CRU has provided a forecast to reflect this scenario (Divergence Case) estimating the higher REO prices needed to encourage supply from costlier producers outside China as well as a forecast that allows for current non-geopolitical driven pricing (Base Case).

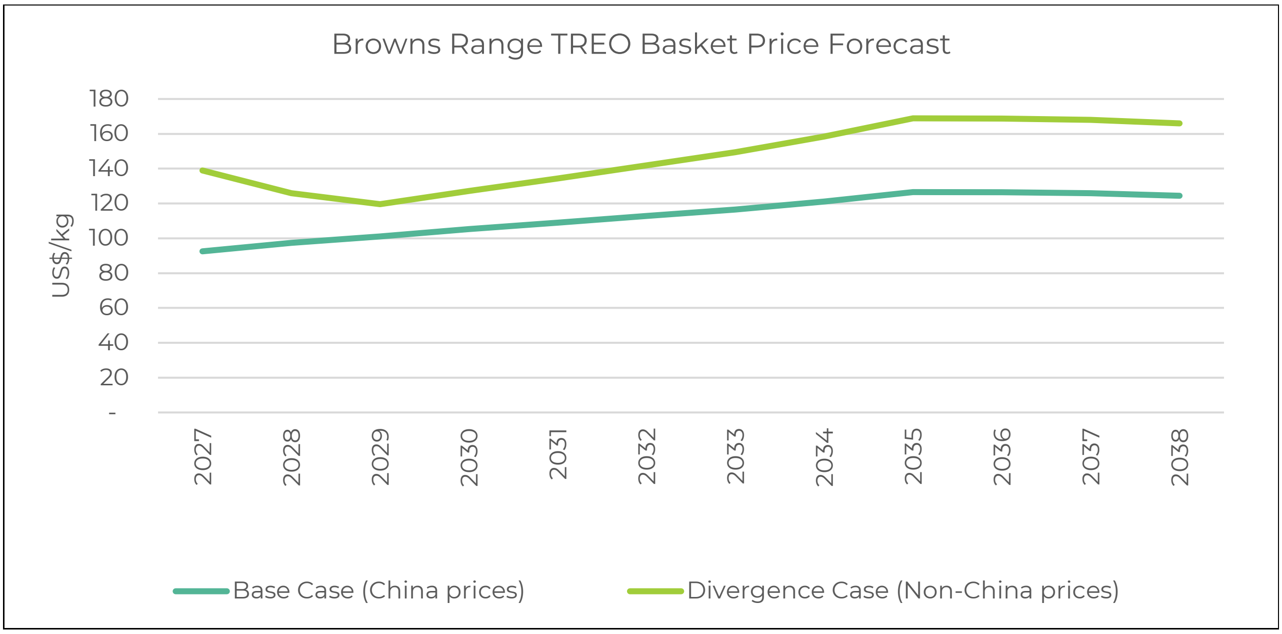

Figure 7 Browns Range product basket price forecast using CRU REE Special Report 2025 (US$/kg, 2025 real)

Northern Minerals considers these price forecasts reflect the expected supply deficit and demand surge in the Dy/Tb market over the medium to long term. Therefore, the economic modelling for Browns Range has been undertaken to present both the Base Case and Divergence Case.

Having already entered into a long-term offtake arrangement under the Iluka Supply Agreement for downstream refining in Australia, Northern Minerals considers it important to present Project economics which reflect the market which the Company's product will ultimately be sold into where the potential two-tiered pricing structure may be realised.

The Company further notes that the historical pricing data for the rare earth market generally demonstrates significant volatility, from cyclical lows and periods of elevated pricing. This volatility is illustrated based on historical prices between 2020 and 2025 set out in Figure 8.

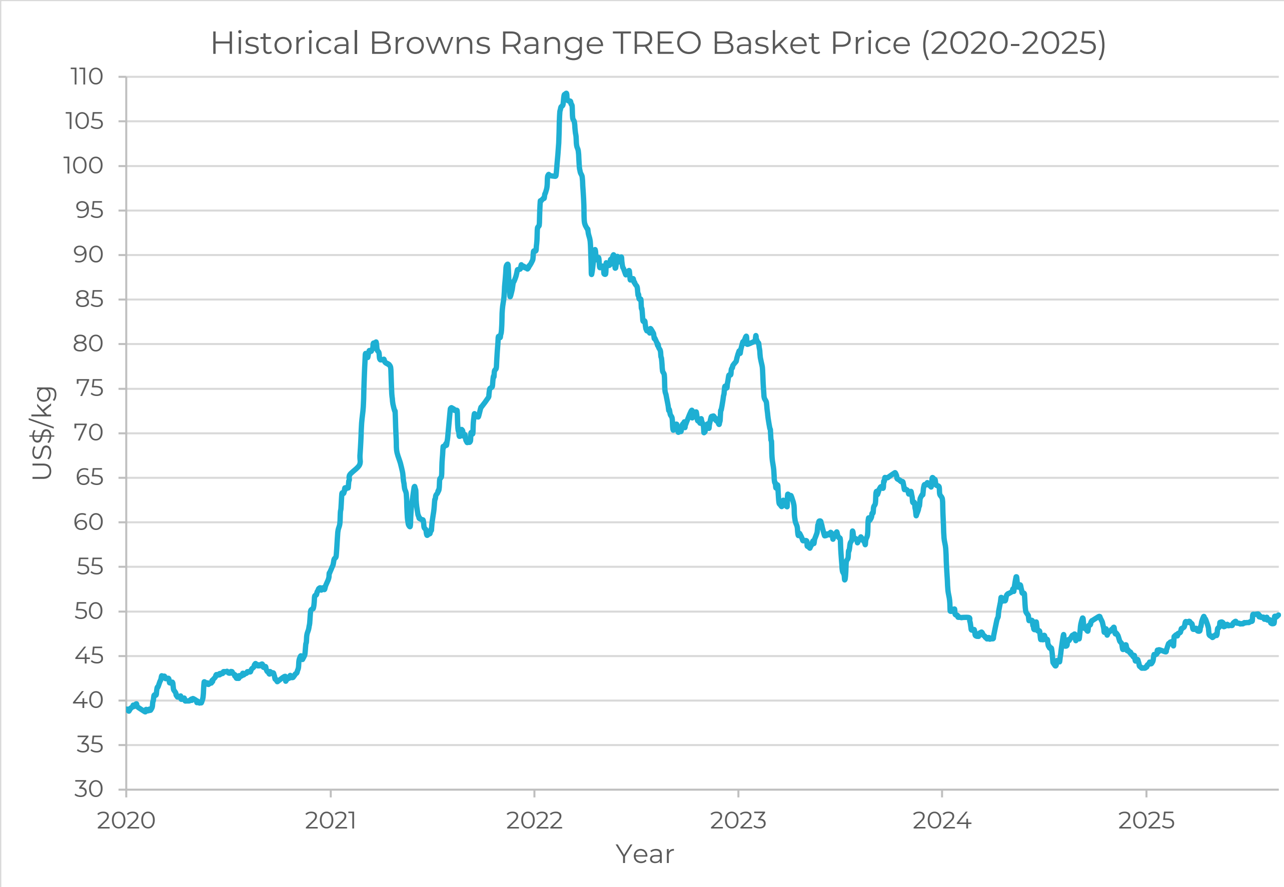

Figure 8 Historical Pricing Volatility sourced from Asian Metals

The Company acknowledges the inherent risk in adopting a long-term view on rare earth prices given the volatility demonstrated above.

For more information regarding REO pricing and the Company's forecast pricing methodology, refer to the discussion under the heading 'Market' in the Executive Summary which is included with this document as Appendix 1.

Operating Costs

Operating costs have been estimated for the Project from contractors pricing and first principles estimates based on design and developed scopes of work, test work, operational experience, and supplier recommendations.

The operating costs were estimated by Project area and represent the effort required to mine and process approximately 560,000 tpa of ROM feed yielding expected LOM averages of 4,350 tpa of TREO.

Table 10 Operating costs by project area

Project area	A$M p.a.	A$/t crusher feed	A$/kg TREO
Open pit mining	3.93	7.00	0.95
Underground mining	54.46	97.20	13.15
Processing	49.71	88.70	12.00
General & admin	21.24	37.90	5.15
C1 operating costs	**129.35**	**230.80**	**31.25**

Notes:
- *Figures are subject to rounding.*

Mining costs include expenditure relating to all works for open pit and underground mining including owners and contractors' costs. Processing costs include all costs to produce a ~25% TREO concentrate and include costs to transport the concentrate to Iluka's Rare Earth Refinery at Eneabba. Fees and royalties include State royalties and other agreed royalties.

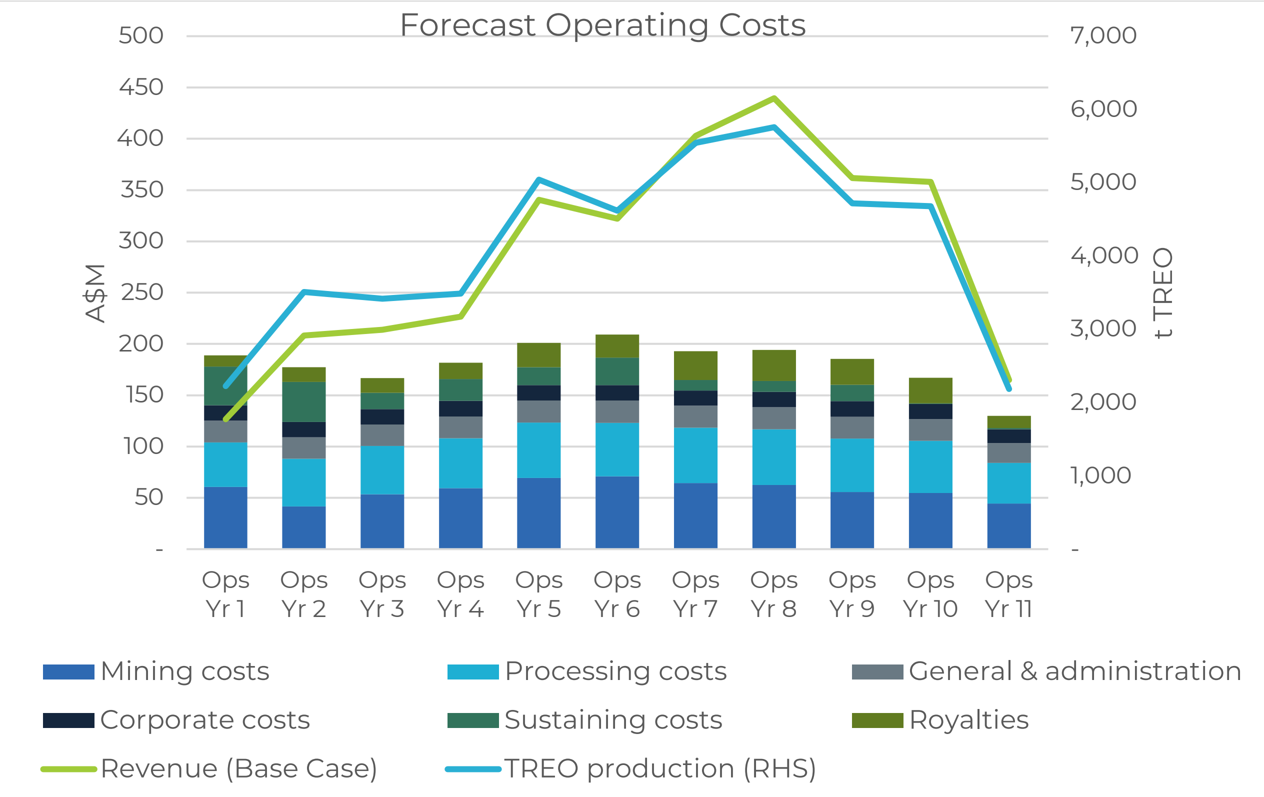

Figure 9 Forecast Operating Costs

Capital Costs

The capital cost estimate as summarised in Table 11 was prepared on an area-by-area basis according to the Project Work Breakdown Structure (WBS). Individual estimates were prepared for each area and compiled based on inputs from experienced consultants and construction and mining contractors, which developed DFS-level data for estimating and costings.

The overarching strategy for sourcing pricing for the capital procurement components of the capital cost estimate was to engage the market on a comprehensive competitive tendering basis using developed scopes of work and specifications as well as bespoke forms of contract. Budget or database pricing was used for small, low-risk scopes of work, which make up only 0.9% of the overall capital costs.

The total pre-production capital estimate for the Project is A$592M, inclusive of A$77.5M of contingency (15.1% of the total capital costs). These costs include those incurred during the ~12 months of pre-production mining.

The overall estimate has been developed in accordance with an AACE Class 2 estimate based on the level of engineering and design completed to date.

Table 11 Summary of capital costs by WBS

WBS	Cost area	A$M
0000	Project indirects	198.52
0100	General site works	1.70
0200	Mine	95.05
0800	Browns Range NPI	74.95
1400	Process Plant	147.93
1500	Process Plant NPI	73.81
	Total capital cost estimate	**591.96**

Cashflows

The Project is expected to generate substantial cashflows throughout its operating life, with positive cash generation beginning after capital expenditure and ramp-up. Under the two pricing scenarios, the payback period is estimated at 7.0 years for the Base Case (Figure 10) and 5.6 years for the Divergence Case (Figure 11).

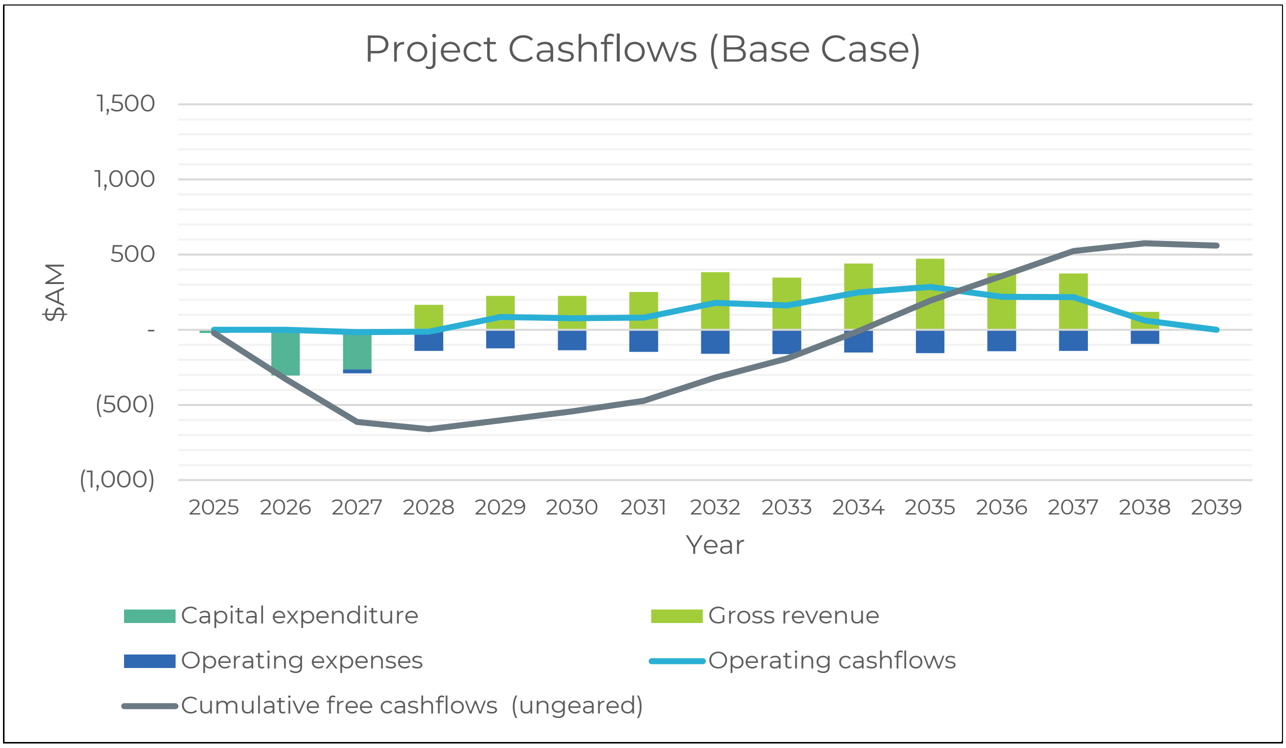

Figure 10 Post-tax Project cashflows (Base Case)

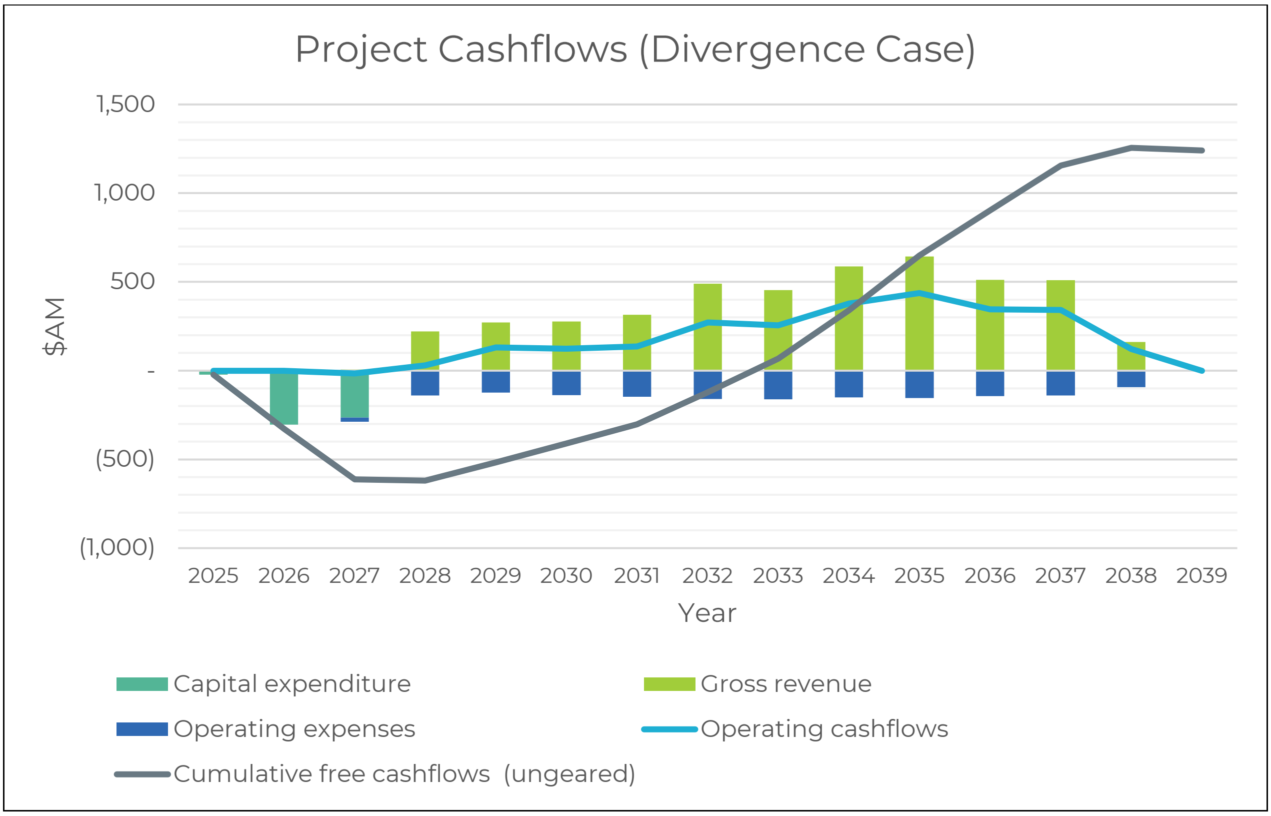

Figure 11 Post-tax Project cashflows (Divergence Case)

Sensitivity Analysis

Sensitivity analysis was completed for the Project, highlighting its economic outcomes across various critical inputs, including recovery, capital costs, operating costs, A$:US$ exchange rate and rare earths pricing. The results of the analysis are shown in the below figures. The analysis reveals that although the Project exhibits some vulnerability to fluctuations in capital and operating costs, it is considerably more influenced by shifts in variations of REO prices, process plant recovery and A$:US$ exchange rate.

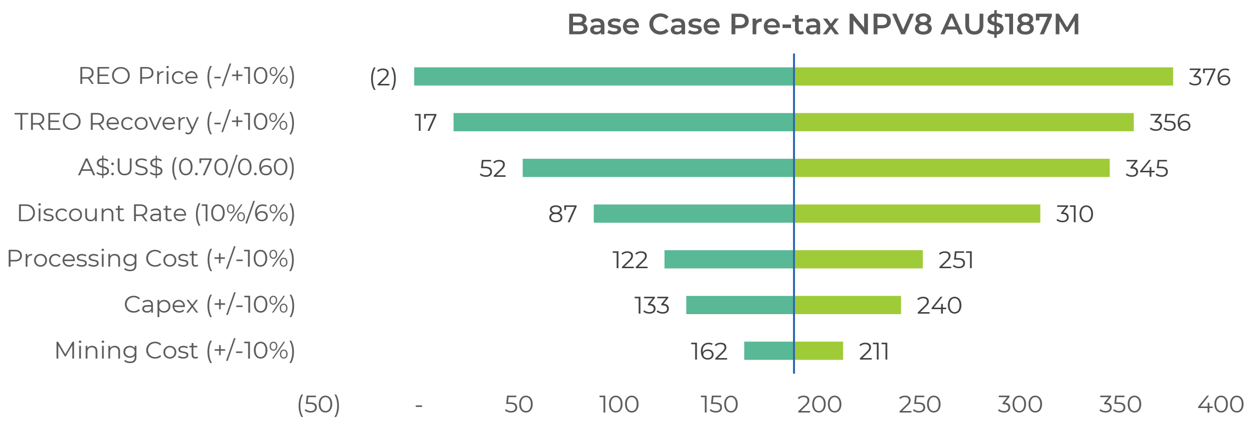

Figure 12 NPV sensitivity (Base Case)

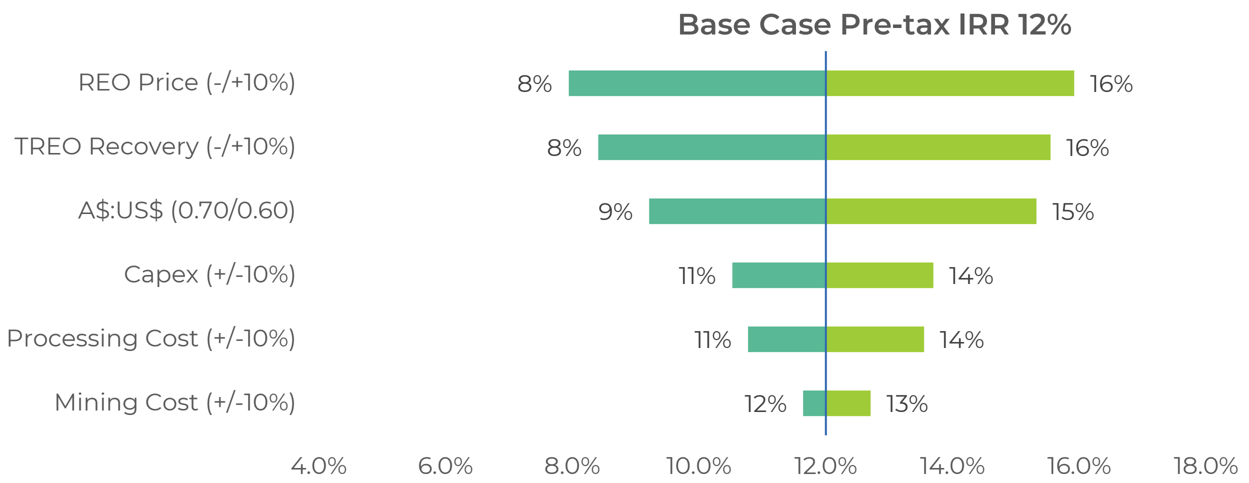

Figure 13 IRR sensitivity (Base Case)

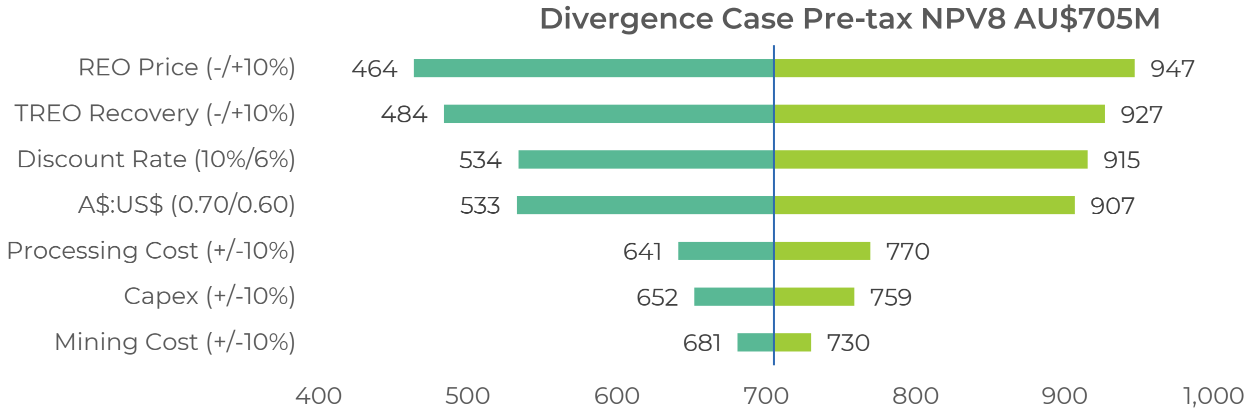

Figure 14 NPV sensitivity (Divergence Case)

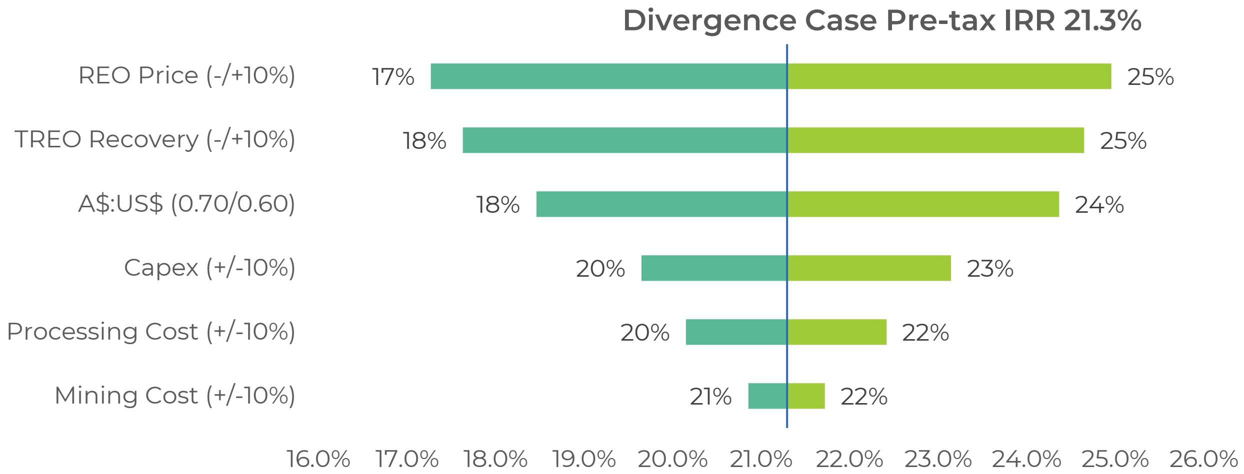

Figure 15 IRR sensitivity (Divergence Case)

Funding

Northern Minerals is actively progressing discussions with a range of funding groups including Northern Australia Infrastructure Facility, Export Finance Australia and other international export finance agencies to determine whether what amount of project finance these institutions may lend to the Project. Any consideration of finance is subject to Northern Minerals meeting relevant agency requirements and necessary levels of due diligence. In addition, the Company is in discussions with various strategic investment groups that have expressed interest in potentially funding part of the equity component of the required pre- production capital.

Northern Minerals believes there is sound rationale to expect the required funding for the Project's development will be obtained, when necessary, with the basis of this belief as following:

- The Company currently has a market capitalisation of ~A$301 million, with a simple corporate and capital structure as well as 100% ownership of the Project.
- The Project is globally significant, with proven mining and straightforward processing methods and once in operation, will be a significant source of Dy/Tb outside of China. The release of the DFS strengthens opportunities to engage with potential financiers.

- The Board and Management team has expertise in raising funds for mining projects and managing ASX-listed resource companies and has determined resourcing needs to progress the Project into construction, commissioning and operations.
- The Company has entered into a strategic partnership and long-term supply agreement with Iluka for feedstock to its Eneabba refinery, providing a clear offtake pathway for the Project and strengthens its position with prospective funding partners.
- There is strong ongoing availability of global debt and equity for rare earths projects, illustrated by recent sizeable financings for companies such as Lynas Rare Earths recent fully underwritten institutional AU$750 million placement, Lindian Resources, Arafura Rare Earths, Brazilian Rare Earths, Australian Strategic Materials, and Iluka Resources.
- Early-stage discussions have begun with potential strategic partners interested in supporting the Project.
- The release of the present DFS-level study is expected to facilitate more formal engagement with financing sources and strategic partners.
- The Project is in discussions with the Federal Government, including prioritisation under industry development programs and participation in major international industry forums.
- All these factors are expected to be highly attractive to prospective financiers.

Forward works programs

Northern Minerals holds extensive exploration tenure across its 5,600 km^2 landholding in WA and the Northern Territory and is actively undertaking exploration work programs seeking to extend its HREE resource base.

Northern Minerals has identified the Dazzler deposit at Brown Range as an opportunity to provide additional sources of mineralisation for processing and therefore has commenced comprehensive metallurgical test work. If the metallurgical test work supports a positive economic outcome, the Company may look to increase the total volume of concentrate produced in the initial production years at Browns Range, targeting completion of the assessment prior to commencement of production.

Northern Minerals continues to progress its funding strategy including ongoing discussions with export finance agencies and various strategic investment groups that have expressed interest in potentially funding part of the equity component of the Project's pre-production capital.

The Company is seeking to finalise its total funding envelope and conditional arrangements with these and other potential financiers within the next six months, with a Final Investment Decision (FID) subject to finalising these funding arrangements. Construction of the Project is estimated to be 26 months from financial close.

With the important DFS work program now completed and published, once funding has been secured, Northern Minerals will set about expanding its organisational capacity to complement its experienced project delivery team.

Competent Person's Statement

The information in this report that relates to Ore Reserves for the Browns Range Heavy Rare Earth Project is based on information compiled by Mr Daniel Donald, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Daniel Donald is employed by Entech and is an independent consultant contracted by the Company for professional services. Mr Daniel Donald has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Daniel Donald consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information for the Wolverine MRE is extracted from the NTU announcement to the ASX on 16 January 2025. The information for the Pilot Plant Stockpiles, Gambit West, and Gambit MREs is extracted from the NTU announcement to the ASX on 28 September 2018. The information for the Dazzler MRE is extracted from the NTU announcement to the ASX titled 'NTU Over 50% increase in Dazzler high-grade mineral resource' on 7 April 2020. The information for the Cyclops and Banshee MREs is extracted from the NTU announcement to the ASX titled 'Further increase in Browns Range Mineral Resource' on 15 October 2014. The information for the Area 5 MRE is extracted from the NTU announcement to the ASX titled 'Wolverine HREE Resource Doubled in upgrade at Browns Range' on 26 February 2014. The information for the above MREs is available to view on the Company's website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements for these Mineral Resources and that all material assumptions and technical parameters underpinning the estimates in these market announcements 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 announcements.

ASX Listing Rule 5.9 – Ore Reserve

The material assumptions for the reporting of the Ore Reserve which this Project is based on are included in the body of this announcement and the Executive Summary which is included with this document as Appendix 1.

ASX Listing Rule 5.16 – Production Target

The material assumptions for the reporting of the Production Target which this Project is based on are included in the body of this announcement and the Executive Summary which is included with this document as Appendix 1.

This ASX announcement has been authorised for release by The Board of Directors.

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About Northern Minerals

Northern Minerals Limited (ASX: NTU) (**Northern Minerals** or the **Company**) owns 100% of the Browns Range Heavy Rare Earths Project in the East Kimberley region of Western Australia (the **Project**). The Project's deposits are uniquely rich in the heavy rare earth elements dysprosium (Dy) and terbium (Tb).

Dysprosium and terbium are critical in the production of dysprosium neodymium iron-boron (DyNdFeB) magnets used in clean energy, military, and high technology solutions. Dysprosium and terbium are prized because their unique properties improve the durability of magnets by increasing their resistance to demagnetisation.

The Project's flagship deposit is Wolverine, which is thought to be one of the highest-grade dysprosium and terbium ore body in Australia. The Company is preparing to bring Wolverine into production with the objective of providing a reliable alternative source of dysprosium and terbium to production sourced from China.

With the completion of the Browns Range Heavy Rare Earth definitive feasibility study, the company is now progressing project funding discussions to enable the construction of a commercial-scale operation focused on mining and beneficiating ore from the Wolverine deposit, for delivery to Iluka Resources' (ASX: ILU) under-construction rare earths refinery at Eneabba, also in Western Australia.

In addition to Wolverine, Northern Minerals has several additional deposits and prospects within the Project that contain dysprosium and other heavy rare earth elements, hosted in xenotime mineralisation.

For more information, please visit northernminerals.com.au.

Future performance and forward-looking statements

This Announcement (including its Appendix) contain certain “forward-looking statements”. The words “expect”, “anticipate”, “estimate”, “intend”, “believe”, “guidance”, "forecast", "target", "aspire", “should”, “could”, “may”, “will”, “predict”, “plan” and other similar expressions are intended to identify forward-looking statements. Any indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this Announcement are based on assumptions and contingencies that are subject to change without notice and involve known and unknown risks and uncertainties and other factors that are beyond the control of Northern Minerals, its directors and management. This includes statements about market and industry trends, which are based on interpretations of current market conditions.

You are strongly cautioned not to place undue reliance on forward-looking statements, particularly in light of the current economic climate and the significant volatility, uncertainty and disruption.

Forward-looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. Actual results, performance or achievements may differ materially from those expressed or implied in such statements and any projections and assumptions on which these statements are based. These statements may assume the success of Northern Minerals’ business strategies, whether the success is realised in the period for which the forward-looking statement may have been prepared or otherwise. No representation or warranty, express or implied, is made as to the accuracy, likelihood of achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this Announcement. The forward-looking statements are based on information available to Northern Minerals as at the date of this Announcement. Except as required by law or regulation (including the ASX Listing Rules), none of Northern Minerals, its representatives or advisers undertakes any obligation to provide any additional or updated information whether as a result of a change in expectations or assumptions, new information, future events or results or otherwise.

APPENDIX 1

BROWNS RANGE HEAVY RARE EARTHS PROJECT DEFINITIVE FEASIBILITY STUDY

EXECUTIVE SUMMARY

DEFINITIVE FEASIBILITY STUDY

Browns Range Heavy Rare Earth Project

SEPTEMBER 2025

ASX:NTU

NORTHERN MINERALS

Cautionary Statement – Northern Minerals’ Definitive Feasibility Study

The Definitive Feasibility Study referred to in this announcement has been undertaken to determine the viability of Northern Minerals' Browns Range Heavy Rare Earth Project based solely on the development of the Wolverine deposit via open pit and underground mining methods (the Project).

The DFS is a technical and economic assessment of the potential viability of the Project. It is based on detailed technical, economic and geopolitical assessments to a level that the Company believes is sufficient to support estimation of Ore Reserves. Northern Minerals has previously commissioned and released the 2015 Feasibility Study (Previous Study). While geological and metallurgical observations and data from the Previous Study have been leveraged to inform the outcomes of the DFS, Northern Minerals considers the Previous Study to be superseded by the DFS. Cost, pricing and other financial assumptions applied to derive economic outcomes under the Previous Study are historical and do not apply in the current markets for commodities, or more-specifically, rare earth products. These assumptions have been revised as reported in the DFS, and Northern Minerals directs investors to rely solely on these updated assumptions with respect to any investment decision concerning the Company.

The DFS is based on existing Mineral Resources and the presently reported Probable Ore Reserves defined within the Project. The Mineral Resources and Ore Reserves underpinning the estimated life of mine production under the DFS (Production Target) have been prepared by a competent person or persons and reported in accordance with the JORC 2012 Code. The Production Target comprises Measured (~2%), Indicated (~84%) and Inferred Mineral Resources (~14%). Investors are cautioned that there is a low level of geological confidence in Inferred Mineral Resources and there is no certainty that further drilling will result in the determination of Measured or Indicated Mineral Resources, or that the Production Target will be realised. Of the Mineral Resources scheduled for extraction in this Production Target, approximately 85% is classified as Probable Ore Reserves. The proportion of Inferred Mineral Resources is not a determining factor for viability of the Project.

The DFS outcomes are based on the range of material assumptions regarding modifying factors outlined in this announcement. Among these material assumptions are the Company's prospects of securing further debt and equity funding of at least A$592M. Investors should note that there is no certainty Northern Minerals will be able to raise the required amount of funding when needed and that access to such funding may be subject to conditions that may or may not be within Northern Minerals' control. It is also possible that said funding may only be available on terms that may be dilutive to or otherwise effect the value of Northern Minerals' shares. It is also possible that Northern Minerals could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Project. This could materially reduce Northern Minerals' proportionate ownership of the Project. While Northern Minerals considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated by the DFS will be achieved.

The DFS further assumes the Iluka Supply Agreement remains on foot to supply up to and beyond the total contracted quantity of 30,500 t contained TREO. The Iluka Supply Agreement is subject to conditions precedent required to be satisfied by certain dates, some of which have passed as at the date of this Announcement, which may entitle the parties to terminate the Iluka Supply Agreement. Northern Minerals and Iluka are in discussions to facilitate satisfaction of the conditions outstanding or agree suitable extensions when appropriate to the relevant satisfaction dates. Neither party has exercised, nor indicated that they will exercise, their termination right as at the date of this Announcement. There can be no guarantee that outstanding conditions will be satisfied or a suitable extension to the relevant satisfaction dates will be reached. Please refer Key Risks “Iluka Supply Agreement” in the Brown Range Heavy Rare Earth Definitive Feasibility Study Executive Summary.

Northern Minerals has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and for holding the expectation that it will be able to complete the development of the Project.

Contents

Strategically and geopolitically significant asset

- Heavy rare earths (HREs) critical in decarbonisation, defense and other applications
- China continues to reinforce its grip on the global HRE sector
- Western governments seeking urgent development of alternate supply chains
- Located in Western Australia, a Tier 1 mining jurisdiction

Browns Range Heavy Rare Earth Project – an emerging alternate supplier

- High grade Dy/Tb deposit at Browns Range
- Project aligned with Australia and other key government critical minerals strategies
- Emerging ex-China premiums on REO pricing as ROW seek alternate supply

Supply and funding partnership with Iluka Resources

- Iluka developing Australia's first rare earth separation facility at Eneabba
- Browns Range will supply key HRE feedstock establishing a new domestic supply chain
- Long-term offtake for 30,500 t contained TREO plus post FID equity funding commitment

Ore Reserve Estimate underpins 11-year LOM production plan[1]

- Probable Ore Reserve of 5.18 Mt @ 0.88% Total Rare Earth oxides (TREO) for 45,800 t contained TREO
- LOM production plan based on Production Target estimate forecast to produce ~17,500 tpa of concentrate containing ~25% TREO for ~4,350 tpa TREO
- Production Target estimate comprises of ~85% Probable Ore Reserve and ~15% Inferred Mineral Resources

DFS defines technically robust project

- Completion of comprehensive specialist studies supporting the mine plan
- Proven flowsheet validated by bench and pilot scale testwork
- Existing site infrastructure for accelerated construction commencement
- CAPEX/OPEX developed in accordance with an AACE Class 2 estimate

Licence to operate

- Key primary approvals obtained
- Project critical tenure in place, native title agreements executed
- Strong government and community support

Scalable project

- Significant exploration upside within >5,600 km² of available tenure
- Expansion and development prospects within existing Mineral Resources for potential mine life extension

1 Based on a Production Target which comprises ~85% Probable Ore Reserves and ~15% Inferred Mineral Resources. 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 Measured or Indicated Mineral Resources or that the production target itself will be realised.

DFS Highlights

Life of Mine[1]
11 years

Pre-production Capital[2]
A$592M

Opex[3]
A$31.25
/kg TREO

Target Concentrate Production in
2028

70% Dy/Tb
by revenue

1 Life of mine or mine life refers to the estimated period of operation, commencing from first concentrate production underpinned by the Production Target, unless otherwise noted

2 Project pre-production capex excludes working capital, finance costs, sustaining capital and corporate costs associated with project development

3 C1 opex includes all mining, processing and general and administration costs and is LOM average

$NPV_{8\%, real}$
(pre-tax)

Base Case
A$187M

Divergence Case
A$705M

IRR
(pre-tax)

Base Case
12%

Divergence Case
21%

Undiscounted free cashflow (post-tax)

Base Case
A$634M

Divergence Case
A$1.3B

Payback from first production
(post-tax)

Base Case
7.0 years

Divergence Case
5.6 years

Introduction

Figure 1 Wolverine trial pit

Northern Minerals has completed a DFS for the development of its wholly owned Browns Range Heavy Rare Earth Project (the Project). The DFS confirms the Project's strategic value and positions it to become one of the world's first significant producers of HREE-rich concentrate outside of China.

The Project comprises the development of a heavy rare earth element (HREE) mining and mineral processing facility approximately 160 kilometres (km) southeast of Halls Creek, Western Australia (WA). The Company holds granted tenure over the Project area and also the mineral rights to an extensive area of exploration tenements surrounding the Project, both within WA and the Northern Territory (NT).

The Project is located within the Company's WA tenements on the margins of the Browns Range Dome (the Dome), a major geological structure with an outcrop spanning approximately 60 km x 30 km (1,500 km^2) across the WA and NT border. The geological assemblages intruded by the Dome are largely underexplored and highly prospective for mineralisation which hosts high grade HREE.

Northern Minerals commenced HREE-focussed exploration on the Dome region in 2010. Exploration to date has focussed on targets in WA with mineral resources identified in seven deposits, including the unconformity hosted Rare Earth Element (REE) Dazzler deposit across the Company's granted mining and exploration leases with the Wolverine deposit the focus of the DFS.

A key feature of the Project is the dominance of xenotime mineralisation, which is rich in dysprosium[1], terbium and other HREEs. The xenotime mineralogy, coupled with the mainly silica host rock, allows the plant feed to be processed and concentrated up to 34 times, with high recoveries of HREEs.

The Project is underpinned by the Wolverine Mineral Resource, one of the highest-grade dysprosium and terbium orebodies in Australia, with an estimated 7.3 Mt at 0.96% TREO[2], inclusive of the Wolverine Ore Reserve estimate of 5.18 Mt at 0.88% TREO, reported as part of this DFS. Once operational, the Project plans to produce an average of ~17,500 tonnes per annum (tpa) of ~25% TREO concentrate over the initial ~11-year life of mine (LOM)[3].

1 In this report dysprosium is to be read as dysprosium oxide (Dy2O3) unless otherwise stated. Other elements are referred to similarly

2 **TREO = Total Rare Earth Oxides** – Total of La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3

3 Life of mine or mine life refers to the estimated period of operation, commencing from first concentrate production underpinned by the Production Target, unless otherwise noted.

The mineralised material will be mined using a combination of open pit and underground mining methods and processed on site. The processing plant will process this feed via a combination of crushing, grinding, magnetic separation and flotation to produce the concentrate. The concentrate will be dried and packaged on site and transported for downstream processing.

The strategic partnership entered with Iluka in October 2022 includes a concentrate supply agreement for supply of HREE concentrate transported from the Project to Australia's first fully integrated rare earths refinery at Eneabba (location shown in Figure 2). Under the partnership, Northern Minerals will play a pivotal role in providing a new supply chain for critical minerals that are essential to global electrification, the transition to a low carbon economy and key defence applications. There is mutual commercial benefit for both parties, as well as for downstream consumers of rare earths; and the value addition will occur in Australia for the first time.

The Project is expected to produce one of the highest rare earth basket values globally. The heavy rare earth oxides (HREOs) of dysprosium and terbium are the key value drivers, accounting for ~70% of the concentrate

Figure 2 Concentrate transport route

rare earth oxide (REO) assemblage by value[4]. The permanent magnet sector, which currently accounts for over 35% of the rare earth market, and in which HREs are a vital constituent, is expected to grow at a compound annual growth rate (CAGR) of 4.7% to 2040[5].

The Company believes there is compelling evidence to suggest that momentum for the transition toward a resilient, non-Chinese heavy rare earth supply chain with independent pricing is accelerating. This is supported by developments in the European markets, where Dy and Tb oxides are trading at up to three times the current Asia Metals prices, (albeit in small volumes), as well as the recently announced public-private partnership between the owner of Mountain Pass rare earth mine, MP Materials (NYSE: MP) and the U.S Department of Defense, providing a floor price, and supporting the emergence of a two-price market. In response to this emerging market dynamic, the Company has incorporated both a Base Case and a Divergence Case into the financial scenarios presented in the DFS.The Company has secured all requisite environmental approvals, critical tenure, and finalised native title agreements with the Jaru and Tjurabalan Peoples. The Project benefits from a strong social and environmental licence to operate, providing the necessary certainty to advance into construction and operational phases.

Northern Minerals intends to advance the Project development through initiation of Front-End Engineering and Design (FEED), and finalising permits and secondary approvals. Financing discussions are ongoing with export credit agencies in Australia, United States and Europe to determine whether these institutions may lend to the Project. Any consideration of finance I subject to Northern Minerals meeting relevant agency requirements and necessary levels of due diligence.

Beyond the DFS, the company is undertaking technical work programs to confirm the viability of incorporating satellite deposits as blending material. In addition, the company is undertaking exploration activities seeking to expand its overall resource base.

Location – Australia

The Project is located 160 km southeast of Halls Creek, within the Gordon Downs pastoral lease in the Shire of Halls Creek, Western Australia. It lies approximately 50 km southeast of the Ringer Soak Community at the Kundat Djaru Aboriginal Reserve and within the determined native title area of the Jaru People.

Feasibility Team

Work completed in the DFS builds on previous studies commissioned by the Company, including the 2015 Definitive Feasibility Study as well as lessons learnt from the operation of the Browns Range Pilot Plant (BRPP) that was in operation until 2021. Northern Minerals' project development, exploration and technical services teams, working in conjunction with several specialised independent consultants, have contributed to complete studies on all aspects of the Project to deliver the DFS. Key contributors include the parties listed in Table 1.

4 Based on 2024 average prices.

5 CRU REE Special Report 2025, July 2025.

Table 1 Independent Consultants

Consultant	Scope Area
NEUPLAN	**Neuplan** – Study and project management services, project controls and procurement, integration of site wide designs, capital and operating cost estimates
entech.	**Entech** – Mineral Resource estimate, mine design, scheduling and costing, mine geotechnical, mine ventilation
BECK ENGINEERING	**Beck Engineering** – Underground sublevel cave material flow modelling, mining geotechnical
Knight Piésold CONSULTING	**Knight Piesold Consulting** – Tailings management and storage design, airstrip design and geotechnical studies
wsp	**WSP** – Surface water management and water balance
Klohn Crippen Berger	**Klohn Crippen Berger** – Project water supply, mine dewatering and ground water modelling
engineered efficiency	**Engineered Efficiency** – Basic engineering design of raw water supply
EPCM SOLUTIONS Pty Ltd	**EPCM Solutions** – Electrical, instrumentation and communications engineering
CARRICK CONSULTING (WA) PTY LTD	**Carrick Consulting** – Wolverine pit surface water management
RAV DG SERVICES	**RAV DG Services** – Fuel storage design and estimate
TRADING MATTERS	**Trading Matters** – Fuel supply cost forecast
SHAWMAC	**Shawmac** – Access roads, site wide earthworks design
GR Engineering Services; MACA Interquip mintrex engineering your success	**GR Engineering Services & MACA Interquip** – Early Contractor Involvement (ECI) for Process plant
MSSGROUP	**Regional Aerodrome Management Services (MSS Group)** – Peer review of airstrip design
JEB LOGISTICS & SERVICES PTY LTD	**JEB Logistics** – Project logistics
Preston Consulting	**Preston Consulting** – Environment and approvals
CAD Resources	**CAD Resources** – GIS and CAD services
Outline IMAGERY AI	**Outline Imagery** – Site survey data
Nerida Miller Architecture	**Nerida Miller Architecture** – Accommodation village
MBS ENVIRONMENTAL	**MBS Environmental** – Environmental studies
Mattiske Consulting Pty Ltd	**Mattiske Consulting** – Flora and vegetation surveys
MODEL ANSWER commercial intelligence	**Model Answer** – Financial model development

Geology

"The xenotime dominant mineralisation found at Wolverine is a rich source of heavy rare earths Dysprosium and Terbium"

Regional Geology

The geology of the Tanami Region (also known as the Granites – Tanami Orogen) comprises the regionally extensive Tanami and Ware groups consisting of a succession of 1885 – 1816 Ma metasedimentary and volcanic rocks. These have been extensively intruded by 1825 – 1790 Ma syn-tectonic granites (Grimwade, Frederick, and Birthday Suite) and dolerite dykes. The metasedimentary, volcanic and granitic rocks of the Tanami Region are unconformably overlain by the younger, non-metamorphosed, Mesoproterozoic siliciclastic and carbonate cover rocks of the Birrindudu Basin 1768 – 1632 Ma in the northwest.

The rocks have been subject to regional metamorphism and extensively deformed in several different deformation events related to the assembly of the North Australian Craton. Two major structural events are of note: the tectono-thermal Tanami Event, ~1840 Ma, with east-west compression which caused folding, greenschist metamorphism; and the extensional Stafford Event 1810 – 1790 Ma, which caused widespread upright folding, faulting and granitic magmatism.

Local Geology

The Browns Range project area lies in the northwest Tanami Region, straddling the border of Western Australia and the Northern Territory. The local geology consists of deformed volcano-sedimentary basement rocks of the Browns Range Metamorphics (BRM). These may be part of the Proterozoic Tanami Group 1885 –1865 Ma or possibly an older Archean sequence 3000 – 2500 Ma.

The BRM has been intruded by the Browns Range Dome (BRD) granite consisting of plutons of the Frederick and Grimwade suites 1820 – 1790 Ma. A sequence of mafic-ultramafic rocks also intrudes the BRM.

The entirety is overlain unconformably and non-conformably by the minimally deformed Gardiner Sandstone, Birrindudu Group, 1735 – 1640 Ma.

The bedrock geology is only partially exposed, being mostly covered by recent alluvial sediments. Figure 4 shows the regional geology of Browns Range.

Figure 3 Wolverine discovery outcrop

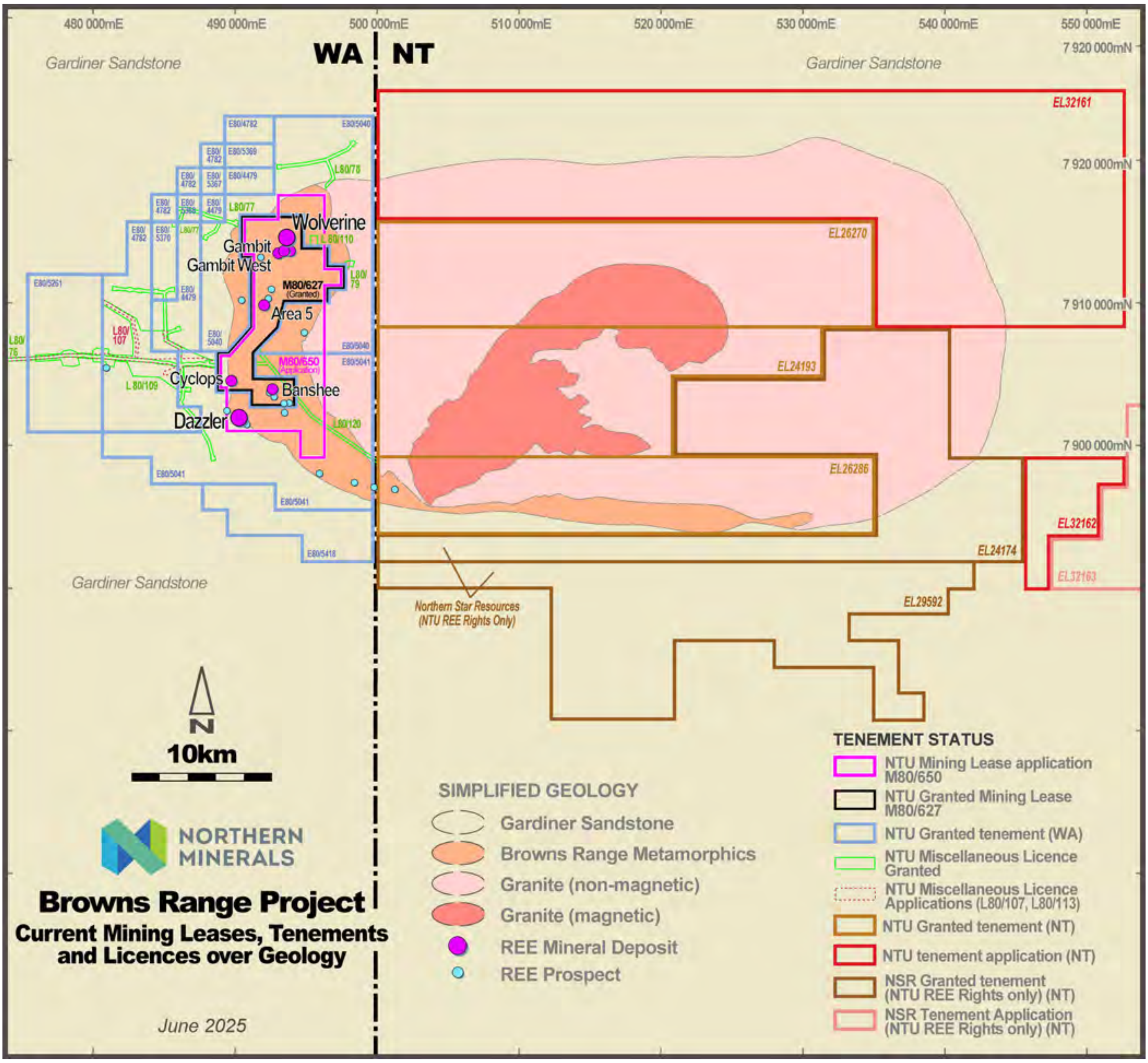


Figure 4 Browns Range geology and location of deposits

"Structural geology and mineralogy at the Wolverine deposit is well informed by over 90,000 m of drilling"

Exploration History

The exploration potential of the Browns Range area was initially generated by reconnaissance mapping carried out by the Bureau of Mineral Resources (BMR) in the late 1950s.

Exploration was undertaken by New Consolidated Goldfields in the early 1960s, followed by various phases of gold, base metals and uranium exploration throughout the 1970s, 80s and 90s, by companies such as BHP Minerals, Sigma Resources and PNC Exploration Australia Pty Ltd (PNC).

Anomalous rare earth elements in outcrop were first identified through evaluation of radiometric targets by PNC during its uranium exploration programs between 1987 and 1992.

Between 2008 and 2010, preliminary exploration work by Northern Minerals identified high-grade rare-earth mineralisation at the Wolverine and Gambit deposits.

An inaugural drilling program was completed in 2011 at the Wolverine, Gambit, Area 5, and Area 5 North deposits. Since then, extensive exploration programs of geophysical data acquisition, geochemical soil sampling, rock chip sampling and mapping of the Browns Range area discovered numerous additional prospects with potential to host economic HREE deposits, providing further exploration upside to extend the life of the Project.

To date, Mineral Resources in seven deposits spanning the Company's granted mining and exploration leases at Browns Range have been identified. The Wolverine Mineral Resource estimate forms the basis of this DFS.

Understanding of the Wolverine deposit's structural geology and mineralogy is provided by extensive exploration and resource development undertaken by the Company to date, including ~90,000 m of drilling.

Figure 5 Airborne geophysical data acquisition (~24,000 line km) Q2FY25

Table 2 Statistics for drilling in the Wolverine deposit by year and drilling type

Year	Drill Type	Hole Count	Total Depth
2011	DD	4	714.1
2011	RC	36	2,590
2012	DD	21	3,135.66
2012	RC	60	6,262
2012	RCDD	12	2,477.39
2013	COST	2	25
2013	DD	14	1,324.85
2013	RC	70	6,416
2013	RCDD	53	17,747.81
2014	DD	9	948.8
2014	RC	85	4,003
2014	RCDD	1	85.9
2017	BH	2,895	15,460.48
2017	CHAN	4	28.49
2017	RC	57	1575
2021	DD	6	893.99
2021	RC	4	486
2021	RCDD	4	2,378.11
2022	DD	6	1,857.71
2022	RC	1	30
2023	DD	20	7,601.68
2024	DD	38	14,698.05
TOTAL	BH	2,895	15,460.48
TOTAL	CHAN	4	28.49
TOTAL	COST	2	25
TOTAL	DD	118	31,174.84
TOTAL	RC	313	2,1362
TOTAL	RCDD	70	22,689.21
TOTAL	**TOTAL**	**3,402**	**90,740.02**

Notes:

"DD" = Diamond, "RCDD" = reverse circulation pre-collar with diamond tail; "RC" = reverse circulation; "COST" = costean; "CHAN" = channel; "BH" = blast hole (open pit)

Wolverine Deposit Geology

The Wolverine deposit is hosted in metasedimentary units of the BRM consisting primarily of metamorphosed siltstone, arenaceous units, and foliated conglomeratic units. The structural setting is moderately complex and a primary control on the hydrothermal system and related REE mineralisation. The Wolverine deposit is associated with a breccia-hosted hydrothermal system, which largely lies below a cover of transported clays, sand and gravels varying between 1 m to 10 m in thickness. Below this cover is an intensely weathered zone of mottled kaolinitic arenite, usually 1 m to 5 m thick.

The dominant REE mineralisation is xenotime. The host rocks in the mineralised zone are silicified and brecciated along a structural zone with hematite and sericite alteration associated with the hydrothermal event.

Additional REE minerals recognised to date are the light REE dominated florencite – goyazite series. These minerals comprise a minor but important component of the REE mineralisation relative to xenotime.

The primary structural control on the hydrothermal system at Wolverine occurs at the intersection of two steeply dipping fault orientations, the Hamster -Capybara faults and the Kurts Cut-off fault. The hydrothermal fluid pathway is focused on the intersection of the fault orientations, which plunges steeply west. The deposit is oriented east-west and dips steeply north, extending over 400 m in strike, up to 40 m in width, and over 550 m in depth from surface outcrop, remaining open at depth.

Mineral Resources

Full details applying to the Wolverine Mineral Resource Estimate (MRE) are disclosed in the original release to the ASX by NTU on 16 January 2025.

Drilling informing the mineralisation of the Wolverine MRE includes 243 RC holes, 85 diamond holes, and 66 RC pre-collar holes with diamond tails, totalling 394 drill holes for 68,231 m, of which an additional 58 infill diamond drill holes for 23,286 m were drilled since the previous 2022 MRE. The drilling was completed during two separate drilling campaigns, the first consisting of 16 drill holes completed between November 2022 and April 2023, and the second program consisting of 42 drill holes completed between November 2023 and May 2024.

The Wolverine MRE has been prepared by the following process:

- Additional diamond drilling to support improved confidence in Mineral Resource estimation, geotechnical assessment and additional supporting metallurgical test work.
- Updates to structural model wireframes from the 2022 MRE with additional drilling data, which includes 3 additional fault interpretations not previously modelled.
- Updates to weathering surfaces and associated volumes, replacing the 2014 interpretations.
- Development and implementation of Domain and Subdomain strategy
    - Detailed core analysis of the mineralised intercepts, resulting in the development of visually differentiated hydrothermal breccia intensity and texture log code system.
    - Relogging of 163 diamond drill mineralised intersections (12,820 m) applying the updated log code system.
    - Applied implicit modelling to the updated logging data, to develop geological domain and sub-domains for the Wolverine deposit.
- Generation of geological wireframes to constrain the sample selection and estimation.
- Application of geological domaining and sub domaining.
- Numerical compositing of sampling data to 1 m lengths.
- Variogram analysis and modelling.
- Density analysis and assignment into the block model.
- Interpolation of grades into subdomains within a 3D block model using Ordinary Kriging.
- Applying geological confidence in the 3D block model in accordance with the JORC Code.
- Reporting the results in accordance with the JORC Code by Mineral Resource classification above a 0.15% TREO cut-off grade and either:
    - Inside the DFS open pit design for open pit Mineral Resources.
    - Below 325 m RL for underground Mineral Resources.

As at 15 January 2025, the global Browns Range MRE stands at 11.7 Mt at 0.77% TREO for 90,500 t TREO contained metal. The global MRE tabulation by deposit and classification is provided in Appendix 1.

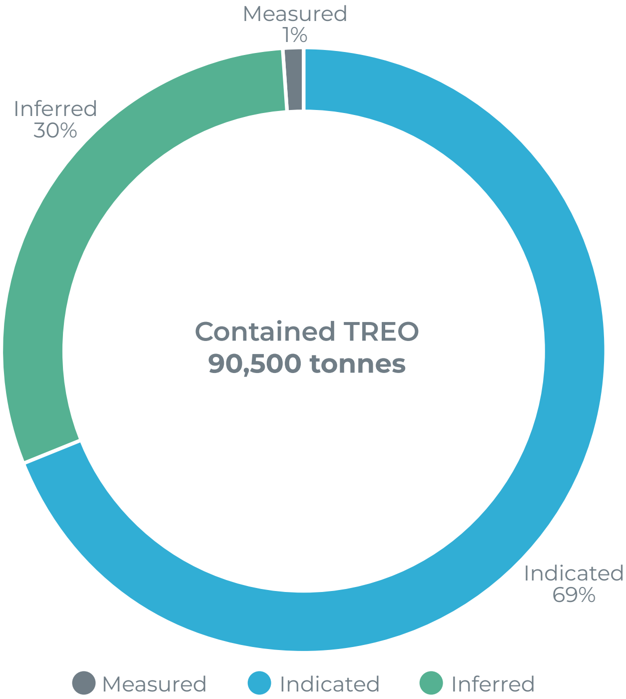


Figure 6 Classification of estimated TREO tonnes from Browns Range Global Mineral Resources as at 15 January 2025

Note: MRE reported above 0.15% TREO and are inclusive of Ore Reserves; refer to Appendix 1.

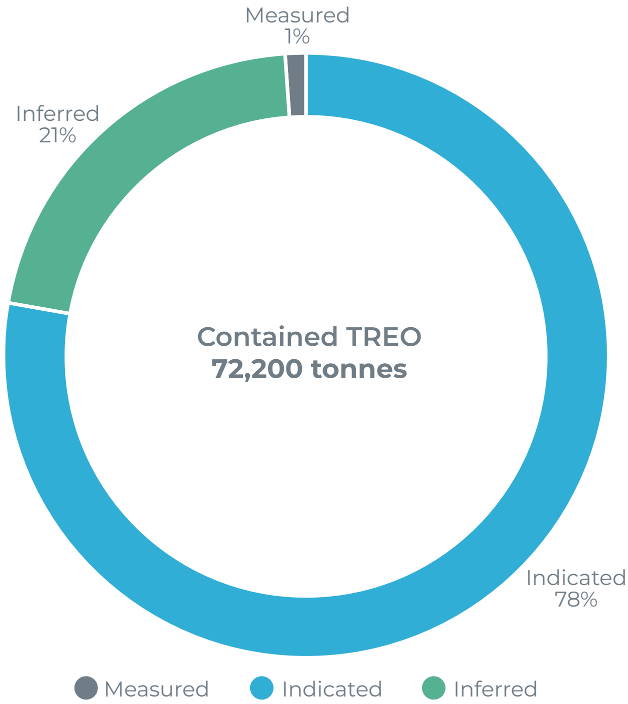
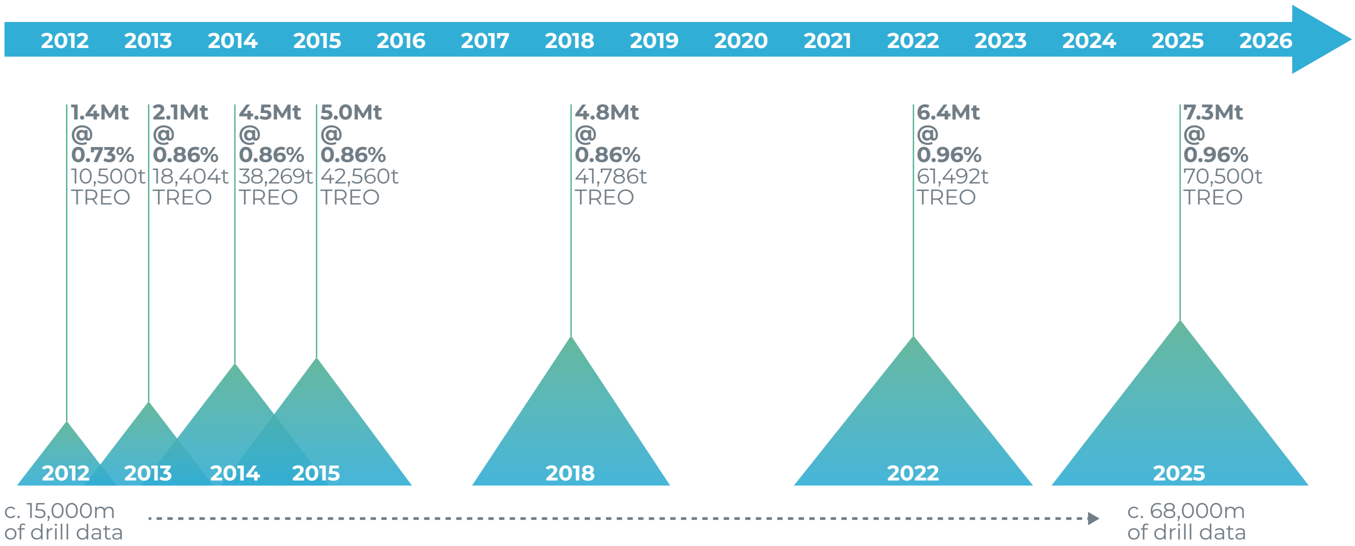


Figure 7 Classification of estimated TREO tonnes from Browns Range DFS Mineral Resources as at 15 January 2025

Note: MRE reported above 0.15% TREO and are inclusive of Ore Reserves; refer to Appendix 1.

Wolverine Mineral Resource Estimate

In 2012, AMC Mining Consultants (AMC) were commissioned to complete the initial MRE for the Wolverine deposit. Subsequent successful resource development and MRE updates have grown the deposit systematically to the January 2025 MRE shown in Figure 8.



Notes:

- TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- 2012: Indicated: 0.9 Mt @ 0.82% TREO; Inferred 0.54 Mt @ 0.57% TREO. Reported above 0.15% TREO COG. See NTU ASX announcement dated 21 December 2012.
- 2013: Indicated 1.57 Mt @ 0.87% TREO; Inferred 0.57 Mt @ 0.82% TREO Reported above 0.15% TREO COG. See NTU ASX announcement dated 15 October 2013.
- 2014: Indicated 2.66 Mt @ 0.89% TREO; Inferred 1.8 Mt @ 0.81% TREO Reported above 0.15% TREO COG. See NTU ASX announcement dated 26 February 2014.
- 2015: Indicated 2.99 Mt @ 0.83% TREO; Inferred 1.97 Mt @ 0.89% TREO. Reported above 0.15% TREO COG. See NTU ASX announcement dated 23 February 2015.
- 2018: Indicated 2.88 Mt @ 0.84% TREO; Inferred 1.97 Mt @ 0.89% TREO. Reported above 0.15% TREO COG. See NTU ASX announcement dated 28 September 2018.
- 2022: Measured 0.14 Mt @ 0.7% TREO; Indicated 3.24 Mt @ 0.95% TREO; Inferred 3.05 Mt @ 0.98% TREO. Reported above 0.15% TREO COG. See NTU ASX announcement dated 10 October 2022.
- 2025: Wolverine Open Pit MRE constrained within open pit design, and above 0.15% TREO COG.
- 2025: Wolverine Underground MRE reported below base of open pit design, i.e., 325mRL, and above 0.15% TREO COG
- Rounding may have caused computational discrepancies.

Figure 8 Wolverine Mineral Resource estimate updates 2012 through 2025

A summary of the Wolverine MRE update reported to the ASX by NTU and current to 15 January 2025 is provided in Table 3.

Table 3 Wolverine Mineral Resource estimate as at 15 January 2025

Classification	Tonnage Mt	TREO %	Dy_2O_3 kg/t	Y_2O_3 kg/t	Tb_4O_7 kg/t	HREO/ TREO %	TREO t
Wolverine Open Pit							
Measured	0.1	0.91	0.84	5.4	0.12	92	1,000
Indicated	0.7	0.76	0.67	4.42	0.09	90	5,200
Inferred	0.1	0.3	0.2	1.36	0.03	69	300
Subtotal	0.9	0.72	0.63	4.19	0.09	89	6,500
Wolverine Underground							
Measured	0	0	0	0	0	0	0
Indicated	4.2	1.19	1.05	7.1	0.15	91	49,200
Inferred	2.3	0.64	0.55	3.7	0.08	87	14,800
Subtotal	6.4	0.99	0.88	5.89	0.13	89	64,000
Wolverine Total							
Measured	0.1	0.91	0.84	5.4	0.12	92	1,000
Indicated	4.9	1.13	1.00	6.72	0.14	91	54,400
Inferred	2.4	0.63	0.54	3.6	0.08	87	15,100
Total	7.3	0.96	0.85	5.68	0.12	89	70,500

Notes:

- Rounding may have caused computational discrepancies.
- TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- HREO = Heavy Rare Earth Oxides – Total of Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- HREO% = HREO/TREO*100
- Wolverine Open Pit MRE constrained within open pit design, and above 0.15% TREO COG
- Wolverine Underground MRE reported below base of open pit design, i.e. 325mRL, and above 0.15% TREO COG.
- The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

In addition to the Wolverine MRE, an existing stockpile of ore mined as part of the BRPP of 0.2 Mt @ 0.82% TREO is available as feed to the process plant (for full details see NTU ASX announcement dated 28 September 2018). This DFS is based on mining and processing of both the Wolverine and BRPP Stockpiles Mineral Resource estimate as provided in Table 4.

Table 4 DFS component of the Mineral Resource estimate as at 15 January 2025

Deposit	Category	Tonnage Mt	TREO %	Dy_2O_3 kg/t	Y_2O_3 kg/t	Tb_4O_{11} kg/t	HREO/ TREO (%)	TREO t
Wolverine	Measured	0.1	0.91	0.84	5.40	0.12	92	1,000
	Indicated	4.9	1.13	1.00	6.72	0.15	91	54,500
	Inferred	2.4	0.63	0.54	3.6	0.08	87	15,100
	Subtotal	7.3	0.96	0.84	5.67	0.12	90	70,500
BRPP Stockpile	Measured	-		-	-	-		-
	Indicated	0.16	0.95	0.83	5.50	0.12	89	1,500
	Inferred	0.03	0.26	0.20	1.35	0.03	79	100
	Subtotal	0.2	0.82	0.71	4.71	0.10	88	1,600
Total	Measured	0.1	0.91	0.84	5.40	0.12	92	1,000
	Indicated	5.1	1.12	0.99	6.68	0.15	91	56,000
	Inferred	2.4	0.63	0.54	3.57	0.08	86	15,200
	Total	7.5	0.96	0.84	5.64	0.12	90	72,200

Notes:

- Rounding has caused imbalanced totals.
- TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- HREO = Heavy Rare Earth Oxides – Total of Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- HREO% = HREO/TREO * 100.
- The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

The Wolverine geological model indicating TREO grades is shown in Figure 9.

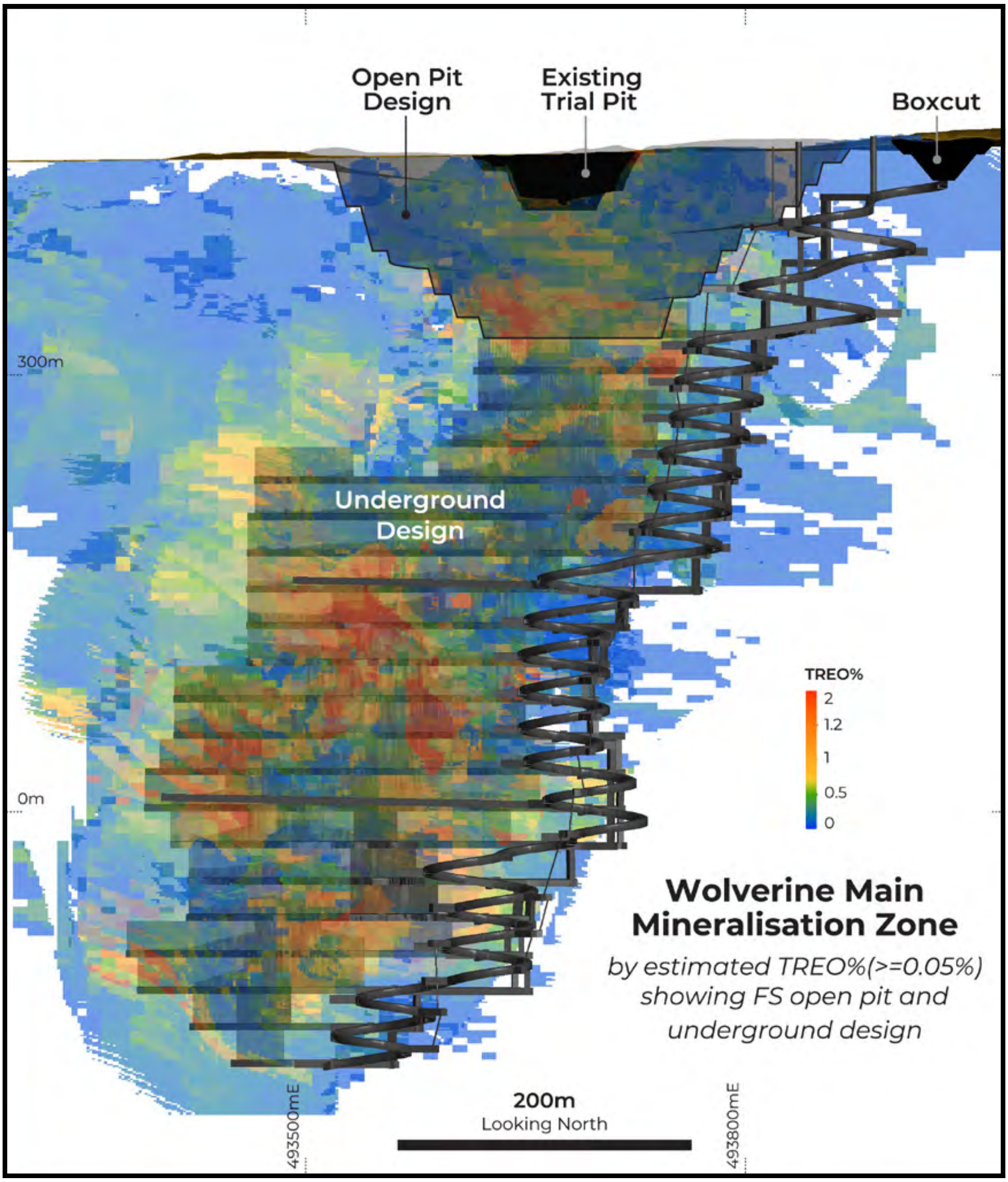


Figure 9 Long section facing north of the Wolverine block model coloured by TREO% > 0.05%. Open pit and Underground DFS mine design and infrastructure shown in transparent grey

Exploration Potential

Northern Minerals' large tenure holding as shown in Figure 10 is highly prospective for the discovery of additional rare earth mineralisation, providing significant potential to extend the Project's mine life. Exploration to date has defined the Wolverine, Gambit, Gambit West, Area 5, Banshee, Cyclops and Dazzler deposits to a Mineral Resource level, with Northern Minerals having completed more than 200,000 m of drilling at these additional priority targets.

Initial exploration work has also identified a potential pipeline of prospects at Browns Range which will be further explored under future programs including airborne geophysical surveys, remote data acquisition, ground geophysical surveys, geochemical soils sampling, and regional mapping and drilling.

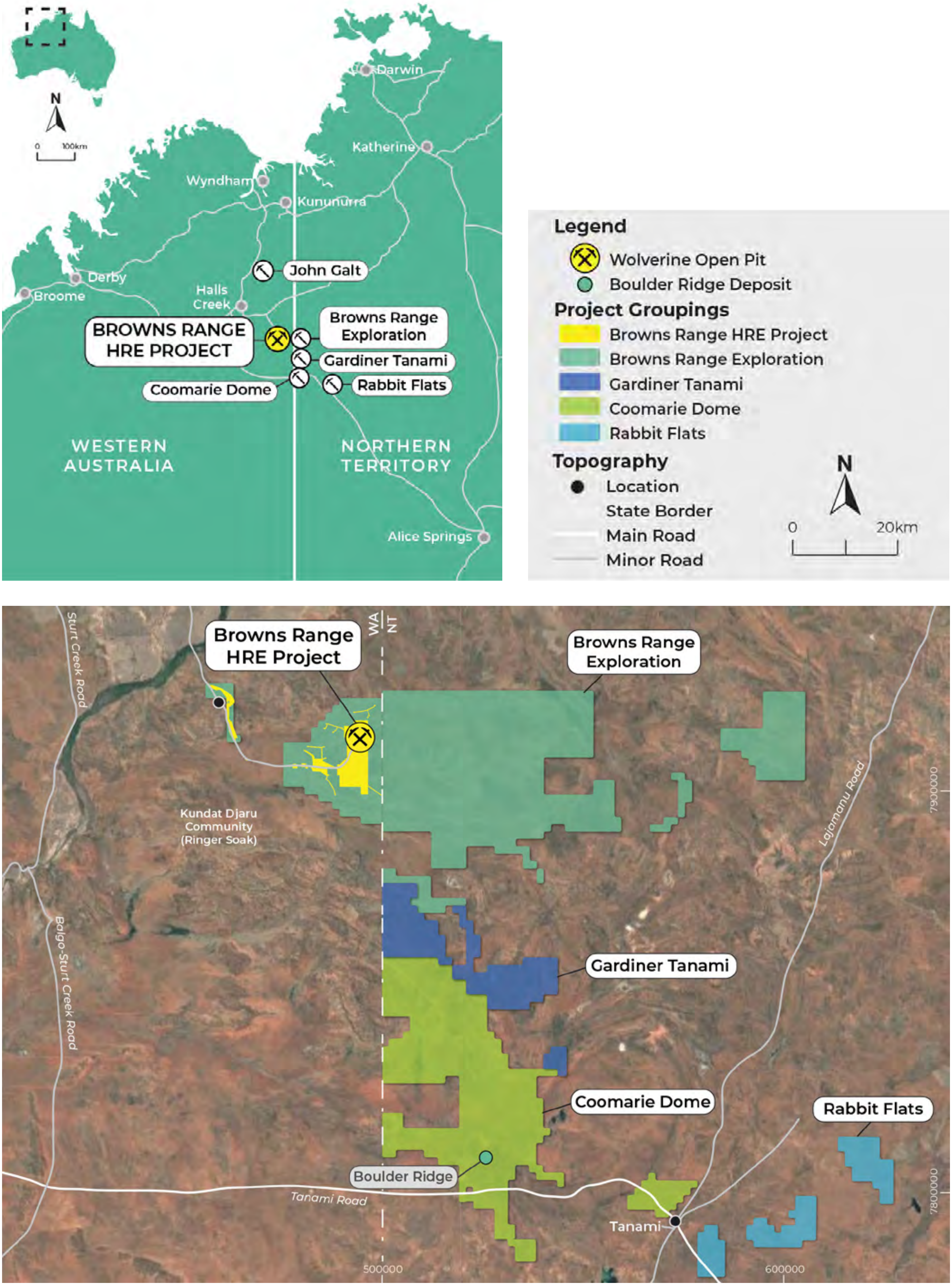


Figure 10 Map showing tenure holding

Mining

Mining studies, completed by Entech on behalf of Northern Minerals, confirm the viability of operations at Browns Range based on development of the Wolverine deposit by open pit and underground mining methods. Entech's work included estimation of an Ore Reserve and a Production Target for the Project. The Production Target estimate underpins the Project's proposed LOM plan.

Detailed open pit and underground mine designs and mining schedules have been developed for the DFS using standard mine planning software, incorporating all available geological and geotechnical information, and practical considerations specific to the Project and proposed mining methods.

Costs for mining operations were estimated, including quotations from mining contractors, and other inputs provided by Northern Minerals (including general and administrative costs, processing costs and recoveries, other overhead costs, product pricing) were reviewed and validated as being suitable to support the DFS.

Production Target

The Production Target is an estimate of future production and is based on the modifying factors noted in this report, and detailed in Appendix 2 (JORC Code, 2012, Table 1). The Production Target includes the reported 2025 Ore Reserve estimate along with supplemental mine production based on Inferred Mineral Resources. The Ore Reserves and Mineral Resources underpinning the Production Target have been prepared by a competent person or persons in accordance with the requirements of the JORC Code, 2012.

The Production Target, presented in Table 5, comprises approximately 85% Probable Ore Reserves and 15% Inferred Mineral Resources. The company is satisfied that the proportion contained across years 11-13 of the production plan I represented in Figure 11 below, is not the determining factor in project viability. Additionally, Inferred Mineral Resources do not feature as a significant proportion early in the mine plan.

Table 5 Production Target summary

Classification	Mined Mt	TREO %	TREO t	Dy_2O_3 kg/t	Tb_4O_7 kg/t	Y_2O_3 kg/t
Wolverine Open Pit						
Probable	0.77	0.76	5,800	0.68	0.10	4.46
Inferred	0.04	0.32	100	0.23	0.03	1.57
Wolverine Underground						
Probable	4.22	0.94	39,600	0.83	0.12	5.59
Inferred	0.84	0.76	6,400	0.68	0.10	4.55
BRPP Stockpile						
Probable	0.26	0.87	2,200	0.75	0.11	4.99
Total	**6.12**	**0.88**	**54,100**	**0.78**	**0.12**	**5.25**

Notes:

- Rounding may cause some computational discrepancies.
- Mined tonnes rounded to nearest 10,000 tonnes. Dy_2O_3, Tb_4O_7 and Y_2O_3 grades rounded to nearest 0.01 kg/t. TREO % rounded to the nearest 0.01 %. TREO t rounded to the nearest 100 t.
- TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- BRPP stockpile underpinning the Production Target has not been depleted to account for pilot plant processing. This equates to inclusion of an additional ~0.06 Mt or ~1% of Total Mined tonnes, and an additional ~600 t or ~1% of total TREO mined tonnes. Northern Minerals is satisfied that this inclusion is not material to the Project.

The Production Target estimate underpins approximately 12 years of mining, which is planned to commence 12 months prior to the first crusher feed. A total of ~6.12 Mt of probable reserve and inferred resource is planned to be mined at a grade of 0.88% TREO from the Wolverine deposit and BRPP Stockpile to support an ~11-year LOM.

Table 6 presents the forecast mining production and crusher feed aligned with the Production Target plan and Figure 11 breaks down the mining production by material category.

Table 6 Forecast mine production plan and crusher feed schedule

	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
Total movement (Mt)	**17.20**	5.10	5.59	0.96	0.39	0.53	0.75	0.81	0.79	0.71	0.65	0.48	0.39	0.05
Mined waste (Mt)	**11.08**	5.04	5.01	0.47	0.10	0.11	0.09	0.07	0.06	0.07	0.06	-	-	-
Mined production (Mt)	**6.12**	0.06	0.58	0.49	0.29	0.42	0.65	0.73	0.74	0.64	0.59	0.48	0.39	0.05
Mined TREO grade (%)	**0.88**	0.49	0.62	1.04	0.72	0.77	0.88	0.82	0.96	1.02	0.92	1.02	0.96	0.55
Crusher feed (Mt)	**6.12**	-	0.19	0.51	0.54	0.54	0.65	0.65	0.65	0.65	0.65	0.64	0.39	0.05
Crusher feed TREO grade (%)	**0.88**	-	0.79	0.79	0.79	0.75	0.84	0.89	0.94	1.04	0.96	0.91	0.96	0.55

Notes:

- Rounding may cause some computational discrepancies.
- Mined tonnes, existing stockpile tonnes and crusher feed tonnes rounded to the nearest 10,000 t. TREO grade % rounded to the nearest 0.01%.
- TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3
- Years as presented are financial years and relate to the mining plan, where Year 1 represents the first financial year in which mining activities commence. Mining activities commence during Q4 Year 1 and conclude during Q1 Year 13.

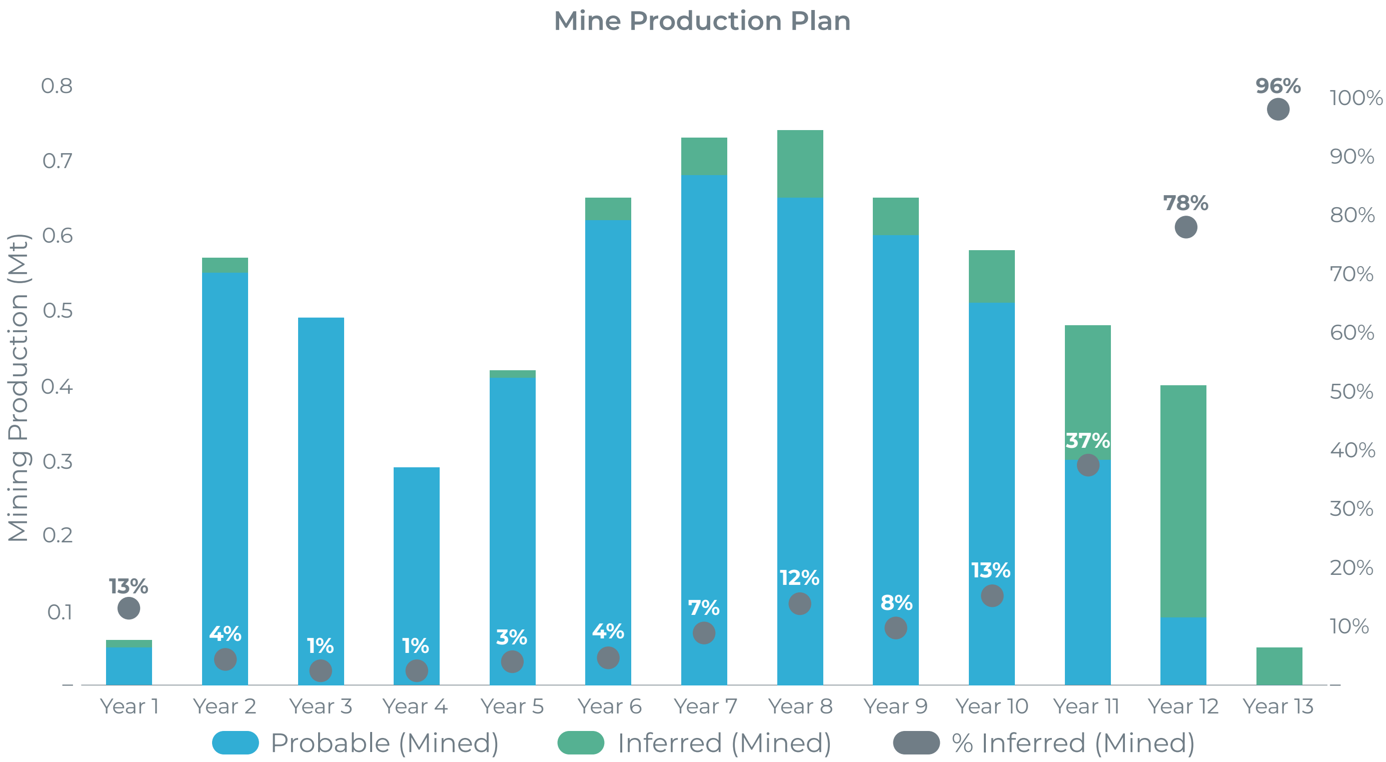


Figure 11 Mined Production Plan by Categories

Geotechnical

Geotechnical investigations were conducted for open pit and underground mining during the DFS, including logging of diamond drill core and commissioning rock properties test work. These investigations supported development of design guidelines for the proposed mining operations and confirmed suitability of the DFS mine plan.

Hydrology and Hydrogeology

WSP and Carrick Consulting conducted reviews of surface hydrology and the surface water management plan has been incorporated into the DFS including allowance for a diversion channel and bunding in the vicinity of the planned mine.

Klohn Crippen Berger conducted groundwater modelling for the DFS and predicted the expected inflows during mining operations that informed the design of mine dewatering systems included in the DFS.

Open pit dewatering will be managed by in-pit sumps and pumps while the pit is being actively mined, and the underground mine will be dewatered using a primary system of helical rotor pumps including allowance for spare capacity.

Open Pit Mining

Wolverine open pit is planned to be mined as a single-stage cutback to the existing trial pit, using conventional drill and blast/load and haul methods. Open pit mining and associated activities will be undertaken by a specialist open pit mining contractor. Overall supervision, planning and technical services will be managed by an Owner's team.

The proposed open pit mining fleet has been selected to match mine designs, excavation parameters and required productivity rates. The haulage fleet includes a 200 t excavator (Hitachi EX1900 or equivalent), paired with 90 t dump trucks (Caterpillar 777 or equivalent). Blast hole drill rigs, and other ancillary mobile equipment will support the mining works.

Drilling is planned to occur over 5 m benches, with different parameters applied to manage production hygiene and waste mining productivity. All material will be blasted. Waste material will be hauled to the surface and utilised in site construction works or stockpiled at the waste dump, while production material will be hauled separately to designated run of mine (ROM) stockpiles.

Open pit mine design was developed from optimisation work undertaken in GEOVIA Whittle software. Based on various input parameters, the software generated a series of nested shells, calculating physicals and a value for each, allowing comparative assessment and selection of the final shell to use as a basis for mine design. Elevation constrained shells were also generated to assist with underground crossover review and analysis. The shell selected for detailed design was considered optimal in terms of economics, operational practicalities, and integration with the underground mining operation.

The parameters used to convert the preliminary shell to a mine design are outlined in Table 7, and the design physicals are summarised in Table 8.

Table 7 Wolverine Open Pit Design Parameters

Design Domain (mRL)	Bench Face Angle (°)	Bench Height (m)	Berm Width (m)	Inter-ramp Angle (°)	Ramp Width Dual/Single Lane (m)
460 to 445	55	15	12	33.4	25/15
445 to 325	75	30	10	59	25/15

Table 8 Wolverine Open Pit Physicals

	Waste	Ore	Strip Ratio	Pit Dimensions			Mining Factors	
	(Mt)	(Mt)	(t:t)	Length (m)	Width (m)	Depth (m)	Dilution (%)	Ore Loss (%)
Total	10.1	0.80	12.7	380	280	125	8	7

The pit design utilises a double lane ramp with a pit crest entry on the western wall, ramping to the North before following the pit edge in a clockwise direction to the base of pit. The pit ramp narrows from a double lane width to a single lane width at 355 mRL. The open pit is mined to 325 mRL, the top of the planned underground mine.

Figure 12 and Figure 13 illustrate the proposed open pit design and the existing Wolverine trial pit.

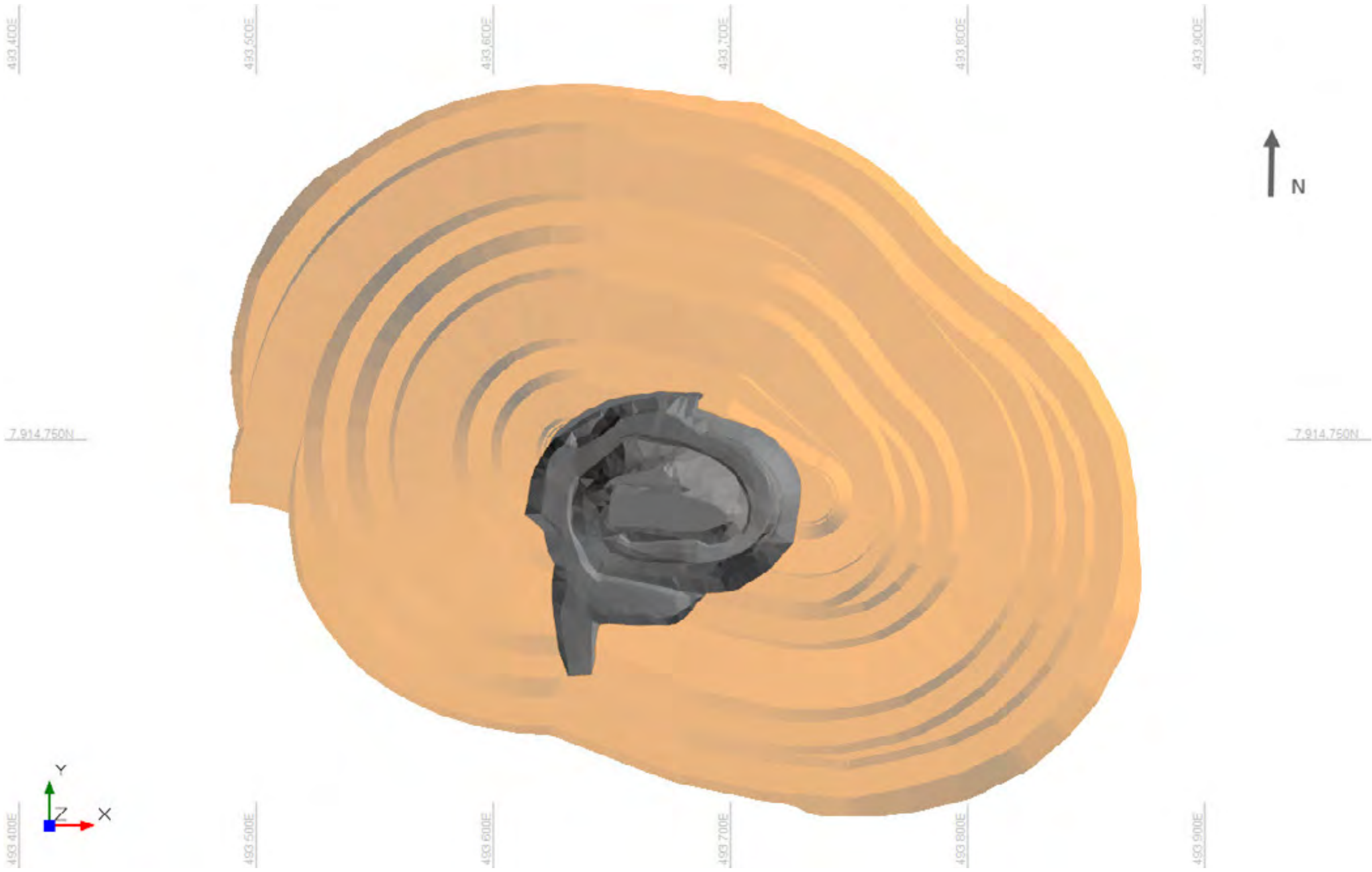


Figure 12 Wolverine open pit design plan view (trial pit shown in grey)

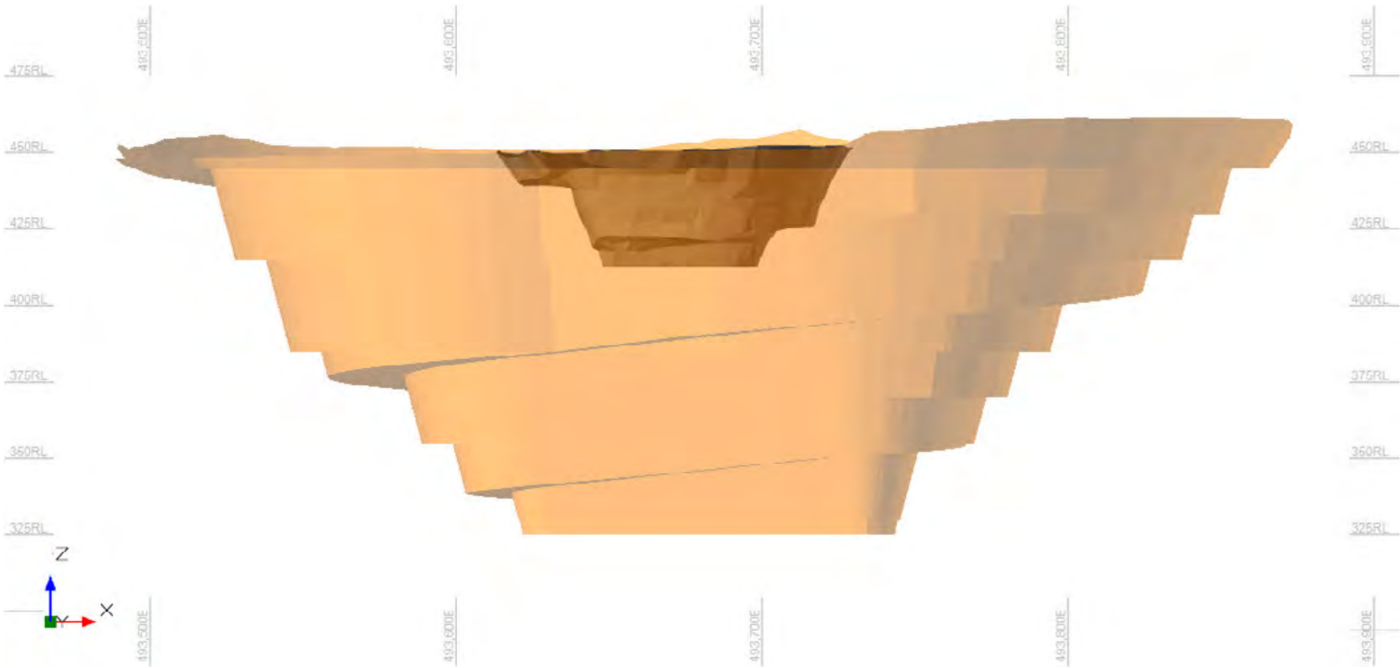


Figure 13 Wolverine open pit design – view looking North (trial pit shown in dark brown)

The open pit Production Target mine plan is based on Measured, Indicated and Inferred Mineral Resources, of which Measured and Indicated Mineral Resources constitute approximately 96% of the open pit mined material.

Open pit grade control was assumed to be carried out in two stages of reverse circulation drilling, planned from surface prior to mining operations and from within the pit during mining operations.

Open pit mining will commence during the Project construction period to provide waste for site establishment activities, excavate the boxcut for underground mine, and enable completion of open pit mining activities in time for commencement of underground production. Open pit mining will occur over approximately 24 months.

Underground Mining

Wolverine underground production is planned to be via end-on longitudinal sublevel caving (SLC), with additional minor discrete areas to be extracted by longhole open stoping (LHOS). Underground mining and associated activities will be undertaken by a specialist underground mining contractor. Overall supervision, planning and technical services will be managed by an Owner's team.

The proposed underground mine has been optimised, designed, and scheduled based on a standard high-capacity mobile, diesel powered, underground fleet, including the following major classes of equipment: twin boom development jumbo (DD422 or similar), production drill (DL432 or similar), loader (LH621 or similar), truck (TH663 or similar).

The underground mine design is based on Datamine Mineable Shape Optimiser (MSO) production shapes. The final production shapes and development required to access and extract the production shapes is designed using Deswik software, considering key geotechnical information and mining constraints.

The underground mine will be accessed from a portal within a newly developed boxcut located adjacent to the open pit mine. The portal will act as one fresh air intake, and a second intake will comprise a separate rise network that connects each operating level to the surface.

A spiral style decline configuration, with a minimum radius of 25 m, has been designed and provides for a consistent level layout. Design dimensions are 5.5 m wide by 6.0 m high, at a gradient of 1 in 7. Decline stockpiles will be used to house infrastructure items, such as electrical substations and refuge chambers once the stockpile is no longer used for temporary waste rock storage and truck loading.

Waste material will be hauled to the surface and stockpiled at the waste dump, while ore will be hauled separately to designated ROM stockpiles.

The decline development is sufficiently offset from the zone of subsidence associated with the SLC mining method.

Sublevel intervals are designed at 25 m floor-to-floor, and production width varies from a minimum of 5 m to a maximum of 45 m (average 20 m). A profile of 5 m wide and 5 m high has been applied to the ore drive development.

The SLC method relies on production breakage by drill and blast techniques, and natural caving of the surrounding rock mass to fill the underground production voids.

The underground workings are planned to break through into the base of the pit, so mined waste backfilled into the open pit will provide a blanket over the upper production levels, filling the initial underground mining void as it intersects the open pit void. This ensures drawpoint coverage is maintained while maximising ore draw during the initial stages of the SLC prior to cave propagation.

Waste backfill will be a one-off process prior to commencement of underground production, with a prescribed quantity of waste placed in the base of the mined-out pit by the open pit contractor.

The SLC mining method has been reviewed and modelled by Beck Engineering. Cave flow modelling reported dilution of 26% and mining loss of 8%. An additional factor for operational effectiveness was applied resulting in an overall mining loss of 18%. No dilution or mining loss factors have been applied to ore drive development.

A representation of the SLC mining method is provided in Figure 14.

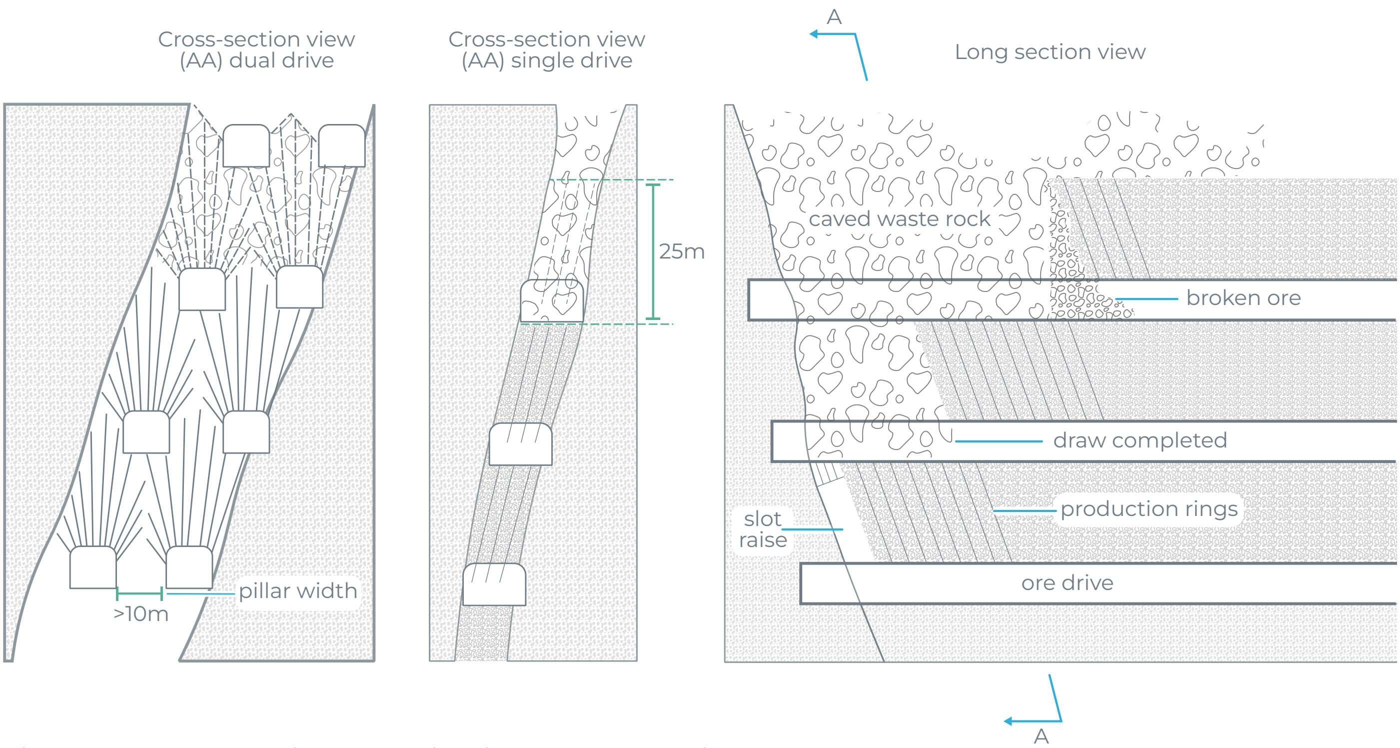


Figure 14 Representation of longitudinal sublevel caving method

The underground Production Target mine plan is based on Indicated and Inferred Mineral Resources, of which Indicated Mineral Resources constitute approximately 83% of the underground mined material.

The proposed layout for the Wolverine underground Production Target mine plan is presented in Figure 15. Design shapes that relate to SLC production are shown in orange, and those that relate to discrete LHOS production areas in the footwall shown in blue (hanging wall design shapes not visible).

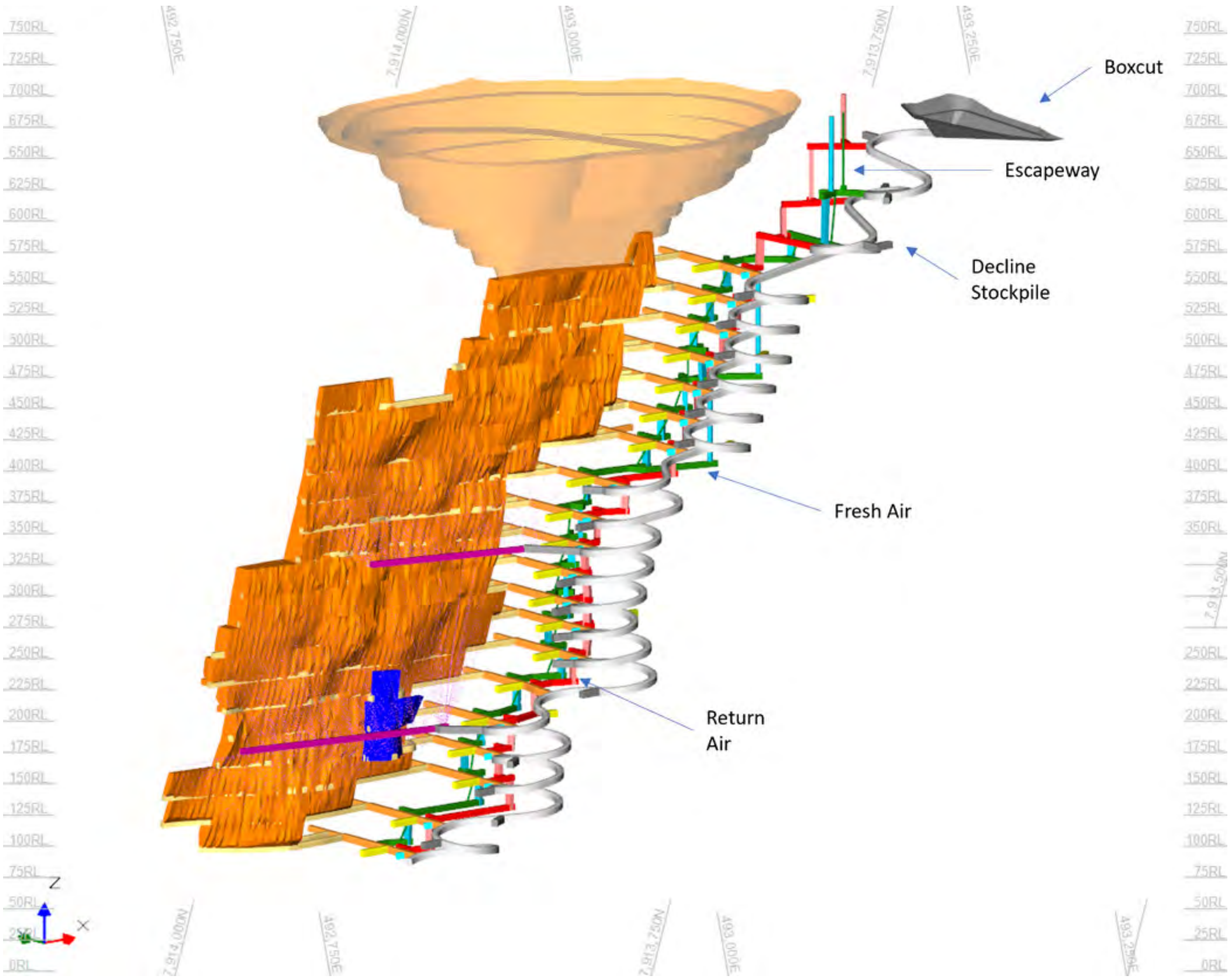


Figure 15 Proposed Wolverine underground mine layout

Underground grade control drilling was assumed to be carried out from surface prior to mining operations and from underground locations during mining operations.

Underground mine development activities, including boxcut ground support and portal works, will commence during the Project construction period, approximately 6 months after the commencement of open pit mining. Underground production activities are planned to commence following completion of open pit mining and placement of waste backfill, and production is scheduled to ramp-up over approximately 24 months.

Ore Reserve

The DFS has assessed modifying factors for mining, metallurgical, processing, engineering, economic, marketing, legal, environmental, social, and governmental considerations to a sufficient level of accuracy to release an Ore Reserve estimate classified in accordance with the guidelines of the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (the JORC Code, 2012). JORC Code, 2012, Table 1 is provided as Appendix 2.

The Ore Reserve estimate, presented in Table 9 is a subset of the Production Target estimate, and represents approximately 85% of the Project's total mining production tonnage

Table 9 Ore Reserve estimate

Deposit	Category	Ore Mt	TREO %	TREO t	Dy_2O_3 kg/t	Tb_4O_7 kg/t	Y_2O_3 kg/t
Wolverine							
Open Pit	Probable	0.80	0.72	5,800	0.65	0.09	4.27
Underground	Probable	4.19	0.92	38,500	0.81	0.12	5.47
BRPP Stockpile							
Pilot Plant Stockpile	Probable	0.2	0.77	1,500	0.67	0.09	4.46
Total	**Probable**	**5.18**	**0.88**	**45,800**	**0.78**	**0.12**	**5.25**

Notes:

- Rounding may cause some computational discrepancies.
- Ore tonnes rounded to nearest 10,000 tonnes. Dy_2O_3, Tb_4O_7 and Y_2O_3 grades rounded to nearest 0.01 kg/t. TREO % rounded to the nearest 0.01 %. TREO t rounded to the nearest 100 t.
- TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- BRPP stockpile is an existing discrete parcel of mined ore, including a portion of Inferred Mineral Resource material. The Inferred portion is circa 16% of the stockpile ore tonnes (<1% of total ore tonnes) and has been attributed zero metal grades.

Other information relating to the Ore Reserve is provided following, in accordance with ASX Listing Rule 5.9.1.

Material Assumptions and Outcomes

The Ore Reserve reflects the portion of the Measured and Indicated Mineral Resource which can be economically extracted by open pit and underground mining methods considering appropriate modifying factors.

Information on product pricing, exchange rate, royalties, processing cost estimates, and other owner's cost estimates were defined by NTU, and provided to Entech to inform the Ore Reserve estimate.

REO basket pricing was adopted for the DFS based on forecast long-term REO prices provided by external market forecaster CRU International Limited (CRU). NTU maintains internal corporate guidance on exchange rates based on current exchange rate and compilation of external advice. The applied royalty comprises State Government and other royalties.

Financial modelling of the Ore Reserve demonstrates a positive economic outcome on a Net Present Value (NPV) basis. The economic outcomes are most sensitive to revenue side factors (positive NPV across range of +10% / -5%) and these future commodity prices are not guaranteed.

Entech advise that the mining aspects that underpin the Ore Reserve are technically feasible and economically viable across an appropriate sensitivity range for the key inputs, including product pricing, costs, and processing recoveries.

Criteria for Classification

Mineral Resource estimates for the Wolverine deposit and the BRPP stockpile, which were reported to the market in January 2025, formed the basis for the conversion to the Ore Reserve. Mineral Resources are reported inclusive of the Ore Reserves.

The Ore Reserve is based on the Measured and Indicated portions of the Wolverine MRE, and the Indicated portion of the BRPP stockpile.

The Ore Reserve is attributed a confidence classification of "Probable" Ore Reserve in its entirety. There is a degree of uncertainty associated with the Mineral Resource estimate and the modifying factors.

Mining Method and Assumptions

Open pit mining using conventional drill/blast and excavator/truck methods has been assumed. Underground mining using conventional mobile underground fleet and decline access has been assumed, with production predominantly via end-on longitudinal sublevel caving. The selected mining methods are considered appropriate based on orebody geometry, geotechnical setting, and economic considerations; unit processes are well-known and widely used.

Open pit dilution and ore loss factors were built in through re-blocking of the open pit model blocks, to appropriately represent the selective mining unit.

Underground production dilution and ore loss were reported from cave flow modelling. An additional 10% ore loss was applied post-cave flow modelling to account for operational effectiveness. No dilution or mining loss factors have been applied to ore drive development.

The BRPP stockpile will be reclaimed and transported to the new process plant. No additional dilution or loss factors have been applied to the stockpile.

Processing Method and Assumptions

The DFS process flowsheet includes crushing, grinding, magnetic separation, flotation, and filtration to produce a mineral concentrate, which is then dried and bagged for transport off site. The process stages are based on well understood conventional unit operations and supported by learnings from BRPP operations.

Processing recovery factors, including recovery factors applied to impurity elements, were developed from metallurgical test work data and have been considered as a modifying factor.

Cut-off Grades or Quality Parameters

A Net Processing Revenue (NPR) function was modelled at the block level, based on in situ REE grades, processing recoveries, estimated costs (processing, general and administration), royalties, exchange rate and product price.

The NPR represents an estimate of the economic value of a block based on the revenue from recovered rare earth elements (REE), once processing and other downstream costs have been accounted for. It is used in conjunction with the estimated mining costs to identify blocks which are economically extractable. Table 10.

Estimation Methodology

Mineral Resource material was converted to Ore Reserves after completing an optimisation process, detailed mine designs and mining schedules, and associated financial assessment as part of the DFS.

While the Ore Reserve is primarily based on Measured and Indicated Mineral Resources, the mine design necessitates the inclusion of approximately 3% by mass of material classified as Inferred Mineral Resources. The cost of mining and processing this Inferred material has been accounted for, however it is attributed zero metal grades and does not contribute to payable metal.

Material Modifying Factors

A summary of the material modifying factors is provided in Table 10.

Table 10 Summary of material modifying factors

Item	Unit	Value
Mining Cost		
Open Pit (average, varies with depth and rock type) (final)	A$/tonne rock	10
Underground Operating (final)	A$/tonne ore	120
Mining Ore Loss		
Open Pit Wolverine	%	7
Underground Wolverine SLC	%	17
Underground Wolverine Ore Drive	%	nil
Mining Dilution		
Open Pit Wolverine	%	8
Underground Wolverine SLC	%	27
Underground Wolverine Ore Drive	%	nil
Processing		
Ore Processing Input Target	tonnes per annum	650,000
Processing Recovery Average	%	84
Financial		
Ore Related Downstream Costs (including Processing, G&A)	A$/t ore feed	130
Average TREO product price (basket price)	US$/kg TREO	107
Basis of Cut-off – Open pit (to assign ore within the economic mining envelope determined by pit optimisation)	NPR A$/t	To process: NPR>0 (fully costed) NPR>(47) (Incremental) and validated with final DFS cost and revenue
Basis of Cut-off – Underground (to define the economic mining envelope)	NPR A$/t	Preliminary design: NPR>90 (fully costed) NPR>50 (incremental), and validated with final DFS cost and revenue
Royalties	%	4.5
Exchange Rate	A$:US$	0.65

Notes:

- $ figures are rounded to two significant figures

Status of Environmental Approvals

Baseline studies have informed environmental impact assessments to support key regulatory approvals. Ministerial Statement 986 was issued in October 2014, with Section 45C variations approved since as required.

The Project has three times been determined to be "not a controlled action" under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Secondary environmental approvals are progressing to support the full-scale Project development timeline.

Status of Mining Tenements and Approvals

All tenements required under the proposed DFS production plan for development of the Project are granted. All regulatory work programs, rental payments, and reporting obligations have been and continue to be met, and the tenements are all in good standing. The Ore Reserve and proposed mining operation are located on M80/627.

All key primary regulatory approvals for the Project are in place, and outstanding secondary approvals and licences to operate are considered by NTU to be in line with expected process timelines and on track with respect to the Project schedule.

Status of Other Government Factors

NTU has native title agreements in place with the Jaru and Tjurabalan Peoples, who hold determined native title over the Project area.

NTU has undertaken archaeological heritage and ethnographic surveys for the Project development footprint, and survey findings have been taken into account and agreed management plans are in place.

Infrastructure Requirements for Selected Mining Methods

Required mining infrastructure has been allowed for in the DFS capital and operating cost estimate and is considered typical for a modern mining operation in this jurisdiction.

Infrastructure Requirements for Transportation to Market

Final product transportation will be via road transport from the Browns Range site to Eneabba, utilising a mine access road, Shire roads, and State highways. Upgrades to the mine access road and its ongoing maintenance are included in the DFS cost estimates.

Metallurgy and Flowsheet Development

"Rare earth concentrate of ~25% TREO targeted with greater than 80% TREO recovery achieved"

Comprehensive metallurgical test work and three-year operation of the large-scale BRPP has allowed the development of a robust process flowsheet for the Project.

The 2015 DFS and BRPP flowsheets included production of an intermediate rare earth (RE) xenotime concentrate followed by a hydrometallurgical circuit to deliver a mixed RE carbonate product. The strategic partnership entered with Iluka in October 2022 for a Supply Agreement of xenotime concentrate to Iluka's Eneabba Rare Earth Refinery resulted in the removal of the hydrometallurgical circuit. The simplification of the processing circuit significantly reduces the technical risks for the Project.

Batch and continuous laboratory and pilot scale test work completed for the 2015 DFS resulted in selection of a hybrid flowsheet (magnetic separation followed by flotation) to produce a concentrate. Data generated from the BRPP operations allowed validation and further enhancement of the flowsheet. The BRPP operations also demonstrated the scaling up and operability of the flowsheet selected and allowed design mitigations of identified operational and equipment issues. Recent variability test work on drill core samples from the Wolverine deposit provided validation of the flowsheet and confirmed no significant variation in performance with varying depths and/or lithologies. Further vendor test work optimised the final flowsheet adopted by the DFS.

Mineralogy

The mineral system displays a predominance of xenotime (Y,REE)PO_4, a large amount of quartz and mica, and minor amounts of iron oxide, and the light rare earth mineral florencite (Ce,Nd,La)$Al_3(PO_4)_2(OH)_6$. The xenotime exists within quartz infill fractures. The xenotime mineralisation is readily concentrated by the selected processing flowsheet and mineral liberation analyses showed an increase in xenotime liberation as grind size approaches the optimised grind size of 80% passing (P80) 63 µm.

Figure 16 Typical lab scale float

Mineral grain size, liberation and associated analysis using the Tescan Integrated Mineral Analyser (TIMA) was completed on head samples. Table 11 compares the mineral association of Wolverine feed reported in the 2015 DFS to the 2021 BRPP Gambit West ore and 2024 Wolverine variability composites and shows similar levels of mineral associations between the three sample sets.

Table 11 Mineral Association Analysis on 2015 Wolverine Feed, 2021 BRPP Gambit West Feed, and 2024 Wolverine Metallurgical Variability

Mineral	Liberation	2015 Wolverine Head (%)	2021 BRPP Gambit West Feed Head (%)	2024 Wolverine Met Variability (%)
Xenotime	Liberated (≥90%)	70.4 – 80.4	78.3	75.8 - 91.6
	Binary	18.0 – 24.6	18.0	7.5 – 21.4
	Tertiary	1.6 – 5.0	1.8	0.7 – 4.8
Florencite	Liberated	54.2 – 62.0	46.0	49.7 – 73.9
	Binary	32.8 – 35.6	38.4	17.1 – 35.0
	Tertiary	5.2 – 10.2	10.8	8.7 – 23.9

Figure 17 presents images extracted from Roger Townend's mineralogical examination of Wolverine xenotime and florencite, showing mineral association and grain occurrences

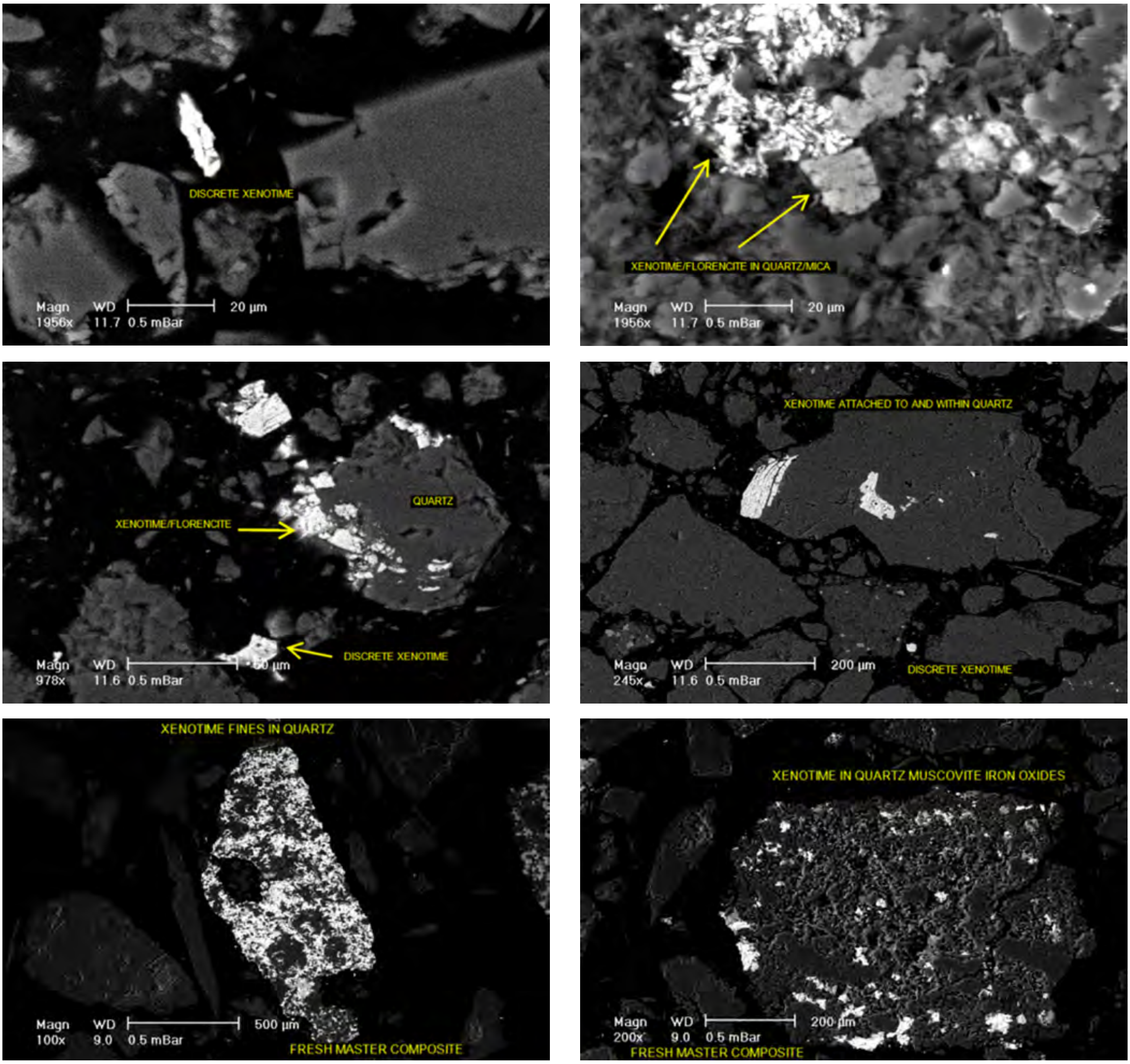


Figure 17 Mineralogical association of Wolverine xenotime and florencite

Figure 18 Xenotime mineralisation

Comminution Circuit Modelling

An appropriate circuit design capable of treating Wolverine mineralised material has been selected based on assessment of ore breakage data, crusher, semi-autogenous grinding (SAG) and ball mill circuit operating conditions and review of the BRPP single stage SAG milling circuit for the full-scale DFS process plant.

The grinding circuit selected comprises a SAG mill and a ball mill operating in closed circuit with hydrocyclones to ensure the target product grind size P80 of 63 µm will be achieved on a consistent basis. The mill selection has been based on modelling using both the Morrell method and JKSimMet modelling. Check calculations based on Bond-Roland and Barratt & Allan (SAGBART) methods have also been completed.

Metallurgical Test Work

Magnetic Separation

Paramagnetic minerals (xenotime, florencite, ilmenite, hematite) are attracted to regions of magnetic field convergence. Magnetic separation has been included in the flowsheet to recover the paramagnetic REE minerals from the gangue waste particles.

Laboratory test work was completed using high intensity or high gradient magnetic separators. Trials during the BRPP operation, and tests subsequent to the BRPP, investigated the effect of grind size, feed rate/residence time, matrix rod size, ring speed, number of stages in series, machine size and magnetic field strength.

The laboratory test work and BRPP operation suggest that feed flow, matrix loading (design and surface area of matrix, speed of ring), and magnetic field strength are the critical operating variables. When these parameters are optimised, an increase in the magnetic strength will increase TREO recovery.

Flotation

The purpose of the flotation circuit is to treat the magnetic concentrate fed from the high intensity magnetic separators to selectively produce a xenotime concentrate. Flotation test work was completed at SGS Lakefield Oretest in 2014, on-site at the BRPP from 2018-2022 and a comprehensive variability program at Bureau Veritas during 2024.

Test work has demonstrated that the Project's mineralisation provides a positive response to mineral processing, primarily due to:

- The favourable mineralogy consisting of the rare earth mineral xenotime, with minor florencite, and predominantly (80-90%) quartz, with accessory mica and iron oxide gangue.
- Strong paramagnetic response of xenotime relative to the diamagnetic quartz.
- The selective flotation of the xenotime-rich magnetic concentrate.

Processing Flowsheet

Based on the test work and BRPP, Northern Minerals has developed and demonstrated a robust processing flowsheet using comminution, wet magnetic separation and flotation to upgrade the plant feed to produce a concentrate.

The test work results confirm an overall recovery of 84% TREO, at a nominal ROM feed grade of 0.88% TREO, produces a mineral concentrate grade of ~25% TREO through the circuit.

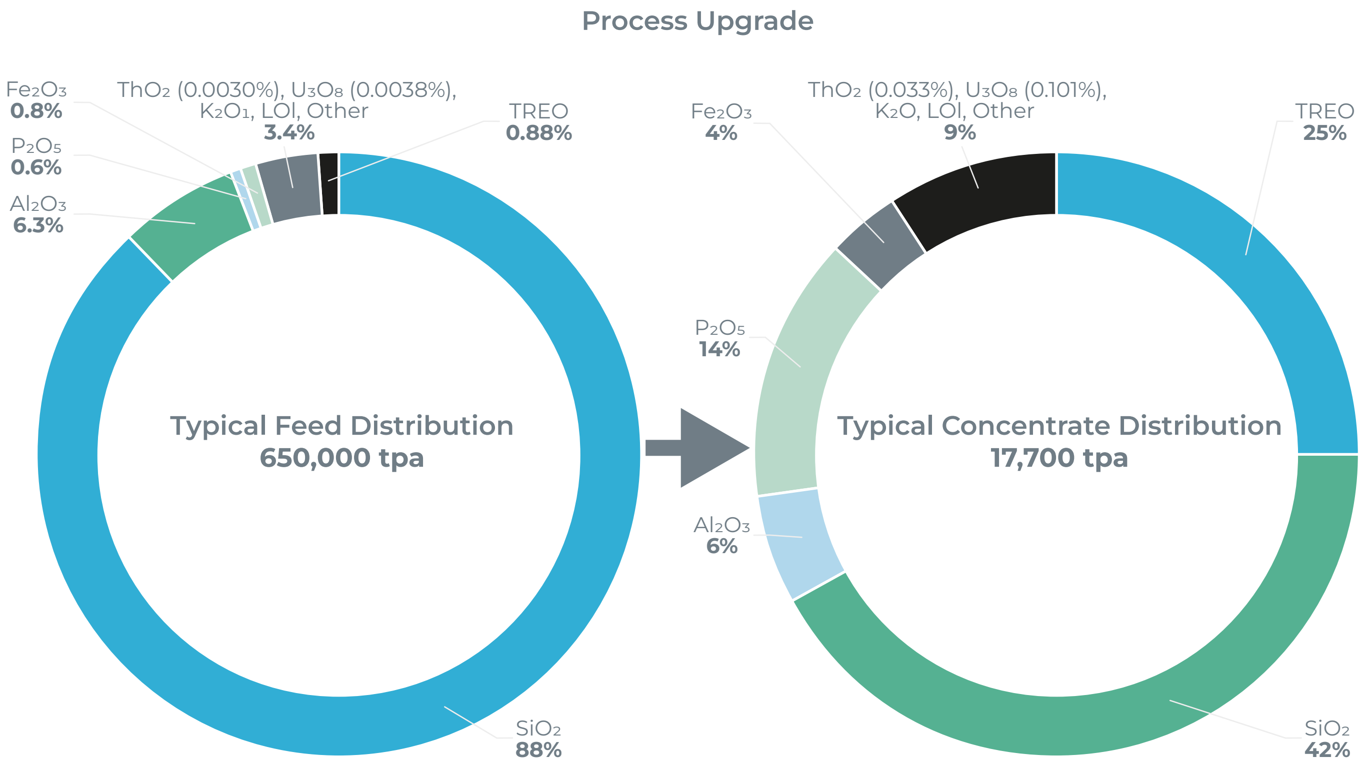


Figure 19 Processing upgrade of typical Browns Range concentrate

Radionuclide Deportment

The Project's mineralised material contains naturally occurring radioactive material (NORM) associated with the Uranium (U) and Thorium (Th) decay chains. Radionuclide deportment assessment conducted by the Australian Nuclear Science and Technology Organisation (ANSTO) and assays completed during the BRPP operations determined secular equilibrium of U and Th decay chains in all process streams.

Tailings from the magnetic separation and flotation circuits are not considered radioactive, as the activities of U and Th (and decay progeny) measure less than 1 Bq/g. The concentrate product is considered a radioactive material and will be subject to regulatory control in terms of material handling, storage and transport as defined by the National Directory for Radiation Protection due to the activities of U and Th (and decay progeny) measuring approximately 13 Bq/g.

To ensure the health and safety of employees, the Company and the transport operator will instigate radiation protection controls to remain compliant with statutory hazardous goods transport regulations.

Process Plant

“The process plant is designed to operate at a nominal crusher feed and mill feed rates of 650,000 tpa”

Figure 20 Browns Range Pilot Plant

Process Plant Design

The process plant will receive ROM material trucked to and stockpiled on the ROM pad. This mineralised material will be fed to a primary jaw crusher by front end loader. Crushed plant feed will report to a surge bin prior to grinding. The grinding circuit will comprise two-stage milling, a SAG mill and ball mill, operating in closed circuit with a cluster of hydrocyclones to grind the feed to a P80 of 63 µm. The ground material is fed to low intensity magnetic separators (LIMS) which remove highly magnetic iron minerals and steel from grinding media to prevent blocking of the matrix in the downstream wet high intensity magnetic separators (WHIMS). The WHIMS produce two products: a xenotime rich magnetic concentrate, and a non-magnetic stream containing largely silica and mica which is rejected as tailings. The magnetic concentrate is then fed to a flotation circuit where selective reagents are used to collect the xenotime material in the froth, producing a xenotime concentrate and reject unwanted gangue material as tailings. The concentrate is dewatered via a plate and frame pressure filter to produce a filter cake which is dried in a spiral flash dryer and bagged using a semi-automated bagging system into 1.5 t bags ready for transportation to the Eneabba Rare Earth Refinery.

The process plant will produce two slurry tailings streams that report to separate cells within the tailings storage facility (TSF). The magnetic separation tailings stream will be thickened prior to disposal into the magnetic separation tailings cell with decant water returning to the process plant without treatment. The flotation tailings will report directly to the flotation tailings cell. To prevent fatty acid flotation collector contamination of the process water system, decant water will be evaporated and not returned to the plant.

Figure 21 Lab scale filter cake

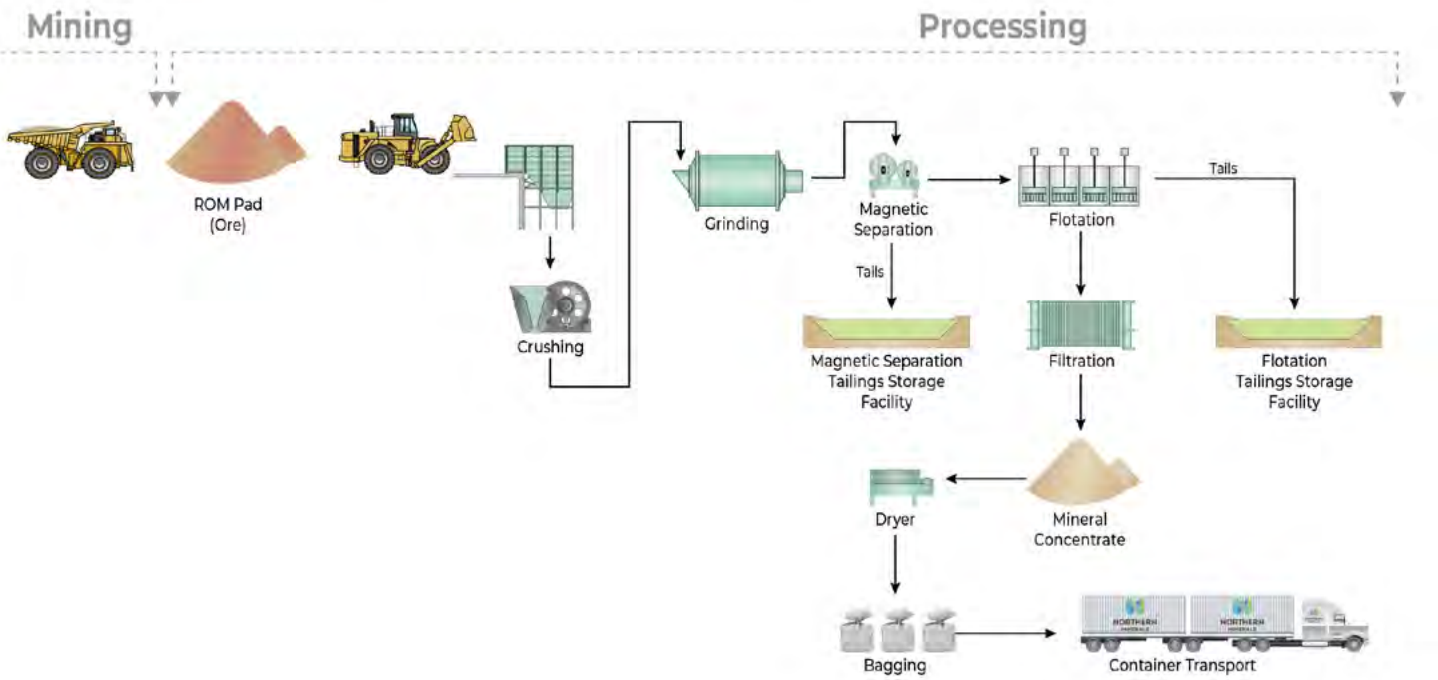


Figure 22 Process flowsheet diagram in pictorial view

The process plant will consist of the following areas:

- ROM pad
- Crushing
- Grinding
- Magnetic separation
- Flotation
- Concentrate dewatering and bagging
- Tailings thickening and storage facility
- Reagents
- Power distribution
- Services
- Buildings and infrastructure.

The proposed layout and design of the process plant is shown in Figure 22

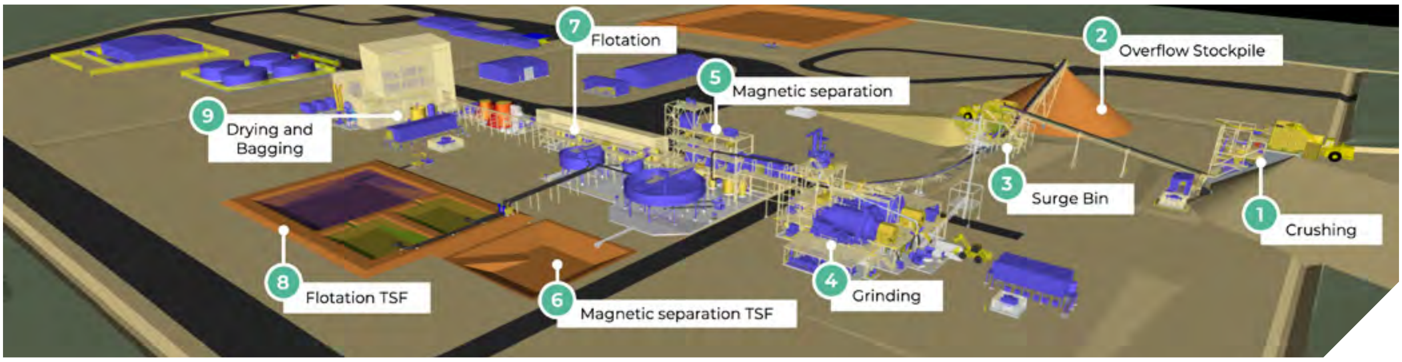


Figure 23 Proposed layout and design of the Browns Range Process Plant

ROM Feed Size Distribution

Two ROM feed size distributions have been considered for the plant design:

- A fine ROM feed distribution based on conventionally blasted open pit mined mineralised material and monitored ring blasted underground mineralised material with the feed F80 of 120 mm.
- A coarser ROM feed distribution based on the sublevel caving (SLC) underground mining method with the feed F80 of 465 mm. SLC fragmentation benchmarking and fines production modelling has been completed.

Figure 24 shows the predicted ROM feed distributions for coarse and fine ROM feed.

Plant equipment has been sized to process both feed size distributions. A static grizzly screen with 650 mm square apertures will be fitted to the ROM bin to scalp away any oversize material, thereby protecting the apron feeder and primary crusher from blockages.

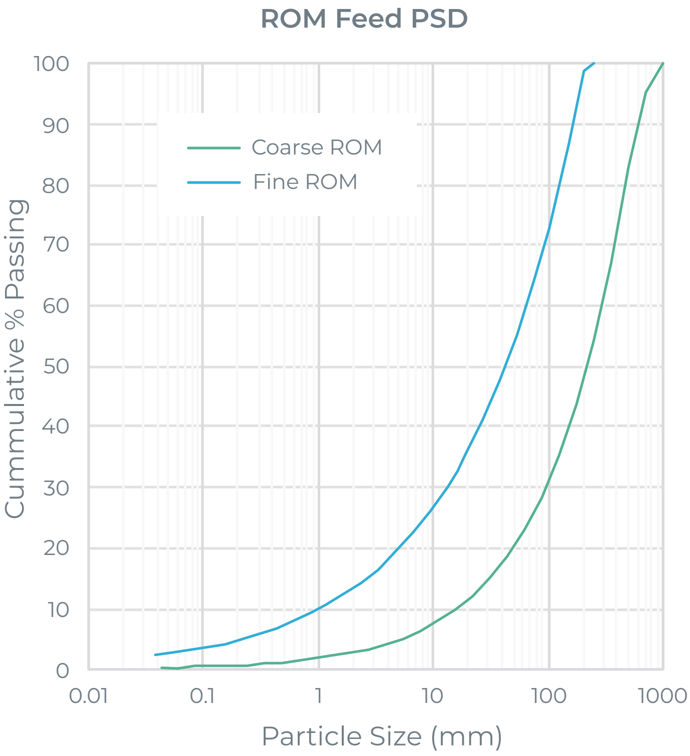


Figure 24 ROM feed particle size distribution

Material Abrasion

The abrasion index for the material is 0.34-0.50 which is considered abrasive and wear rates on equipment and platework will reflect this.

Direct contact between flowing mineralised material and platework surfaces has been minimised, where practicable, to reduce the downtime required for change out. Liner selection and accessibility of liners was also investigated, considering the abrasiveness of the material.

Process Plant Process Control

The process plant process control philosophy has been developed to ensure that the plant will be safe to operate, minimise impact on the surrounding environment and be simple to control.

The plant will have dedicated programmable logic controllers (PLCs) to monitor and control plant functions. The PLCs will interface with a desktop computer-based Process Control System (PCS) located in a dedicated control room. The PCS will provide the interfacing between Operators and the PLCs, allowing operational personnel to monitor and control the plant.

A data historian will be installed to enable collection of process plant, laboratory, operator log sheet and plant downtime data for long term data storage and retrieval. The system provides multiple ways to visualise and gain insights into plant operations for optimisation and trouble shooting in addition to routine reporting.

Flotation Reagent Consumption

The reagent consumption estimates for the plant are based on the 2024 Wolverine sample variability test work dose rates for sodium silicate and fatty acid. The caustic soda dose rates are based on the BRPP consumption. Annual consumptions of each reagent are summarised in Table 12.

Table 12 Flotation Reagent Consumption

	Units	Fatty Acid	Sodium Silicate	Caustic Soda
Density (for transport)	% w/w	100%	44%	50%
Consumption (at transport density)	Wet tpa	356	291	266

To account for the road closures potentially cutting off access to site during the wet season, an additional two-month storage capacity for bulk delivered reagents will be provided over and above the typical storage requirements of an operating plant.

Additionally, suitable site storage will be provided to store up to two months of concentrate production.

Process Plant Utilities and Infrastructure

Services for the process plant will be located depending on the areas of the primary demands or proximity to the source of supply.

Water

Raw water will be pumped 13.5 km from the raw water bore field to the raw water dam located at the process plant. Raw water consumption will be minimised by internal recycling of plant process water where practicable.

The fire system for the process plant will be located at the raw water dam. A dedicated volume of raw water will always be available to the fire system.

Process water will be reclaimed from the magnetic separation tailings storage facility and thickener overflow streams. Re-use of process water will be maximised to minimise the site raw water consumption. The process plant will have a negative process water balance and raw water makeup will be required.

Stormwater in the process plant area and surrounding infrastructure will be managed by a combination of elevated terraces, stormwater cut-off drains and drainage channels.

Hazards and Spill Control

Spillage within the process plant will be controlled within the concrete bunded area of each process area. These bunds will be equipped with vertical spindle pumps to return the spillage back into an appropriate location within the process.

The tailings disposal lines will be located within earthen bermed corridors running from the process plant to the foot of the TSF. In the event of a burst pipe, the spillage will be contained within the corridor. The tailings disposal system will also be fitted with flow monitoring to detect a burst pipe and limit spillage.

Buildings and Facilities

Within the process plant, additional building infrastructure will be required for plant operations, including:

- A Central Control Room
- Operator huts

The overall operation will require additional non-process infrastructure (NPI). The following buildings have been identified as the infrastructure required to support site operations:

- Administration complex
- Plant workshop and stores
- Ablutions
- Crib room
- Emergency Response Team facility
- Laboratory
- Light vehicle workshop.

Demountable transportable buildings will be utilised, with the exception of the workshop and stores which will consist of container mounted dome shelters with a concrete floor. This method of demountable construction reduces the on-site labour supply risk and associated schedule risks, as well as reducing construction duration and simplifying maintenance requirements, thus reducing the overall capital cost.

Power Distribution

A total of seven motor control centres (MCC) will be required for the process plant and its infrastructure. The estimated loading for the MCCs is presented in Table 13.

Table 13 Estimated loadings for MCC's

MCC	Area	Connected Load	Average Demand	
		kW	kW	kVA
1	Crushing 415 V	280	172	207
2	Grinding and Magnetic Separation 415 V	1,578	915	1,075
	SAG and Ball Mill HV	3,000	2,583	2,704
3	Flotation, Filtration and Services 415 V	2,008	1,182	1,406
4	Tailings Dam 415 V	24	13	19
5	Raw Water 415 V	34	19	25
6	Fuel Storage 415 V	55	28	40
7	Administration 415 V	235	94	173
	Camp Distribution Kiosk 415 V	1,500	850	1,000

Prefabricated, transportable switch rooms will be used for the major 11 kV substations and MCC rooms. The prefabricated structures will be manufactured complete with all lighting and small power requirements.

Instrumentation and Control

Conventional instrumentation has been allowed for in the process plant and will be connected to PLCs via remote input and output stations distributed throughout the plant.

Five networks will be established in the process plant:

- Process control system network
- PLC network
- Fieldbus network
- MCC network
- Closed circuit television network.

Sampling and Metallurgical Accounting

The following automated samplers in addition to an On-Stream Analyser (OSA) will be installed within the process plant:

- Plant feed (trash screen undersize)
- LIMS magnetics
- Flotation feed (combined WHIMS magnetics)
- Final product bagging
- Tailings
- Flotation tailings.

The analytical laboratory will operate on a continuous 24/7 basis to provide timely results for plant optimisation and control.

The plant control system and data historian will accumulate and report all measured parameters on an hourly, shift-wise, or daily basis, as required for input to a metallurgical accounting system. Overall metallurgical balances and reporting will be performed in a metallurgical accounting software package.

Spares Holding

A plant equipment spares list, and associated costs have been developed from vendor recommendations and BRPP operational experience for the process plant and includes commissioning, first year operation and critical equipment spares.

Infrastructure and Logistics

Figure 25 Aerial photo of existing infrastructure and Gambit West trial pit (bottom foreground)

The Browns Range site has existing non-process infrastructure which was constructed as part of the BRPP in 2017. The infrastructure includes an existing access road from Ringer Soak, a village with 80 rooms, water supply from the Gardiner Sandstone Aquifer, potable water treatment plant, sewage system, airstrip, radio repeater system, satellite communication link, offices, training room, emergency response and medical centre. Figure 25 shows the existing infrastructure.

The existing infrastructure will allow the rapid mobilisation of initial construction activities and support the commencement of the full-scale Project, where it will be retained and expanded where possible to minimise project cost, risk, and construction duration. The planned infrastructure is shown in Figure 26.

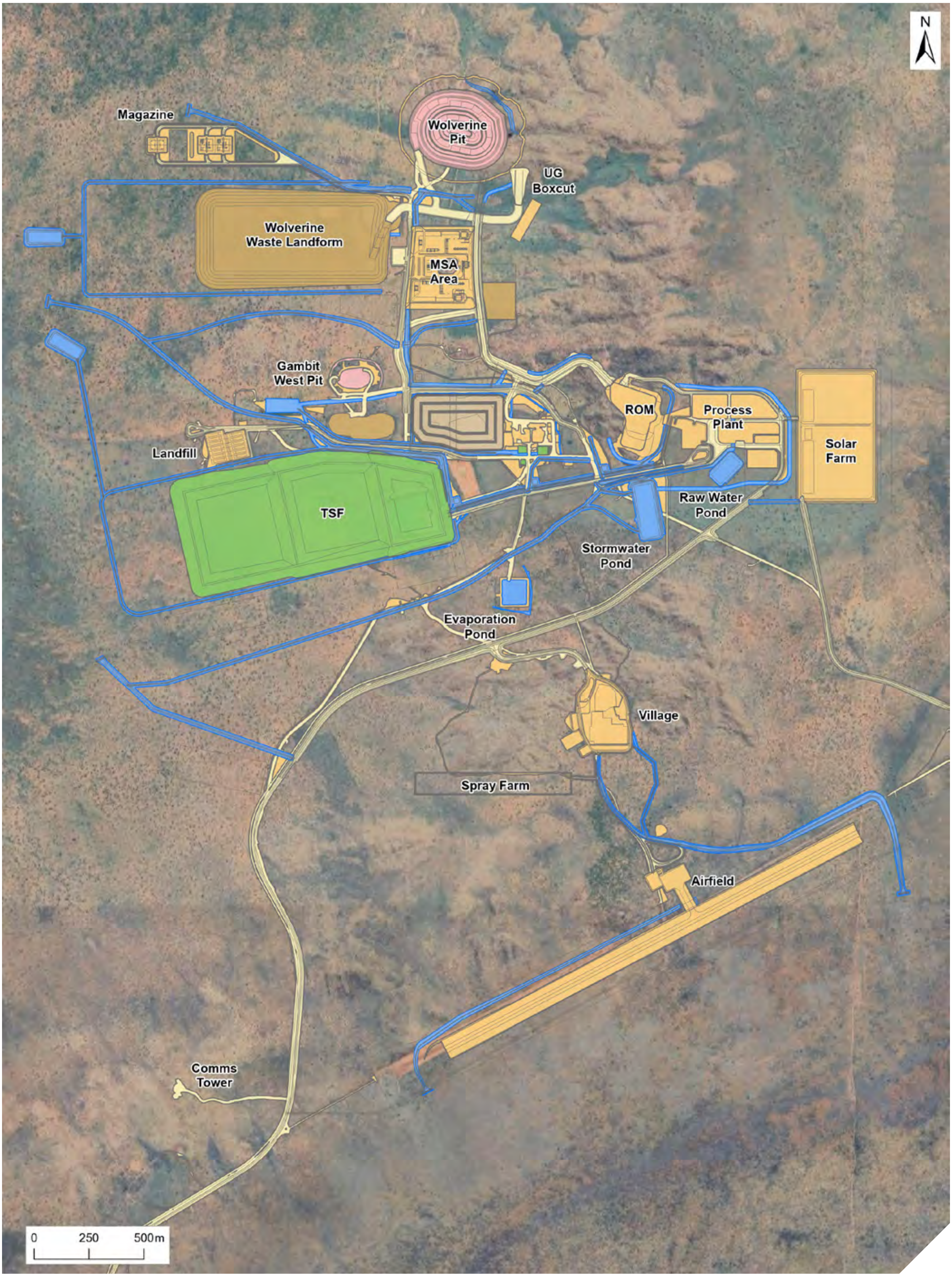


Figure 26 Planned site infrastructure

Figure 27 Existing site access road

Road access

Site road access is required for transport of plant, equipment, materials and personnel to site during the construction phase, and during the operational phase transport of reagents, consumables and supplies to site, and transport of product off-site to Iluka's Eneabba Rare Earth Refinery. The main access route into site is along the Western Australia State highway network to the town of Halls Creek and then on to the Duncan and Gordon Downs local Shire roads (approximately 156 km), past Ringer Soak and onto the existing Browns Range Mine Access Road (MAR). The MAR intersects Gordon Downs Road and will be upgraded to support the Project's road access needs.

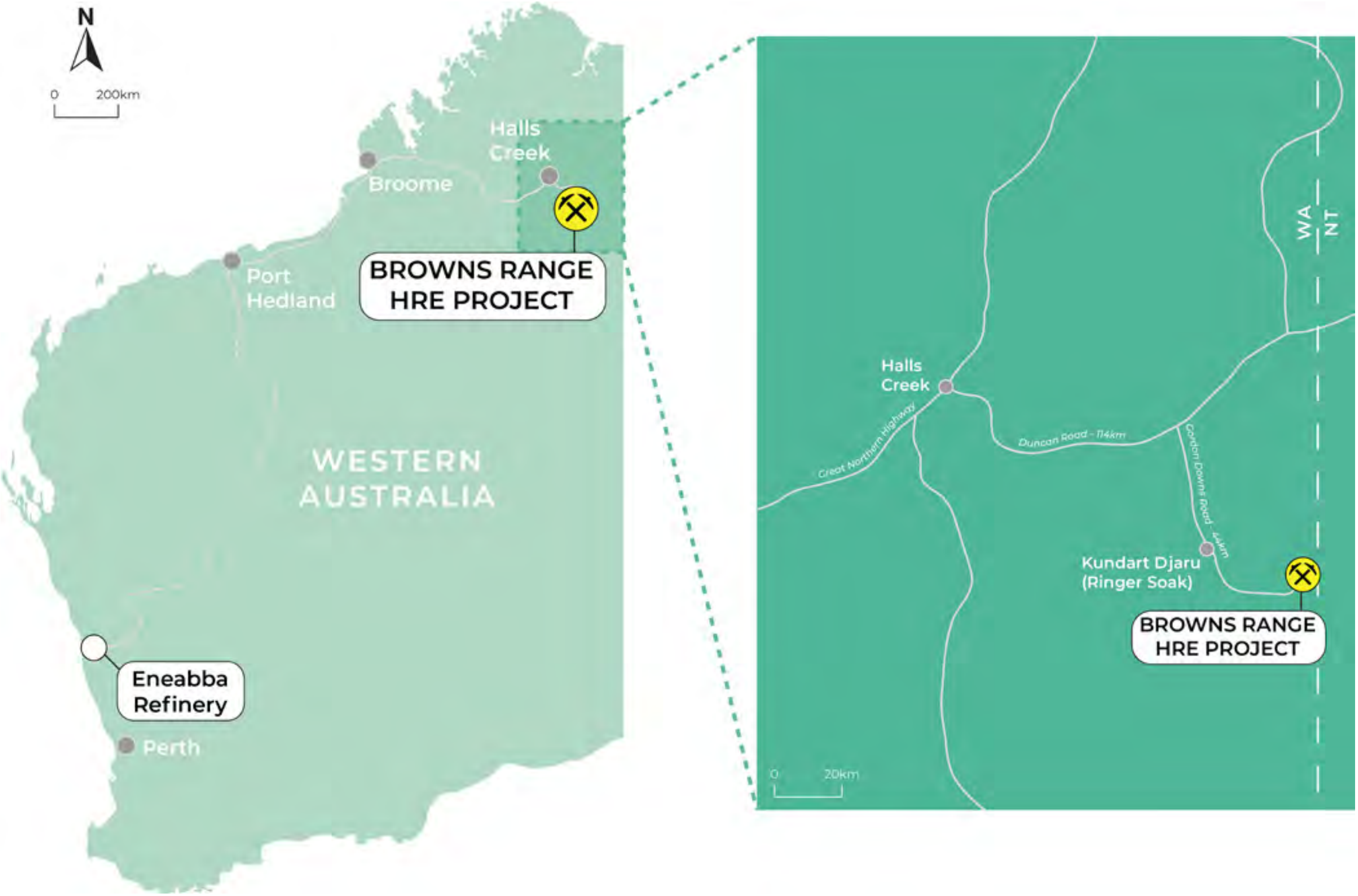


Figure 28 Project access roads and shipping route

Main Roads WA have been progressively upgrading the Duncan and Gordon Downs Roads with final upgrades of the Duncan Road planned to be completed in 2025. Based on engineering assessments of the existing MAR, road upgrades and ongoing maintenance have been costed and allowed for in the DFS capital and operating cost estimates.

Airstrip

The existing airstrip is a 1,100 m unsealed airstrip designed to International Civil Aviation Organisation (ICAO) Code 2B, capable of landing turboprop planes of 9 seat capacity. An upgrade is planned to extend the airstrip to 2,000 m and include refuelling and check in facilities, which will make it suitable for ICAO Code 3C aircraft capable of landing turboprop planes of 76 seat capacity to transport the workforce for construction and operations.

Accommodation Village

A village will be used to house both the construction and operations' workforce. The existing accommodation village located approximately 1.3 km south of the process plant area and 900 m north of the airstrip will be expanded, with its occupancy increased from 80 to 352 rooms. The village will include a range of recreational and social amenities designed to enhance the well-being of residents.

Power Supply and Fuel Storage

An onsite, purpose-built hybrid diesel-solar power station will supply power to the Project. This power station will be located adjacent to the process plant area and will be sized and configured to supply all electricity requirements to the mine, process plant and camp with a N+1 level of redundancy. The power station will comprise an installed capacity of 28.5 megawatts (14 x 1 megawatt diesel generators and 14.5-megawatt solar farm) for a total power demand of 11 megawatts with renewable energy generation contribution of up to 44% per year. The renewable energy generation will comprise a solar farm and a battery energy storage system of 10 megawatt hours. The power station will be built, operated and maintained by a power service provider.

On site fuel storage capacity will be 1.8 million litres, which is sufficient to account for possible supply interruptions of up to two months during the wet season.

Water Supply and Treatment

Total Project water demand is estimated at 1.3 gigalitres per annum. This is to be supplied by groundwater sourced from the Gardiner Sandstone Aquifer located approximately 13.5 km to the southwest of the mine and process plant area. Water exploration drilling, pump testing and groundwater modelling work has concluded that this aquifer will sustain the long-term supply, with extraction having negligible environmental impact. The water is good quality, will not require treatment for the process plant, while only minimal treatment for potable water use.

Communications

Due to the remote nature of the Project, no permanent communication infrastructure exists within close vicinity of the mine lease area. The planned communication link is based on low earth orbit satellite technology from OneWeb and Starlink, which will provide a communication link of 900 Mbps to 1 Gbps.

Wet Season Access

Due to the location of the mine site, the wet season impact is a significant consideration for the Project. In the summer wet season, road access can be impacted primarily by the rising of the Sturt Creek which crosses the Gordon Downs Road.

Assessment of the Duncan Road and Gordon Downs Road upgrades completed in 2022 by Main Roads Western Australia indicates that the Sturt Creek crossing upgrade has been constructed to a serviceability level that should result in road closures of less than two months during the wet season.

The wet season will have negligible impacts on day-to-day operations on site as personnel movements will be via the airstrip; however, road transport may be impacted. To mitigate this, storage facilities on site have been designed and costed to accommodate a maximum two-month road outage.

Figure 29 Typical bags used for concentrate packaging

Logistics

Project logistics incorporates the shipping and road transport requirements of construction phase materials and equipment, operational phase supplies, and produced rare earth oxide concentrate off-site.

During the construction phase, transport of materials and equipment will utilise existing container and breakbulk liner shipping services into the Port of Darwin or Fremantle Port. The Port of Darwin is preferred based on its superior berthing capability and landside facilities. There will also be construction materials and equipment that need to be transported from Perth or Fremantle to site.

Transport of materials and equipment from the Port of Darwin to site will be via the existing road network. A construction phase transport envelope study has been conducted on the proposed road route to ensure that any height and width restrictions will not prevent large equipment movements from reaching site.

Once the Project moves to an operational stage, Northern Minerals will import all reagents, consumables, general freight and spares direct to local ports where practicable, which are required to support the operation of the mine site. A Perth warehouse and consolidation facility will be established for receival and storage of material to maximise inbound truck loads. Inbound materials from Perth will be loaded on double trailers and transported to site via the Great Northern Highway (RAV 7 limit).

The concentrate produced at the Project will be packaged with the regulatory placarding and loaded into tautliner trucks for delivery to Iluka's Eneabba Rare Earth Refinery via the Great Northern Highway.

Currently, the Port of Wyndham and Port of Broome are being upgraded to provide both first point of entry (FPOE) capability and larger berthing options. These may provide potential shipping options during construction and operations due to their proximity to the Project.

Tenure, Land Access and Heritage

"Northern Minerals has been actively working with and maintaining positive relationships with Traditional Owners since 2008"

Figure 30 Traditional Owners conducting a site survey

Tenure

The Project covers an area of 603 km² of granted tenements within Western Australia and is comprised of significant deposits across tenement holdings all 100% owned by NTU.

There are four (4) tenements required under the proposed DFS production plan, all of which have been granted. The project main site lies within the mining lease M80/627. Proposed ancillary infrastructures lie within three (3) granted miscellaneous licences (L80/076, L80/109 and L80/111).

Project operations located on the mining lease include mining, ore processing and storage of mine waste, mine accommodation village, airstrip and power station. The miscellaneous licence tenements will generally be used for linear infrastructure including pipelines, roads and power transmission, and service facilities such as water abstraction.

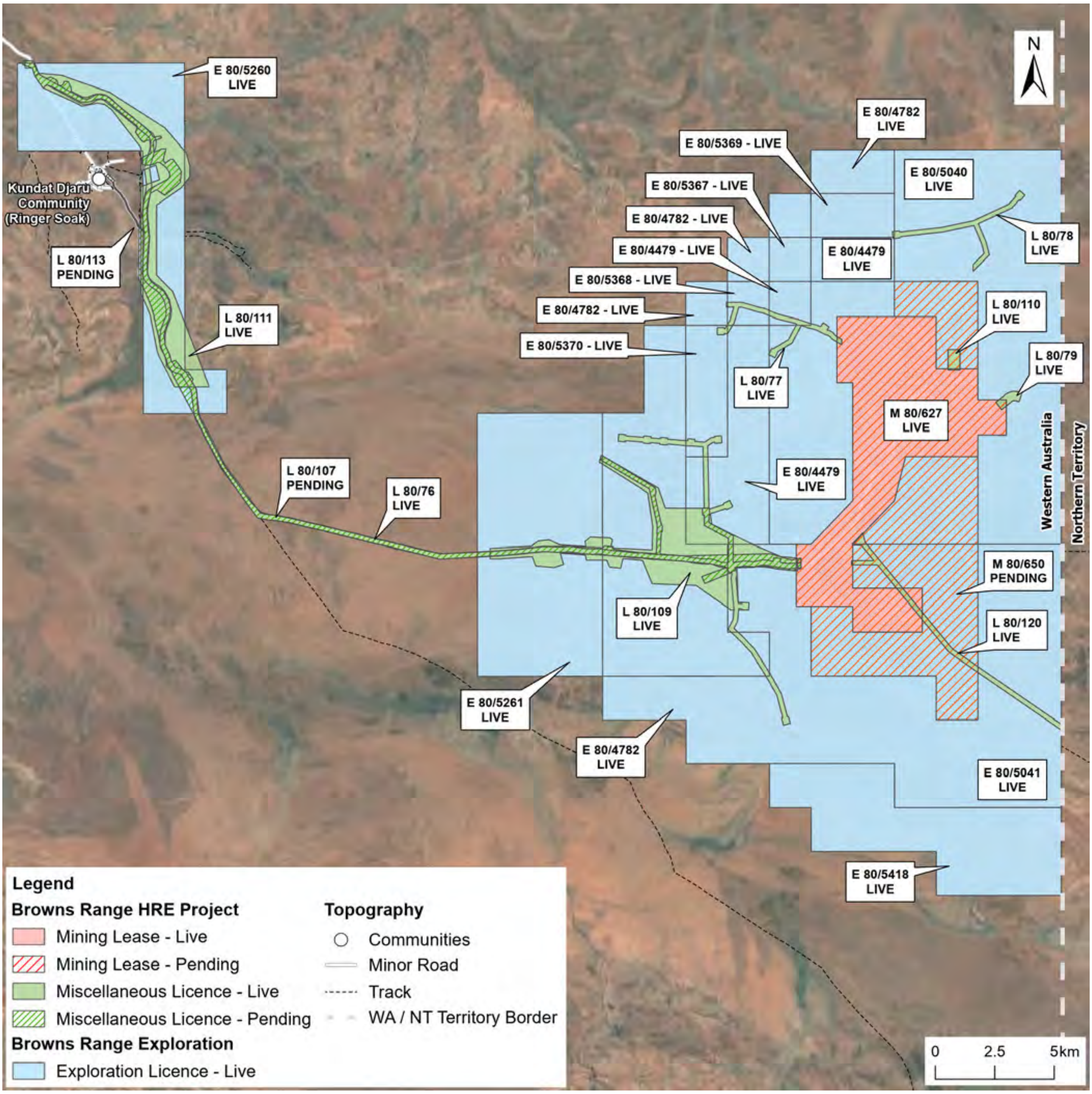


Figure 31 Map of Tenements

Table 14 Granted Project Tenements

Tenement	Locality	Purpose	Area (km²)
M80/627	WA	Mine, Plant, Accommodation, Village and primary services	49.24
E80/4479	WA	Project expansion	32.37
E80/4782	WA	Project expansion	74.44
E80/5040	WA	Project expansion	133.94
E80/5041	WA	Project expansion	140.46
E80/5260	WA	Project expansion	48.58
E80/5261	WA	Project expansion	58.25
E80/5367	WA	Project expansion	3.24
E80/5368	WA	Project expansion	3.24
E80/5369	WA	Project expansion	6.48
E80/5370	WA	Project expansion	9.71
E80/5418	WA	Project expansion	38.81
L80/76	WA	Infrastructure	14.32
L80/77	WA	Infrastructure	1.81
L80/78	WA	Infrastructure	1.67
L80/79	WA	Infrastructure	0.43
L80/109	WA	Infrastructure	22.53
L80/110	WA	Infrastructure	0.43
L80/111	WA	Infrastructure	17.57
L80/120	WA	Infrastructure	2.65

Land Access

The Project lies predominantly within the Gordon Downs Pastoral Station with the remainder within Unallocated Crown Land.

The Gordon Downs pastoral lease is held by Heytesbury Pastoral Group (Heytesbury). Road Sharing and Water Sharing Agreements are in place with Heytesbury to facilitate access to site and the drawing of water from local aquifers subject to all relevant regulatory approvals.

Whilst no further consents are required from Heytesbury, in line with obligations under the existing agreements, the Company provides regular updates as to activities being undertaken over the lease area.

Native Title

The Project lies entirely within the determined Jaru native title area, with the exception of a section of the mine access road which crosses into the Tjurabalan determined native title area.

The Company has executed a Co-existence Agreement with the Jaru Aboriginal Corporation RNTBC on behalf of the Jaru native title holders. This agreement provides Northern Minerals consents and access to country to develop and operate the Project, while at the same time ensuring the Jaru People benefit, both socially and economically, from the Project's development. A Native Title, Heritage Protection and Mineral Exploration Agreement has similarly been entered into with the Tjurabalan Native Title Lands Aboriginal Corporation RNTBC on behalf of the Tjurabalan native title holders that sets out conditions for management of cultural heritage and community benefits for the Tjurabalan People.

The settlement of Kundat Djaru (Ringer Soak) was established in the 1980s on land excised from the Gordon Downs Pastoral Station. The land on which the township lies and a parcel of land lying mainly to the south of it has been formally gazetted as Crown Reserve 37670, under the Aboriginal Affairs Planning Authority Act 1972.

Health, Safety, Environment and Community

Figure 32 Periodic site surveys

The Company is committed to delivering a Project that will be an environmentally and socially responsible supplier of rare earths for a globally sustainable future.

Northern Minerals upholds a high standard in health and safety, environmental, and social practices, with a commitment to ensuring that the advancement of the Project brings positive outcomes for all stakeholders and communities in which it operates.

Health and Safety

Safety has been embedded as a core design principle in the development of the mine and processing plant, with systems established to support safe construction and operations. NTU's Mine Safety Management System (MSMS) aligns with the Work Health and Safety Act 2020, WHS (Mines) Regulations 2022, and ISO 45001 standards, ensuring risks are effectively managed and safety is prioritised across all activities.

A risk-based approach underpins NTU's safety management framework, with a strong focus on hazard identification and risk reduction. The MSMS includes a fatality prevention program addressing critical mining hazards, supported by a structured Risk Management Framework aligned with ISO 31000. Regular hazard studies, such as HAZID, HAZOP, and design risk assessments, are conducted at various stages of the project lifecycle to ensure risks are controlled to "As Low as Reasonably Practicable" (ALARP).

NTU demonstrates its commitment to maintaining an effective and adaptable safety system, ensuring the health and well-being of its workforce and the successful execution of its projects.

Figure 33 Heritage surveys being conducted at Browns Range

Regulatory and Permitting

Commonwealth Government

Baseline environmental studies conducted in 2013 and 2014 identified that the Project area contains habitat that could support some fauna that are protected under Commonwealth environmental legislation *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Project has twice been referred to the Federal Department of the Environment (now the DCCEEW). The first referral was in 2014 and was for the entire Project. The second referral in 2019 was to introduce the ore sorter which would elevate the tailings produced to be a radioactive material. Both referrals were determined not to be controlled actions under the EPBC Act, and, accordingly, no approval or formal assessment was required by the Commonwealth.

The removal of the hydrometallurgical step in mineral processing results in a concentrate product that is slightly higher in radioactivity. Storage of this concentrate at site triggered a mandatory referral under the EPBC Act as a potential nuclear action. Northern Minerals submitted a third referral to DCCEEW in April 2025 which was determined to be "not a controlled action – particular manner" on 14 August 2025.

Western Australian State Government

The Project has been assessed by the Western Australian Environmental Protec-tion Authority (EPA) under the "Assessment on Proponent Information" (API – category A) framework. The Project was approved by the WA Minister for the En-vironment on 20 October 2014 under Ministerial Statement 986, with a small number of conditions.

Minor changes to Ministerial Statement 986 have been approved under section 45C of the Environmental Protection Act 1986. Authorised changes include a larger Development Envelope and additional disturbance to accommodate the updated project footprint.

The granting of Ministerial Statement 986, together with the requisite project tenure under the Mining Act 1978, allows secondary approvals, i.e. permits and licences, to be issued under subordinate legislation. These include permits and licences required under the *Mining Act 1978*, the *Environmental Protection Act 1986*, the *Radiation Safety Act 1975*, and the *Rights in Water and Irrigation Act 1914*.

Northern Minerals has implemented a staged program of approvals, with applications to be lodged with relevant agencies in line with the Project development schedule, summarised in Table 15 with approvals expected to be granted well in advance of the commencement of construction.

Table 15 Project approvals

Approval type	Regulator	Status
EPBC Act Referral of concentrate product storage facility	DCCEEW	Approved
Ministerial Statement 986	Minister for Environment	Approved.
Section 45C to Ministerial Statement 986	Minister for Environment	Approved
Conservation Significant Fauna Management Plan – revision	Minister for Environment	Revised in accordance with s45C (above) requirement. Submitted in July 2025.
Works Approval Applications (WAA)	DWER – industry regulation	Staged approach. Stage 1 (WWTP, landfill and mobile crushing plant) - approved. Stage 2 application for main construction is in preparation in line with DFS schedule.
Revised 5C licence for increased groundwater abstraction during construction	DWER – water	Pending pump testing of new bores.
Mining Proposal with Mine Closure Plan	DMPE	Drafted to be submitted in line with DFS schedule
Dangerous Goods license – explosives magazine and bulk chemical storage	DMPE	Not commenced, to be submitted in line with DFS schedule

Physiography and Land Use

The Project area is located in the semi-arid south-eastern Kimberley region, at the northern edge of the Tanami Desert. The topography across the Project site is generally subdued, with some rocky outcrops and ridges to a maximum elevation of about 490 m RL (or about 25 m to 30 m above the surrounding plain). Figure 34 depicts the typical landscape in the Project area.

Figure 34 Typical landscape in Project area

Customary traditional owner land uses and pastoral land uses are the dominant land uses in the Project area. The closest gazetted conservation reserves to the Project area include the Ord River Regeneration Reserve, located approximately 100 km north-west of the Project and the Wolfe Creek Meteorite Crater National Park, located approximately 120 km to the west-southwest.

Hydrology and Hydrogeology

The Project site is situated in the upper reaches of the Sturt Creek catchment. Runoff from the 55,000 km^2 Sturt Creek system ultimately flows into Lake Gregory (Paruku), 280 km downstream of the Project area. All water courses in the catchment are ephemeral and only flow following large storm events or prolonged periods of rainfall (typically between January and March). Several relatively small ephemeral watercourses drain the Project area in a westerly direction, joining the Sturt Creek some 140 km upstream of Lake Gregory.

Baseline studies have identified three water-bearing stratigraphic units in the Project area. Groundwater quality in the Project area is generally fresh to brackish, and with the exceptions of localised areas where the groundwater is naturally saline, the water is suitable for watering of livestock.

Hydrogeological studies have identified that while dewatering will be required at the proposed Wolverine open pit and underground mines, the water abstracted will not be suitable to meet the Project's water demands. It is proposed to source water from an array of shallow production bores at a newly constructed borefield to be located 13.5 km to the west of the process plant. Hydrogeological modelling for the proposed borefield and pit dewatering has concluded that the proposed borefield, and mine dewatering will not have an impact on existing registered groundwater bores, or springs. There are no wetlands or groundwater dependent vegetation recorded in the vicinity of the Project. Studies into mine dewatering discharge to the environment are continuing in line with Project mining schedule.

Figure 35 Rehabilitation of the existing waste dump at Brown Range

Geochemistry of Mine Waste Rock

Geochemical characterisation of the Project waste rock shallower than 121 m below ground level (mBgl) has shown that waste rock from the Wolverine pit is largely benign to the top of fresh rock, where some likelihood for potentially acid forming (PAF) material was encountered in arkose lithology. Assays to determine the acid-forming potential of waste below 121 mBgl in the Wolverine pit found that PAF material accounts for 0.04% of total waste material and hence was determined to pose a low likelihood of acid mine drainage arising at the Project.

Leachable trace metal concentrations of the waste rock samples (including samples taken from the ore zone) were generally low and often below detection limits. Overall, the geochemical testing has shown that only a small proportion of the trace elements present in project waste rock occurs in forms that are readily leachable. Neither acidic nor saline seepage is expected to occur at the waste rock landforms, as the waste rock stored there will be non-saline with low acid-generating capacity.

Flora and Fauna

Vegetation in the Project area is largely in excellent condition. Some populations of weed species occur near existing roads and tracks and laydown areas associated with mineral exploration activities. Drainage lines in the Project area support characteristic vegetation assemblages, but no obligate groundwater dependent species or communities have been identified on the Project tenements.

Most vegetation associations within the proposed Project development footprint are well represented across the region and will not be significantly affected by clearing. No threatened plant species protected under Commonwealth or State environmental legislation were recorded during surveys. Overall, the impacts on native flora and vegetation arising from the implementation of the Project are modest. The fauna assemblages in the Project area are consistent with those known to occur in the surrounding landscape. No vertebrate fauna assemblages are believed to be restricted to the Project area.

Seven conservation-significant fauna species are known to occur or are considered likely to occur within proposed Project operations areas, overall, the baseline fauna impact assessment has concluded that implementation of the Project is unlikely to result in significant adverse impacts on vertebrate fauna or their habitats. A Conservation Significant Fauna Management Plan required by Ministerial Statement 986 has been developed and approved by the Office of the Environmental Protection Authority, which will be implemented during both construction and operations to further reduce the potential for adverse impacts on threatened fauna.

The Project is not expected to have any significant impact on subterranean fauna or short range endemic invertebrate fauna.

Figure 36 Typical fauna at Browns Range

Aboriginal Heritage

Northern Minerals respects the rights and cultural links Traditional Owners have with country and encourages an environment of cross-cultural appreciation and sharing. Since 2008, the Company has been actively working with Traditional Owners in relation to Project activities and recognises that only by working together can joint benefits and success be achieved.

The Heritage Impact Assessment (HIA) process is the primary method under which Northern Minerals engages with the Traditional Owners under the Heritage Schedule in the Native Title Agreements to seek consent to undertake works on Aboriginal lands and to ensure that any cultural and heritage sites are identified and managed. Compliance with the HIA processes is a critical component of the agreement that NTU has with the Traditional Owners, which sets out in detail the process that must be undertaken prior to any works being carried out. HIAs will continue throughout the Project's lifecycle as necessary.

To improve knowledge and appreciation of traditions, heritage and values, Northern Minerals is committed to providing cross cultural awareness training for employees. This training assists in fostering an inclusive workplace built on mutual respect and understanding which is an integral part of delivering the Company's commitments.

Community and Stakeholder Relations

Northern Minerals is committed to responsible and ethical business practices, and the Company recognises that maintaining its social licence to operate is a core aspect of the Project's development.

Since 2008, the Company has worked proactively with the local community, particularly the communities of Ringer Soak and Halls Creek. From this early interaction, strong relationships have formed, creating a positive foundation for understanding and working with the community, while also providing a platform for community involvement in the Project's development.

Northern Minerals is committed to maintaining strong relationships and active engagement with local communities and its stakeholders. Through community consultation forums, regular on the ground consultation, and ongoing engagement with the local Shire, community leaders and government service providers, the Company ensures that the local social and economic landscape is understood, and that the community concerns are heard and addressed.

Northern Minerals has completed a social and economic impact assessment of the Project, with further assessments planned during the life of the Project. The results from these assessments inform the development of plans and strategies aimed at minimising any negative impacts, while enhancing the positive impacts.

A key part of Northern Minerals' community engagement activities is to actively participate in and support the business community. Northern Minerals is a member of the East Kimberley Chamber of Commerce and Industry and the Broome Chamber of Commerce and Industry.

To support the regulatory and approvals process and remain abreast of legislative and policy changes that may impact operations, Northern Minerals has developed and implemented a Stakeholder Engagement Management Plan. This strategy is bi-partisan and reviewed regularly to ensure its relevance in relation to Project requirements, and the current political landscape. The strategy includes ongoing engagement and regular dialogue with Federal, State and Local governments, and Members of Parliament and all other stakeholders.

The Company is an active member of the Western Australian resources industry and actively participates in matters relating to the industry, and the Kimberley region, through memberships with key industry associations.

Project Execution Plan

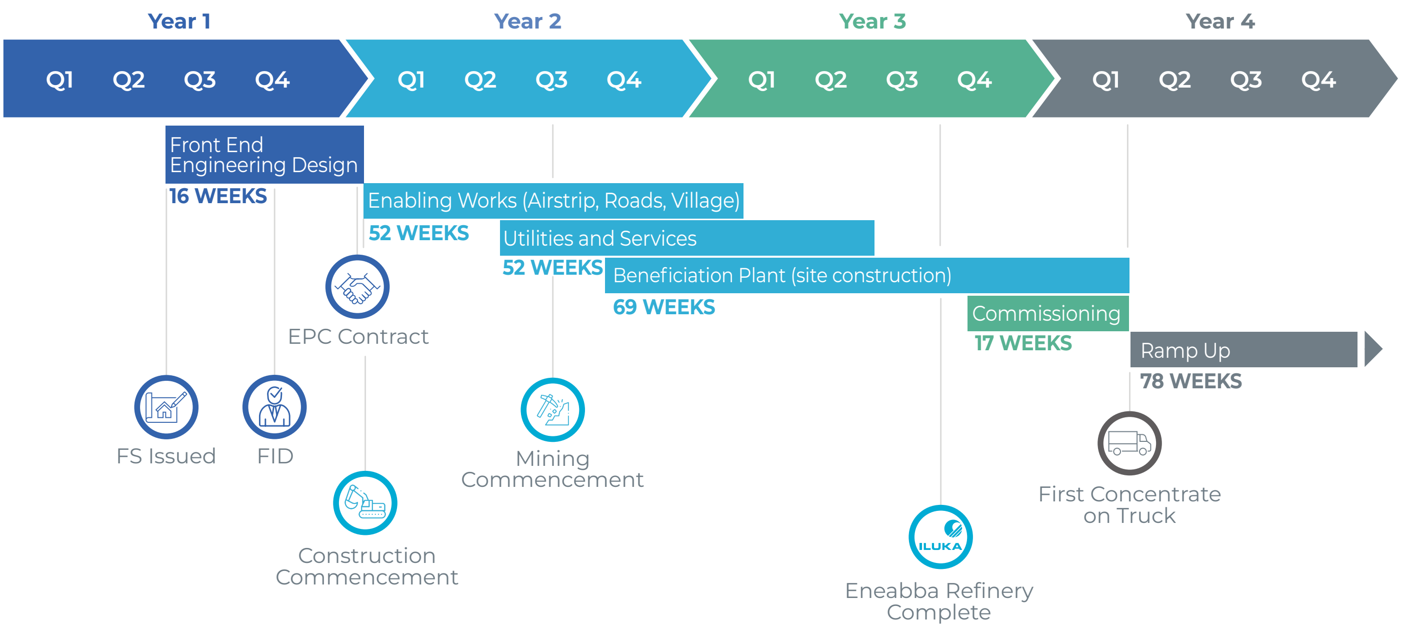


Figure 37 Summary Project Implementation Schedule

With key primary approvals in place, Project critical tenure granted, and the DFS confirming the economic, strategic and technical viability of the Project, Northern Minerals aims to, subject to arranging project funding and make a Final Investment Decision (FID) as soon as practical post completion of the DFS.

Figure 37 presents the key activities and work programs in the Project implementation schedule.

The Project contracting strategy aims to facilitate a relatively seamless transition from DFS into execution. This is achieved by limiting the number of major contracts, reducing interfaces, and assigning risk to the party best placed to manage it. This approach has led to four large contracts, representing over 70% of direct costs – an Engineering, Procurement, and Construction (EPC) contract for the process plant, a schedule of rates construction contract for site wide earthworks, and separate open pit mining and underground mining contracts. Significant progress has been made with preferred contractors for these major contracts during the DFS, with final awards contingent on the FID. This allows the DFS cost estimates to be supported by known and accounted-for contract and procurement risks.

Project Construction

An early works program is expected to commence prior to FID, focusing on finalisation of major contracts and detailed design to enable construction to commence immediately following FID. Construction is targeted to commence three months after FID, with construction water supply and accommodation expansion established as soon as practicable after FID to facilitate road works, site wide earthworks and civil works. Commencement of construction, and procurement of critical path items such as long lead items, will enable the Project to target construction completion by Q4 2027, followed by commissioning and ramp up in 2028. This will enable the Project to commence supply of xenotime concentrate to Iluka's Eneabba Rare Earth Refinery shortly after commissioning of the Project.

Mining Operations

Optimisation of mine designs and schedules will continue throughout the detailed engineering design and construction phases. Following this, suitably qualified open pit and underground mining contractors will be engaged. Open pit mining operations are scheduled to commence with twelve months of pre-commercial production to provide a ROM stockpile for commissioning and production ramp-up. Development of the decline for the Wolverine underground mine will begin six months later, allowing underground operations to commence in alignment with the planned production schedule.

Commissioning and Ramp Up

The commissioning and ramp up of the process plant can be broadly divided into pre-commissioning, dry commissioning, wet commissioning, and ore commissioning activities. Following successful commissioning, the Operations team will gradually begin the process of ramping up the facilities to their nameplate capacity. This process is expected to take 18 months during the production period.

Capital Cost

Basis of Estimate

The overall Project pre-production and sustaining capital estimate has been compiled based on inputs from experienced consultants and construction and mining contractors who developed DFS level data for estimating and costings. The contributing consultants are listed in Table 16.

Capital costs relate to the entire Project and include all scope areas that have been defined in the DFS. The overall estimate has been developed in accordance with an Association for the Advancement of Cost Engineering (AACE) Class 2 estimate based on the level of engineering and design completed to date.

Table 16 DFS capital estimate contributors

Capital Estimate Item	Contributor
Geology and resource	Northern Minerals and Entech
Open pit and underground mining	Entech and Mining Contractors
Process plant	ECI with EPC Engineers
Project management, procurement, planning, and estimating	Neuplan
TSF and evaporation pond	Knight Piésold Consulting Engineers
Project water supply	Engineered Efficiency and Raw Water D&C Contractor
Mine ventilation	Entech
Site wide earthworks	Earthworks Contractor
Accommodation village and Non-process Infrastructure	Village Design & Construct Contractor
Project logistics	JEB Logistics
Site communications	Communications Contractor
Power station	Independent Power Producer
Diesel cost forecast	Trading Matters & Fuel Supplier
Operational readiness	EnterpriseIS

Estimate Methodology

The capital estimate was prepared on an area-by-area basis according to the Project Work Breakdown Structure (WBS) with individual estimates prepared for each area. The delineation of pre-production capital costs and operating costs has been defined as the point at which mechanical completion and wet commissioning of the process plant installations has been completed.

The overarching strategy for sourcing pricing for the capital procurement components of the capital cost estimate was to engage the market on a comprehensive competitive tendering basis using developed scopes of work and specifications, and bespoke forms of contract. Budget or database pricing was used for small low risk scopes of work which makes up only 0.9% of the overall capital costs.

Estimate Structure

The capital cost estimate has been divided into the following major cost areas:

- Project indirects
- Project directs:
  - General site works
  - Mine
  - Browns Range non-process infrastructure (NPI)
  - Process plant
  - Process plant NPI
- Project contingency

Project Indirects

Project indirects include costs that are not directly proportional to the quantity of permanent work to be performed, are not readily allocated directly to individual cost items and are typically time-based driven by the Project schedule. The indirect costs are itemised as follows:

- *Owner's costs* – Owner's labour and expenses during the Project execution stage and includes the costs of owner's management, labour, owner's team third party consultants and the initial operations team, insurances, environmental, social and governance (ESG) and health and safety (H&S) systems, monitoring and compliance, flights and accommodation, village management, and fuel, freight and road maintenance.
- *First fills and consumables* – The cost of reagents and consumables that will be required to achieve the inventory levels necessary to commence operations.
- *Equipment spares* – The costs of commissioning, first year operation and critical equipment spares.
- *Operational readiness* – The costs for all tasks in the Operational Readiness Plan to be completed by the Northern Minerals responsible personnel or external consultants or contractors under management of the responsible personnel.
- *Third Party Consultants* – Budget allowance for consultants required to support work remaining to progress work packages from the DFS to a level required for Project execution.

Project Directs

Project direct costs are those expenditures that are directly attributable to the Project scope items and include the supply of equipment and materials, freight to site and construction labour. The direct costs for the Project have been categorised as follows:

- *General site works* – site wide drainage and culverts, sediment retention ponds, and ancillary site works.
- *Mine* – open pit and underground mining contractor site establishment and capitalised items, and owner's team mining costs.
- *Browns Range NPI* – communications systems, raw water supply including water pipelines and water bores, accommodation village expansion, airstrip upgrade, and Mine Access Road realignment and upgrade.
- *Process plant* – plant and ROM pad earthworks, ROM wall, comminution, magnetic separation, flotation, concentrate dewatering and bagging, tailings thickening and reagents.
- *Process plant NPI* – Plant services such as water, air and fuel, pipe racks, power and electrical equipment, site earthworks, buildings, communications, independent power producer (IPP) fees, tailings storage facility and water management ponds.

Project Contingency

Contingency is a provision made to cover unforeseen items of work that will have to be performed or items of cost that will be incurred within the defined scope of work of the estimate but cannot explicitly be foreseen or accounted for at the time of preparing the estimate due to the level of Project definition. Contingency allowances were developed to account for:

- Design, scope and engineering change risks taking into account design maturity of capital cost components by package
- Value, rate and costs risks taking into account pricing maturity of capital cost components by package
- Construction risks assessed by quantitative risk analysis.

The total contingency allowance for the Project is A$77.5M which is 15.1% of the total Project capital costs.

Capital Cost Summary

The pre-production capital cost estimate for the Project is presented in summary in Table 17 and Figure 38.

Table 17 Project pre-production capital cost estimate

WBS	Cost area	A$M
0000	Project indirects	198.52
0100	General site works	1.70
0200	Mine	95.05
0800	Browns Range NPI	74.95
1400	Process Plant	147.93
1500	Process Plant NPI	73.81
	Total capital cost estimate	**591.96**

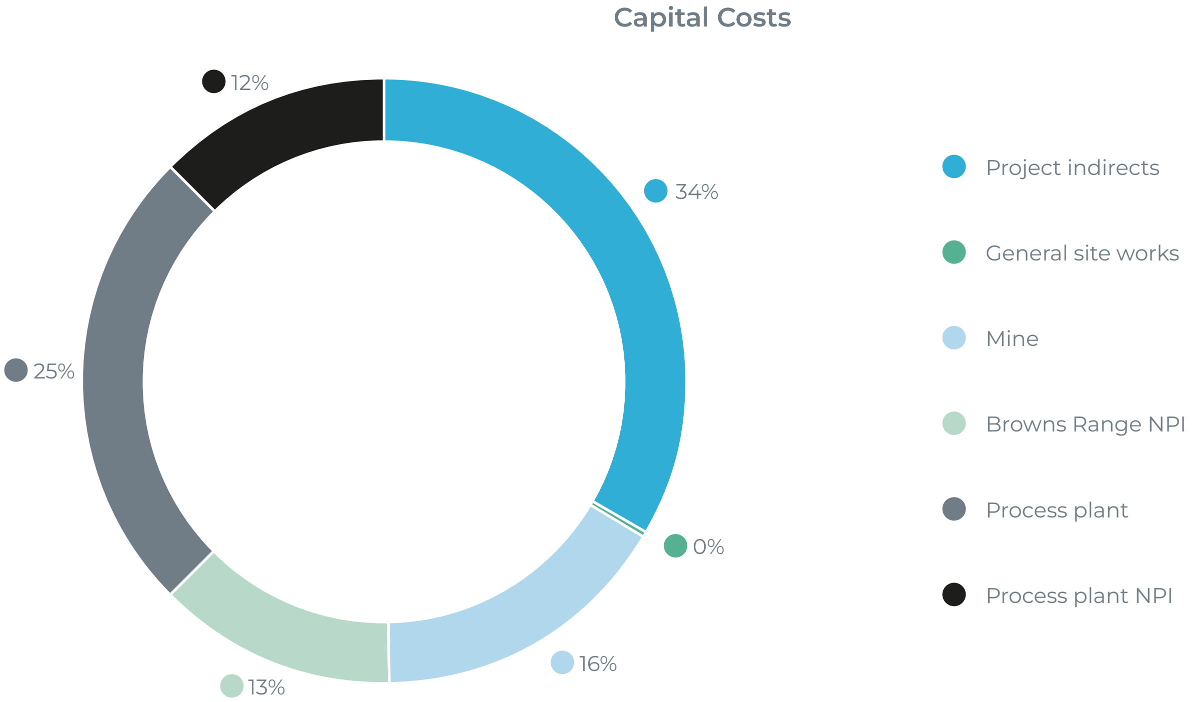


Figure 38 Percentage of capital costs against total capital cost by cost centre

Operating Cost

Operating costs have been estimated for the Project from contractors pricing and first principles estimates based on design and developed scopes of work, test work, operational experience, and supplier recommendations.

Operating costs have been grouped into the following cost centres:

- Mining contractor costs for open pit and underground mining, including power and diesel consumption
- Owners' team labour
- Power for the mining area, process plant and non-process infrastructure
- Flights and messing for Northern Minerals employees and contractors
- Maintenance for process plant and non-process infrastructure
- Reagents and consumables at the process plant
- General and administration, ESG and H&S
- Product transport from the Project site to Eneabba
- Corporate costs.

C1 opex
$31.25/kg
TREO

A summary of the average operating costs over LOM by cost centre is presented in Table 18 and Figure 39.

Table 18 Operating costs by cost centre

Cost centre	A$M p.a.	A$/t crusher feed	A$/kg TREO
Mining	39.88	71.15	9.65
Owners' team labour	25.31	45.15	6.10
Power	20.53	36.60	4.95
Flights and messing	12.87	23.00	3.10
Maintenance	9.27	16.55	2.25
Reagents and consumables	7.69	13.75	1.85
General & admin, ESG and H&S	8.07	14.40	1.95
Product transport	5.73	10.20	1.40
C1 operating costs	**129.35**	**230.80**	**31.25**
Corporate costs	15.01	26.80	3.60
Total operating costs	**144.36**	**257.60**	**34.85**

Note: Figures are subject to rounding.

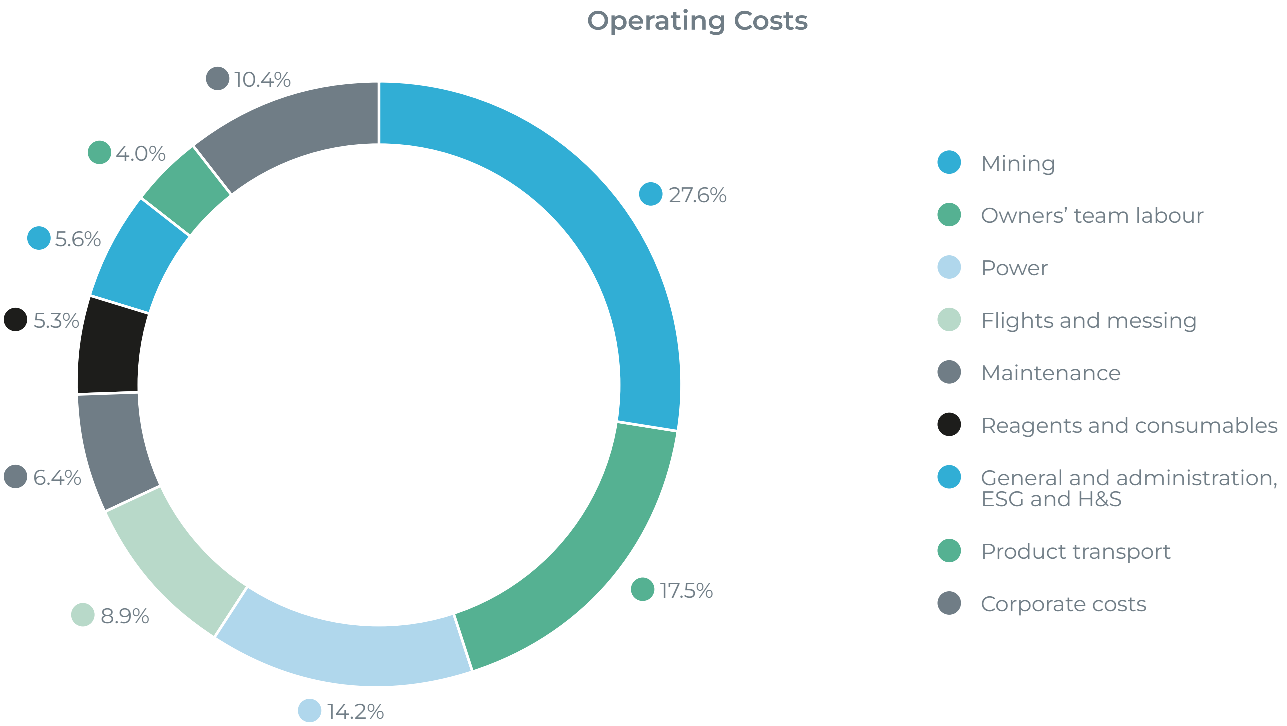


Figure 39 Percentage of operating costs against total operating costs by cost centre

The LOM average operating costs have also been summarised in Table 19, by the key Project areas, comprising the following costs:

- Open pit mining – open pit mining contractor costs, diesel, power, owners' mining costs, owners' team labour, and flights and messing costs.
- Underground mining – underground mining contractor costs, diesel, power, owners' mining costs, owners' team labour, and flights and messing costs.
- Processing – power, reagents and consumables, product transport, owners' team labour, maintenance and flights and messing costs.
- General & administration.

Table 19 LOM average operating costs by key Project area

Project area	A$M p.a.	A$/t crusher feed	A$/kg TREO
Open pit mining	3.93	7.00	0.95
Underground mining	54.46	97.20	13.15
Processing	49.71	88.70	12.00
General & admin	21.24	37.90	5.15
C1 operating costs	**129.35**	**230.80**	**31.25**

Note: Figures are subject to rounding.

Mining

Northern Minerals engaged Entech to develop a mining schedule and associated mining operating cost model for the DFS based on a contract mining strategy. The mining costs estimated are based on market tested rates.

Table 18 and Table 19 detail the Project's mining costs, by cost centre and key project area respectively. These figures exclude pre-production and include LOM operating costs only. The open pit and underground mining operational cost equates to an average of A$58.4M per annum, made up of A$39.9M per annum contractor mining costs, owners' mining and maintenance costs, and diesel costs, with the balance of A$18.5M representing the mining component of the owners' team labour, power, and flights and messing costs.

Table 20 details the Project's mining costs, with unit costs provided for mining from open pit and underground sources. These figures include both pre-production and operating period costs. Open pit mining unit costs are presented per tonne of total material mined and per tonne of production target material mined. Underground mining unit costs are presented per tonne of production target material mined.

Table 20 Mining operating costs breakdown

	Open pit mining		Underground mining
	A$/t total material mined	A$/t of production target material mined	A$/t of production target material mined
Contractor mining	6.50	88.50	73.30
Owner's mining	-	-	1.20
Owner's team labour	0.40	5.20	11.20
Power	0.05	0.40	15.25
Diesel	0.90	12.50	3.70
Flights and messing	0.40	5.80	12.80
Maintenance	-	-	1.30
Total	**8.25**	**112.40**	**118.75**

Notes:

- Figures are subject to rounding.
- Figures include costs incurred during both pre-production and operating periods.
- Total material mined refers to all tonnes mined from the open pit (i.e. waste plus production target material).
- Excludes sustaining capital.

Owners' Team Labour

The average annual employee salary costs for all NTU employees over the LOM are estimated at A$25.3M, including all direct salary payments and on-costs.

An organisational chart was developed for the Project with employee numbers established to meet the planned production levels over the LOM, which was then benchmarked against similar sized projects. All-in costs per position have been developed based on the AON Radford McLagan Compensation Database, an industry recognised remuneration benchmarking survey.

Power

The Project will engage an independent power producer (IPP) to build, own, operate and transfer (BOOT) a hybrid power station on site to service the mine, processing facilities and all associated site infrastructure. The hybrid power station will utilise diesel driven thermal and solar with a target renewable energy penetration of 44%. The cost was obtained through proposals from IPPs to provide centralised power to the Project over a 126-month term.

Diesel fuel will be free issued to the IPP. The unit cost of site thermal power is based on diesel generator sets with a diesel fuel consumption of 250 L/MWh. The LOM average cost of power including renewables is $0.29/kWh.

Power requirements for the Project were calculated from the load lists developed for each area of the Project. Project power requirements and costs are outlined in Table 21.

Table 21 Power Costs

Area	Average demand (MWh/a)	Average Annual Cost (A$M)
Mining	25,102	7.2
Process plant	40,784	11.8
Non-process infrastructure	4,518	1.3
Water bores powered by standalone thermal and solar generation	414	0.2
Total	**70,817**	**20.5**

Flights and Messing

Flights and messing requirements were determined from a LOM personnel histogram and includes owner and contractor labour.

Maintenance

Maintenance expenses cover costs associated with the consumption of equipment spares and other supplies utilised in carrying out the maintenance activities on plant and infrastructure during operations. Maintenance costs have been either estimated as a percentage of the direct capital costs of installed plant equipment or based on pricing provided by vendors.

Maintenance on mining equipment and facilities is included as part of the mining contractor costs.

Reagents and Consumables

Reagent and consumable consumptions are based on laboratory test work and BRPP operating data, and costs are based on market pricing through a formal enquiry process and are inclusive of warehouse storage and transport costs to site.

Consumable costs covering fuel, crusher liners, mill liners, grinding media, screen panels, filter cloths, product packaging, water treatment chemical etc.

General and Administration, ESG and Health and Safety

General items and administration are such costs as operating licences, insurances, stationery, environmental monitoring, mining rehabilitation fund levy, tenement fees, health and safety equipment and communications.

Product Transport

Product transport costs from the Project to Eneabba have been developed by logistics consultants. An average of 231 triple trailer road trains will transport up to 18,400 tonnes of concentrate per year.

Corporate Costs

Corporate costs include directors and employee related costs, legal and professional fees, administration, occupancy, and depreciation.

Sustaining Capital and Mine Development

The annual costs required to sustain the operation, including capital costs incurred during the operations phase, such as:

- TSF embankment lifts in four stages
- Open pit and underground mine development capital during the operations phase
- Underground mine pumping
- Mine owners' costs including equipment replacement
- Computer hardware replacement.

The annual sustaining capital costs have been incorporated into the financial model as Project operating cost items. The sustaining capital schedule for the Project is shown in Table 22.

Table 22 Sustaining capital

	Sustaining capital per operating year (A$M)											
Item	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Total**
TSF embankment lifts	-	12.0	3.1	9.4	6.1	18.4	-	3.0	9.0	-	-	**61.0**
Underground mine pumping	2.5	2.4	0.8	-	1.5	-	0.8	-	-	-	-	**8.1**
Open pit and underground mine development	34.4	23.6	11.8	11.6	8.9	8.3	9.1	7.2	6.7	0.3	1.0	**123.1**
Mine owners' costs	0.9	1.2	0.1	0.4	0.6	0.1	0.1	0.3	0.1	0.1	0.1	**3.9**
Total	**37.8**	**39.2**	**15.9**	**21.3**	**17.2**	**26.8**	**10.0**	**10.5**	**15.9**	**0.4**	**1.1**	**196.1**

Note: Figures are subject to rounding.

Closure

Total closure costs of A$19.7M has been allocated according to Department of Mines, Petroleum and Exploration (DMPE), formerly Department of Energy, Mines, Industry Regulation and Safety Mining Rehabilitation Fund Reporting Guidelines' unit rates per hectare.

Market

Browns Range concentrate is ~10% (of TREO) high value Dy/Tb, making it one of the highest value rare earth baskets in the world.

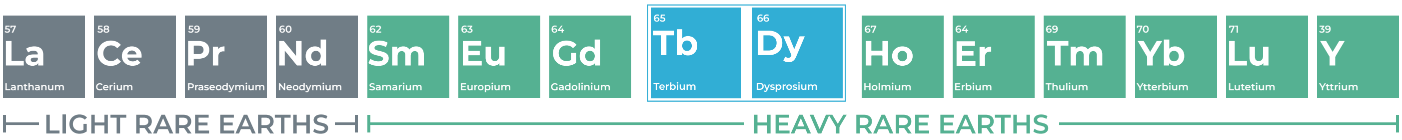


Figure 40 Rare Earth Series on the Periodic Table

Rare Earths Background

Rare earths refer to a group of 15 commonly found elements with each having different characteristics and end uses. These elements are found together on the periodic table and share similar chemical properties, coloured silver, silvery-white or grey, with high lustre which tarnishes readily in the air. These elements also have high electrical conductivity, can store large amounts of magnetic energy and contain luminescent and catalytic properties. They are often divided into light rare earth elements (LREE) and heavy rare earth elements (HREE), determined by their atomic weights.

These elements are concentrated mainly in minerals such as bastnäsite, monazite, and xenotime; significant deposits are found in China, Australia, the United States, Brazil and Russia.

LREEs, such as neodymium, praseodymium, and cerium, are much more abundant in the earth's crust and typically found in hard rock deposits. HREEs, including dysprosium, terbium, and yttrium, are concentrated in much rarer ionic clay deposits, most of have historically been found in southern China.

Greater than 99% of HREEs are produced or controlled by entities operating in China, particularly for the most critical elements like dysprosium and terbium. To date, no large-scale commercial production of HREEs exists outside China. In contrast, LREE production is more geographically diversified and increasingly available from new projects in Australia, the US, and other countries.

REE demand is driven by advanced manufacturing and advanced consumer goods. It is also increasingly driven by vehicle electrification and wind energy generation. As a result, REO demand is increasingly exposed to the development of a low-carbon economy. A major driver of demand in permanent magnets is the growth of alternative energy (use in wind turbines) as well as clean transport (EV's).

High performance magnets are essential in modern technology. Many of these magnets rely on rare elements for their superior strength, durability and resistance to demagnetization. Rare earth magnets are notably stronger than conventional ferrite or alnico magnets, making them invaluable for advanced applications in various industries.

Common applications of these high-performance permanent magnets include in renewable energy, electric vehicles, consumer electronics, medical technology, industrial automation, aerospace and defence, and other key uses.

China currently dominates the REE value chain, Northern Minerals via its Browns Range Heavy Rare Earth Project is seeking to supply critical feedstock for downstream processing of dysprosium and terbium in Australia through its Iluka Supply Agreement with Iluka.

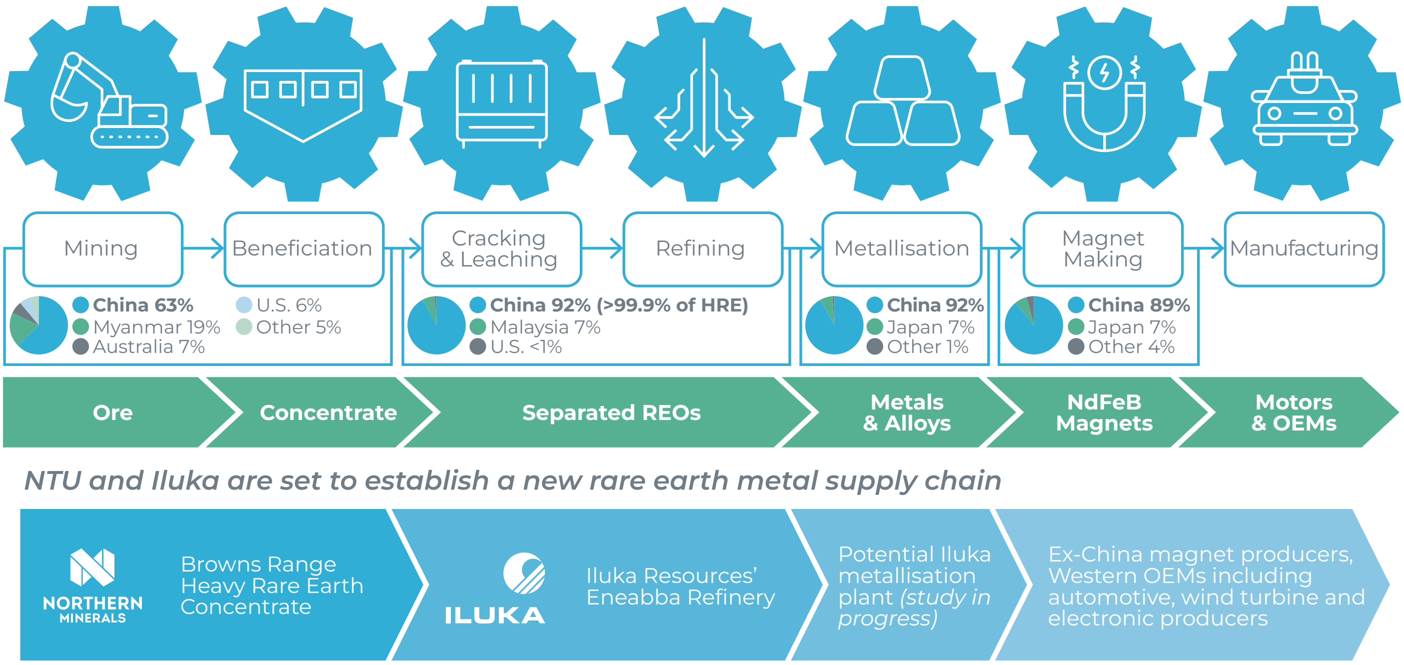


Figure 41 NTU in the mine to magnet process

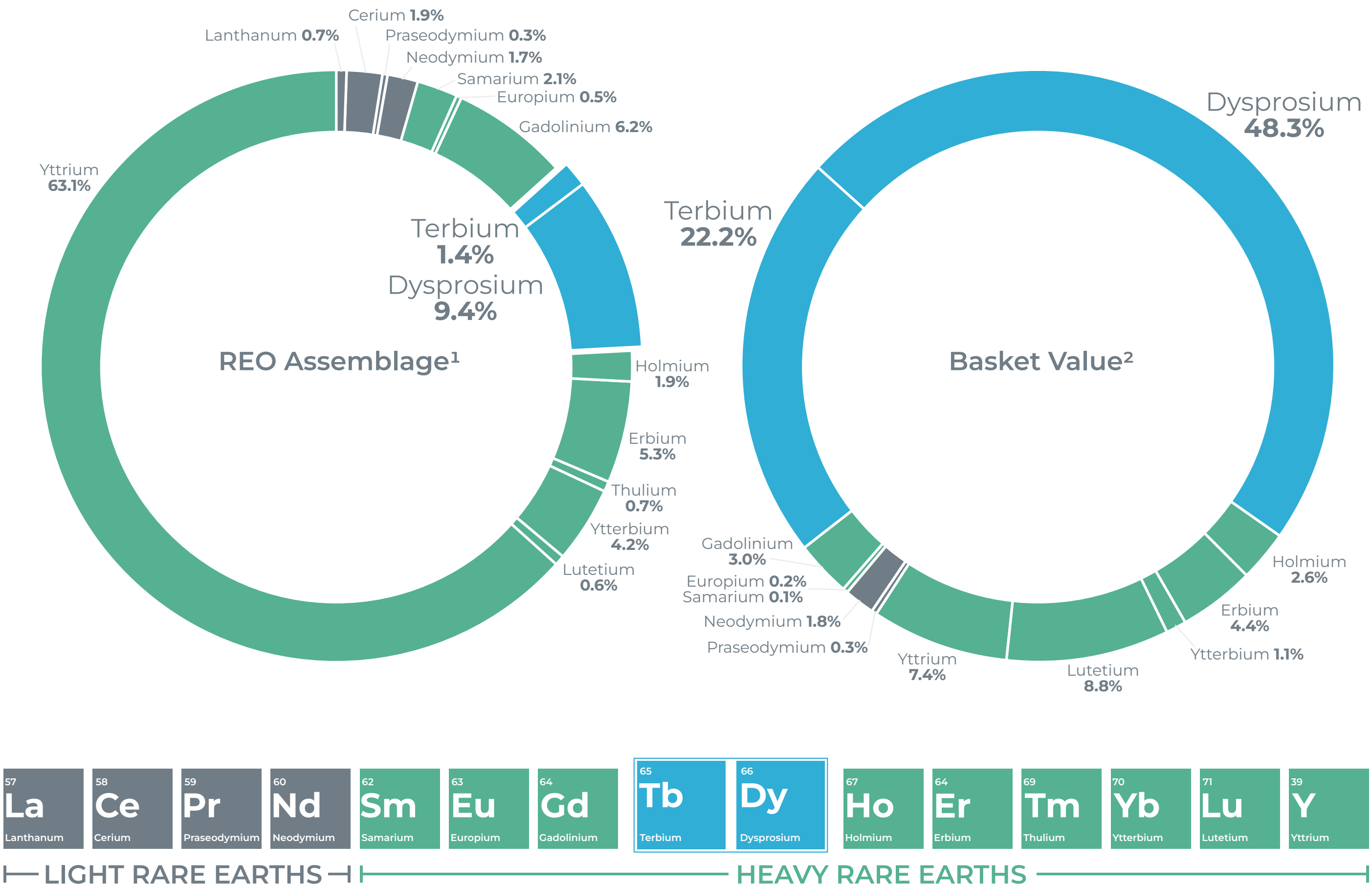
Commencement of production is set to align with increasingly favourable market fundamentals for HREs, as demand grows for sources outside of China. The supply of HREs, especially Dy and Tb, is increasingly constrained as there are limited new HRE deposits, and the market continues to depend on HRE feedstock from China/Myanmar.

Key factors supporting the medium to long-term outlook for Dy/Tb include:

- Surging demand for NdFeB permanent magnets driven by global push for decarbonisation and accelerating growth in EV and wind turbine applications as well as the emerging robotics sector
- Limited new sources of supply both within and outside China
- China's continued enforcement of strict rare earth mining quotas and export restrictions
- Strategic and geopolitical factors driving governments to establish new supply chains for REEs, particularly HREs
- Emerging development of rare earth refining projects and expansions, driving further demand for rare earth concentrate and feedstock

Northern Minerals is uniquely positioned to support the establishment of an alternative supply chain to address the heavy rare earth supply deficit.

Browns Range concentrate is ~10% (of TREO) high value Dy/Tb, making it one of the highest value rare earth baskets in the world.



Notes:

1 Based on DFS expected process plant recoveries of individual REOs in concentrate.

2 Based on average individual REO prices in 2024.

Figure 42 Browns Range concentrate expected REO assemblage and basket value

Rare Earth Industry

REEs or rare earth oxides (REO) are essential to modern technology, enabling advancements in miniaturisation, efficiency and sustainability. They are a critical component in the manufacture of clean energy and high-performance technology solutions.

China is the dominant force in the rare earths industry, accounting for approximately 69% of global mine production and over 90% of refining and metal making[1]. Recognising the strategic and economic importance of rare earths and the interdependence of a diverse range of downstream industries, China continues to implement measures to maintain its market position and secure rare earth supplies, particularly HREs. These measures include national industry consolidation, restriction of rare earth production quotas, restriction on exports of rare earth separation technologies and more recently heavy rare earths (including Dy and Tb) and permanent magnets, the stockpiling of critical rare earths and restrictions on international movements of rare earth industry experts.

The geographical concentration of supply, rising geopolitical tensions and the vital role rare earths play in the global energy transition and emerging technologies have prompted nations to seek to secure diversified and sustainable supplies of feedstock. Governments worldwide continue to implement strategies and policies to reduce dependency and to develop independent rare earths supply chains, such as the U.S. Defence Production Act to reduce U.S. dependence on China for rare earth elements and the European Union's Critical Raw Materials Act to strengthen its capacities along the rare earths value chain and reduce dependency on external sources of rare earths. The geopolitical factors and the limited availability of REE outside of China are expected to drive development of mining projects outside of China

1 CRU REE Special Report 2025, July 2025

and lead to a potential divergence in China and non-China market prices, where premiums may emerge as end users seek to mitigate supply chain risk by securing non-China sources of REEs.

Substantial growth is expected in the rare earths market in the coming decade. With key primary approvals in place, granted Project critical tenure and strong government and community support, Northern Minerals is well-positioned to benefit from this growth by becoming one of the first significant producers of HRE concentrate outside of China.

Dysprosium and terbium

The permanent magnets sector is the primary demand driver for REOs, accounting for over 35% of total global TREO consumption by volume.

NdFeB (neodymium-iron-boron) permanent magnets in particular are in high demand for use in renewable energy applications such as hybrid and electric vehicles and wind turbines, as well as emerging technologies in the robotics sector. Dysprosium and terbium are vital inputs in the production of NdFeB magnets that require high temperature performance and resistance to demagnetisation. While there have been efforts to reduce dysprosium and terbium usage in these magnets, there is currently no known comparable substitute.

China and Myanmar currently mine over 90% of the world's HREs, and China processes close to 100% of HREs and produces 90% of the world's permanent magnets. Looking forward, China supply is expected to be constrained with CRU forecasting production quotas to grow at an average of 2.3% until 2028 and falling to 0.5% year-on-year increase thereafter[2]. In recent years, increased regulatory oversight on environmental management of domestic mining in China has led Chinese producers to outsource material from HRE-rich ionic clay deposits in Myanmar, whose less stringent environmental policies facilitate larger volumes of DyTb production. In 2024, Myanmar was responsible for over 40% of global Dy/Tb production[3] that is almost all exported to China for processing; however, it remains a highly uncertain source of production due to ongoing political instability and well-documented environmental destruction caused by in-situ leaching of the ionic clay deposits. Outside of China and Myanmar, there is currently minimal supply of Dy/Tb (production tonnages of Dy/Tb from Lynas' Malaysian facility have not yet been publicly disclosed as at the time of this report), highlighting the supply chain risk.

CRU forecasts global demand increases of 99% for Dy and 94% for Tb through to 2035, equivalent to 3,400 tonnes of additional Dy and 1,200 tonnes of additional Tb required. Of this, ex-China demand from automotive and wind industries alone is expected to increase 142% for Dy and 197% for Tb through to 2035, equivalent to 2,600 tonnes of additional Dy and 600 tonnes of additional Tb required over the next decade. At an expected concentrate production of ~4,000 tpa TREO including ~400 tpa Dy/Tb, Browns Range plan to supply, via Iluka's Eneabba Rare Earth Refinery, material volumes of Dy and Tb into an expected supply constrained market.

Price forecasts

Rare earth supply is geographically concentrated and the rare earth pricing structure is opaque due to most sales negotiated on a contract basis between miners and downstream manufacturers. There is no commodity exchange for rare earths and Chinese market prices are generally taken as reference for negotiations. The Asian Metal Index is the primary market price reference index, and its fluctuations have historically been heavily influenced by Chinese policy decisions rather than supply-demand fundamentals.

Over the past 24 months, prices for magnet rare earth oxides (Nd, Pr, Dy, and Tb) have experienced significant volatility. In 2023 and early 2024, steep declines were observed across the board, with dysprosium falling over 22% in 2024 before rebounding 28.55% year-to-date in 2025. Terbium dropped 9.75% in 2024 but has surged 42% in 2025. Neodymium declined by more than 34% between January 2023 and January 2024, driven by oversupply concerns and weak demand in the electric vehicle and magnet sectors. Praseodymium followed a similar trend, with the NdPr oxide benchmark falling below US$55/kg by mid-2024. However, since July 2025, Nd and Pr prices have surged sharply, with NdPr oxide prices increasing by 40% within weeks, reaching their highest levels in over two years. This price rally was primarily caused by a supply squeeze following the cessation of exports from the US miner MP Materials to China, coinciding with peak seasonal demand from the electronics, wind turbine, and EV industries and recently announced long-term Western investment increases, creating competition for Chinese materials. As a result, manufacturers sought to secure inventories rapidly, pushing prices higher and reversing the earlier downward trend.

CRU forecasts magnet REO prices to increase over the next decade as the market enters a sustained market deficit due to rising demand and slow supply response outside of China. Trade restrictions resulting from China's imposition of rare earth export controls could lead to two factors driving price spikes in the medium-term outside of China: government policy responses to develop ex-China supply chains and the emergence of price premiums. Critical minerals policies and regulations being enacted globally (such as the U.S. Defence Production Act and the EU Critical Raw Materials Act) are focussed on creating supply chains that are not dependent on China, which could incentivise non-China supply of REEs potentially giving rise to price premiums where higher development costs of projects outside of China satisfy demand

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for non-China supply. A non-China spot market could develop, with prices diverging, creating a two-price market in the long run. Materialisation of price divergence assumes willingness of end users to pay a premium for ex-China rare earths, development of full supply chains for rare earth magnets outside of China and prolonged periods of trade restrictions.

To account for the potential emergence of price premiums for non-China REEs, CRU forecasts a divergent price trajectory in a two-price rare earth market scenario where prices differ between China and non-China sources. This model estimates the REO prices necessary to incentivise supply from higher-cost producers outside China, addressing demand for secure non-China supply. In this context, CRU projects non-China dysprosium (Dy) and terbium (Tb) prices to grow at compound annual growth rates (CAGR) of 12% and 15%, respectively, through to 2035, while ex-works China Dy and Tb prices are forecast to increase more modestly at CAGRs of 5% and 8%, reflecting no additional supply requirements within China.

An example of this emerging two-price dynamic is the transformational partnership between MP Materials, the U.S.'s largest rare earth producer, and the U.S. Department of Defense (DoD). In 2025, the DoD made a $400 million investment in MP Materials, becoming its largest shareholder and instituting a US$110/kg price floor for neodymium-praseodymium (NdPr) oxide significantly above current Chinese market prices. This deal includes a 10-year offtake agreement for magnets from MP's expanded facilities, including the planned 10X magnet production plant. These arrangements aim to reduce reliance on China for critical minerals used in defence and advanced technology manufacturing. This partnership is being discussed as a new model for supporting domestic supply chains and critical mineral investments.

The projected basket value of the Browns Range concentrate is based on forecasted prices of contained REOs within the concentrate and will be principally driven by trends in Dy and Tb, estimated to make up 70% of the product basket by value[4]. The Iluka Supply Agreement provides for pricing of the concentrate on a fixed price component based on contained REO and an upside price sharing mechanism based on Iluka's realised selling price, as well as adjustments for impurities.

The financials of the DFS are based on the REO price forecasts from CRU being applied to Iluka's realised selling price for the full product basket within the Iluka Supply Agreement pricing structure. Northern Minerals considers these price forecasts reflect the expected supply deficit and demand surge in the Dy/Tb market over the medium to long term.

Based on CRU's price forecasts and expected relative distribution of REOs in the Browns Range concentrate, the forecasted basket values over the LOM for the base case and price divergence case are presented in Figure 45.

4 Based on 2024 average prices.

Table 23 Dy and Tb price forecast[1]

	2024	2025	2027	2030	2033	2035	2035 vs 2024 (%)	CAGR 2024-2035
Dy								
Base case (US$/kg)	261	609	518	583	650	699	168%	9%
Price divergence (US$/kg)	262	951	793	706	832	928	255%	12%
Total supply (kt REO)	4.5	4.7	4.8	5.4	5.5	5.5	23%	2%
Total demand (kt REO)	3.5	4.0	4.8	5.8	6.6	6.9	99%	6%
Surplus/(deficit)	1.0	0.7	0.0	(0.3)	(1.0)	(1.4)	-	-
Tb								
Base case (US$/kg)	817	2,608	2,215	2,496	2,782	2,991	266%	13%
Price divergence (US$/kg)	832	4,129	3,442	3,066	3,612	4,030	384%	15%
Total supply (kt REO)	0.7	0.7	0.7	0.8	0.9	0.9	23%	2%
Total demand (kt REO)	1.3	1.4	1.6	1.9	2.3	2.5	94%	6%
Surplus/(deficit)	(0.6)	(0.7)	(0.9)	(1.1)	(1.4)	(1.6)	-	-

1 Data provided for 2024 data is actual data taken from CRU REE Special Report 2025

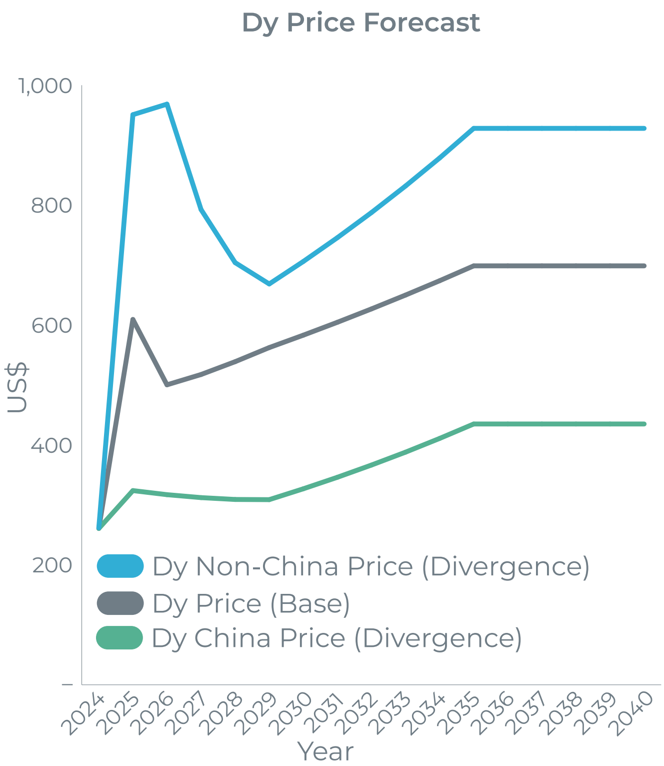


Figure 43 CRU forecast Dy prices 2024-2040 (US$/kg, 2025 real)

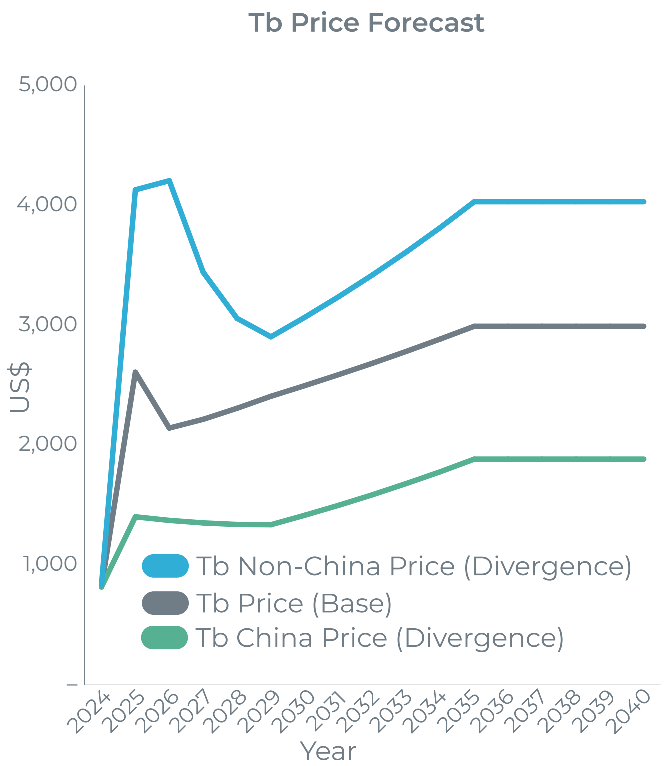


Figure 44 CRU forecast Tb prices 2024-2040 (US$/kg, 2025 real)

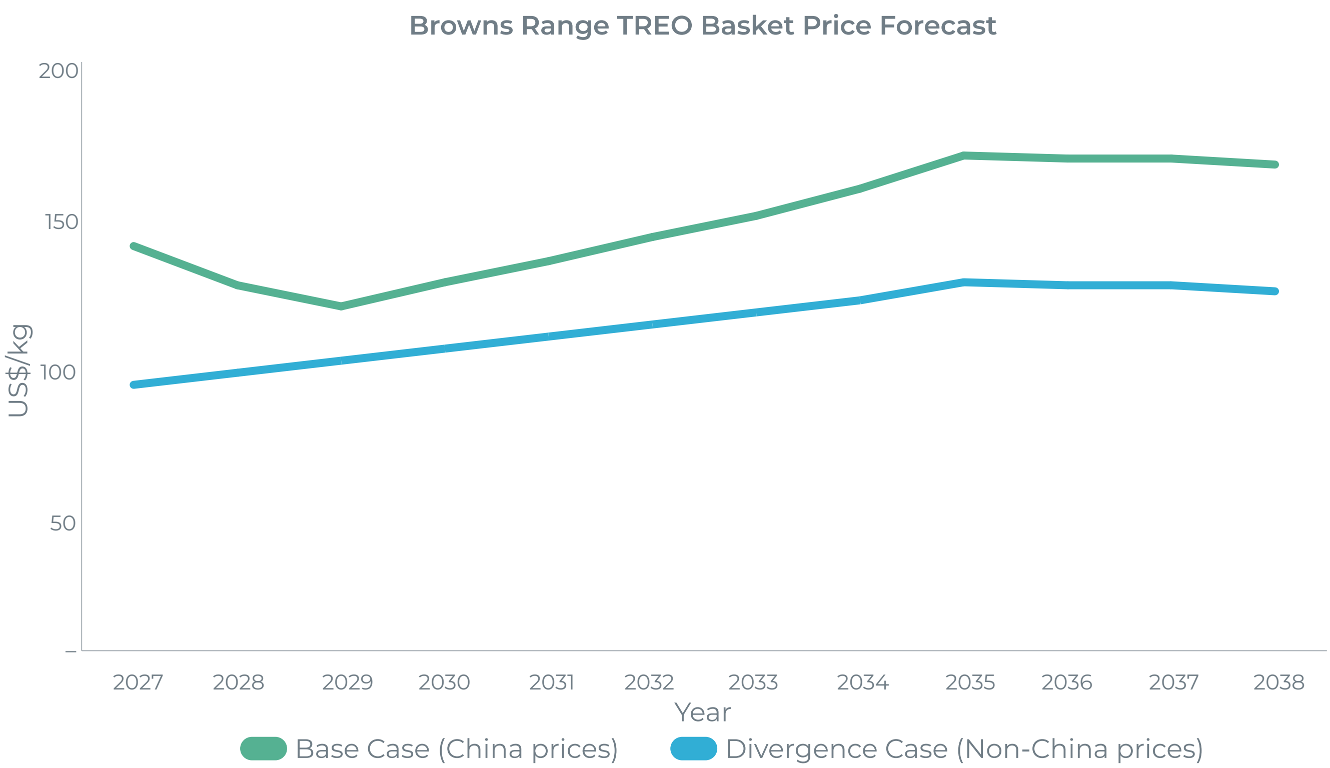


Figure 45 Browns Range product basket price forecast using CRU REE Special Report 2025 (US$/kg, 2025 real)

Economic Evaluation

Northern Minerals has completed an economic evaluation of the Project which confirms the value and economic viability of the Project with a pre-tax NPV estimated at A$187M using CRU base case price forecasts and A$705M using CRU divergence price forecasts (excluding China supply).

NTU have developed the discounted cashflow model which reflects work completed in the DFS, including the mine production plan, and capital and operating cost estimates. Project economics have been estimated using forecasted pricing data published in July 2025 by CRU, a highly regarded independent market analyst. NTU have chosen to present two cases in this DFS, the CRU base case (Base Case) and the CRU price divergence scenario (Divergence Case).

Tax outcomes are shaped by a variety of intricate elements, including local tax laws, eligible expense deductions, and when income is recognised. A precise assessment of these factors is only possible once the project is underway and actual financial results are known. Consequently, while early-stage financial modelling offers a useful reference point, the final after-tax results may differ due to fluctuations in market conditions and the actual prices realised.

An average annual EBITDA of A$175M (Base Case) and A$272M (Divergence Case) is projected and A$129M (Base Case) and A$195M (Divergence Case) of average annual operating free cash flow is generated during steady state operation over the course of the 11-year LOM.

The estimated total pre-production capital requirement is A$592M, equating to a post-tax payback period of 7.0 years (Base Case) and 5.6 years (Divergence Case) from delivery of first concentrate.

A summary of the financial outputs of the Project is shown in Table 24 and the Project cashflow profiles for the Base Case and Divergence Case are presented in Figure 46.

Unless otherwise noted, financials presented are in real terms. Calendar years used in the financial analysis are for conceptual purposes only.

Table 24 Summary of project returns

Financial Metrics	Units	Base Case	Divergence Case
Pre-tax $NPV_{8\%, real}$	A$M	187	705
Pre-tax IRR	%	12%	21%
Post-tax $NPV_{8\%, real}$	A$M	74	443
Post-tax IRR	%	10%	18%
Payback from first production (post-tax)	yrs	7.0	5.6

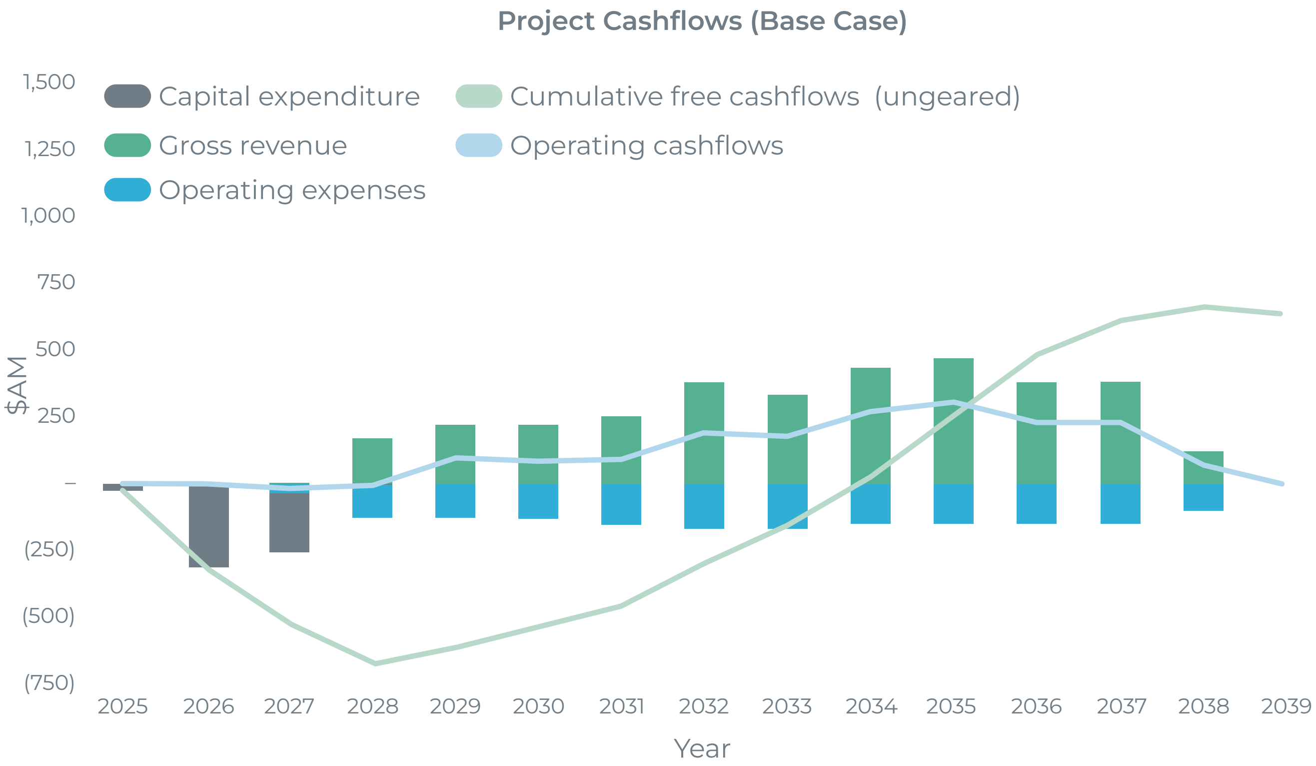


Figure 46 Post-tax Project cashflows (Base Case)

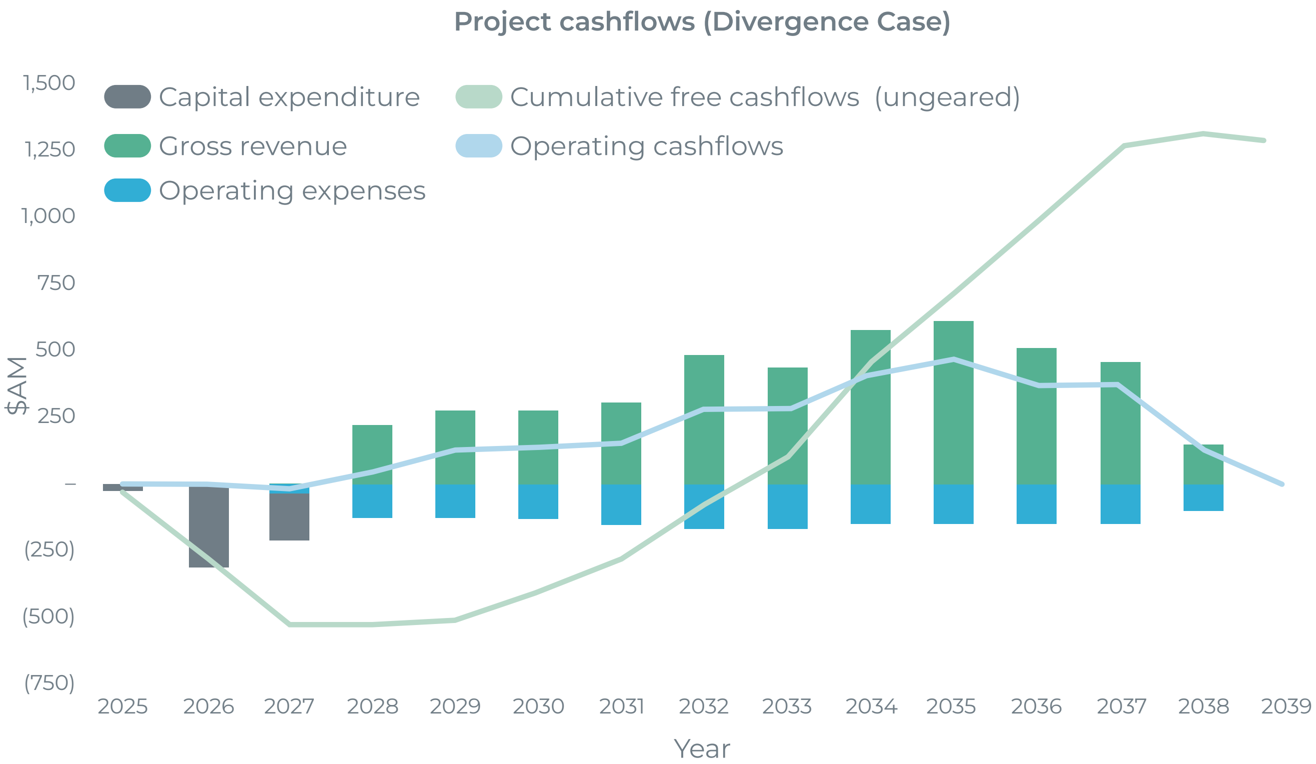


Figure 47 Post-tax Project cashflows (Divergence Case)

Key LOM Project metrics are outlined in Table 25.

Table 25 Key Project metrics

Physicals	Units	Value[1,2]	
Ore mined	kt	5,870	
Ore processed (including stockpile)	kt	6,120	
LOM	years	11	
Average head grade	% TREO	0.88	
Concentrate production	t (dry)	181,000	
Average concentrate production (steady state)	tpa	17,500	
Concentrate grade	% TREO	25	
Average TREO recovery to concentrate	%	84	
TREO production	t	45,000	
Average TREO production	tpa	4,350	
DyTb % in TREO	%	10.7	
Revenue and operating costs	**Units**	**Base**	**Divergence**
Average TREO basket[3] price (applied to Iluka Supply Agreement)	US$/kg TREO	107	138
Dy oxide price (LOM average)	US$/kg	636	820
Revenue[3]	A$M	3,270	4,270
Average Revenue	A$M	343	450
LOM free cashflow (ungeared, post-tax)	A$M	635	1,335
EBITDA	A$M	1,695	2,690
Average EBITDA	A$M pa	175	272
C1 operating costs	A$/kg TREO	31.25	31.25
All-in Sustaining Costs (AISC)	A$M	2,020	2,119
AISC	A$/kg TREO	44.70	46.90

Note:

1 Figures are subject to rounding.

2 Average revenue and EBITDA are calculated as the arithmetic annual averages during steady state production.

3 DFS financial assessment has assumed that the Iluka Supply Agreement pricing structure remains in place for and after the total contracted quantity of 30,500 t contained TREO has been delivered to Iluka under the terms of the agreement. It has also been assumed that any annual production volumes in excess of the 5,500 tpa maximum annual quantity are subject to Iluka exercising its right of first refusal and purchasing the excess volumes as per the agreement pricing structure.

Production Profile

The Project's financial assessment has been modelled based on the DFS mining schedule with an average LOM process plant feed rate of ~560,000 tpa at a grade of 0.88% TREO. The LOM average is lower than the design nameplate capacity of 650,000 tpa due to production ramp up and ramp down. Figure 48 and Figure 49 show the Project's crusher feed tonnes and grades, and TREO production and grade respectively. Concentrate grades of an average of 25% TREO have been assumed in the modelling.

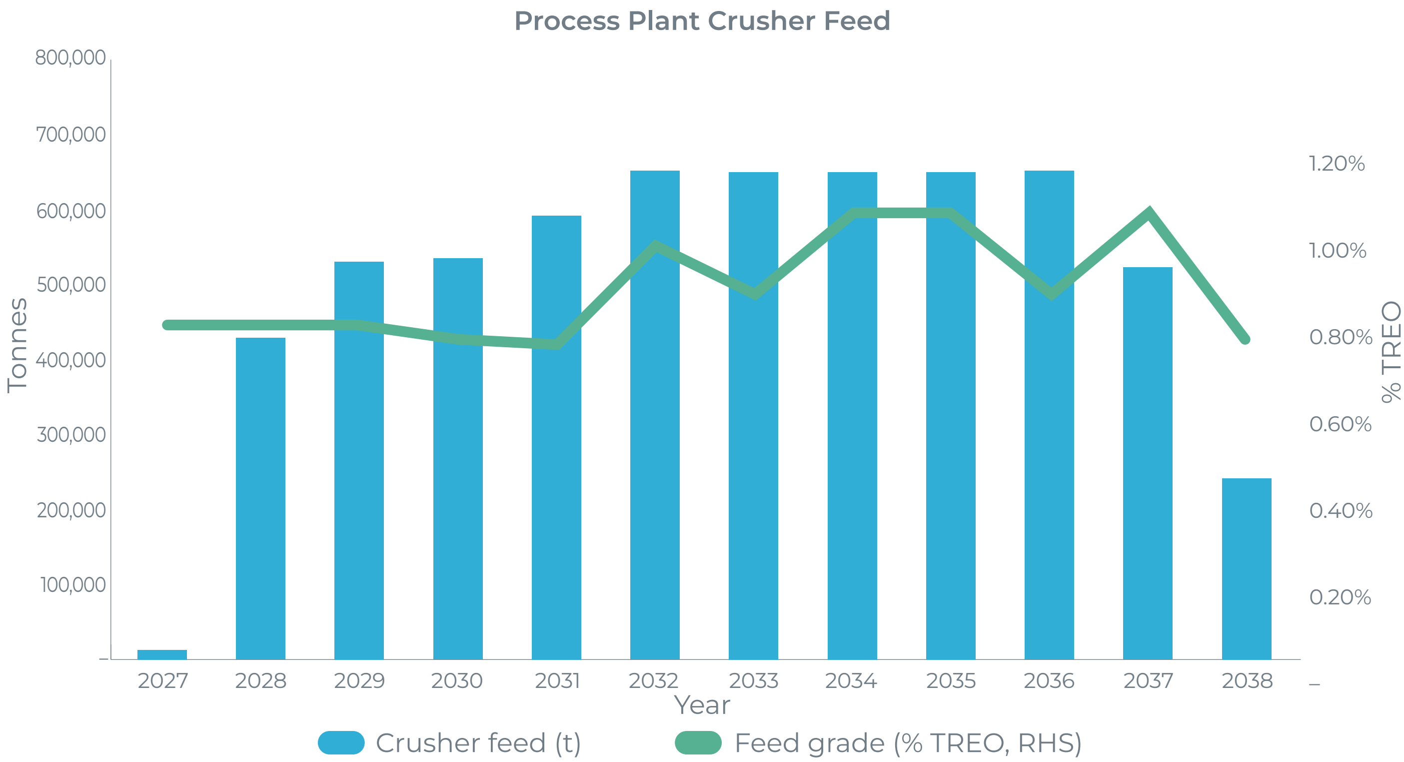


Figure 48 Crusher feed tonnes and TREO grade

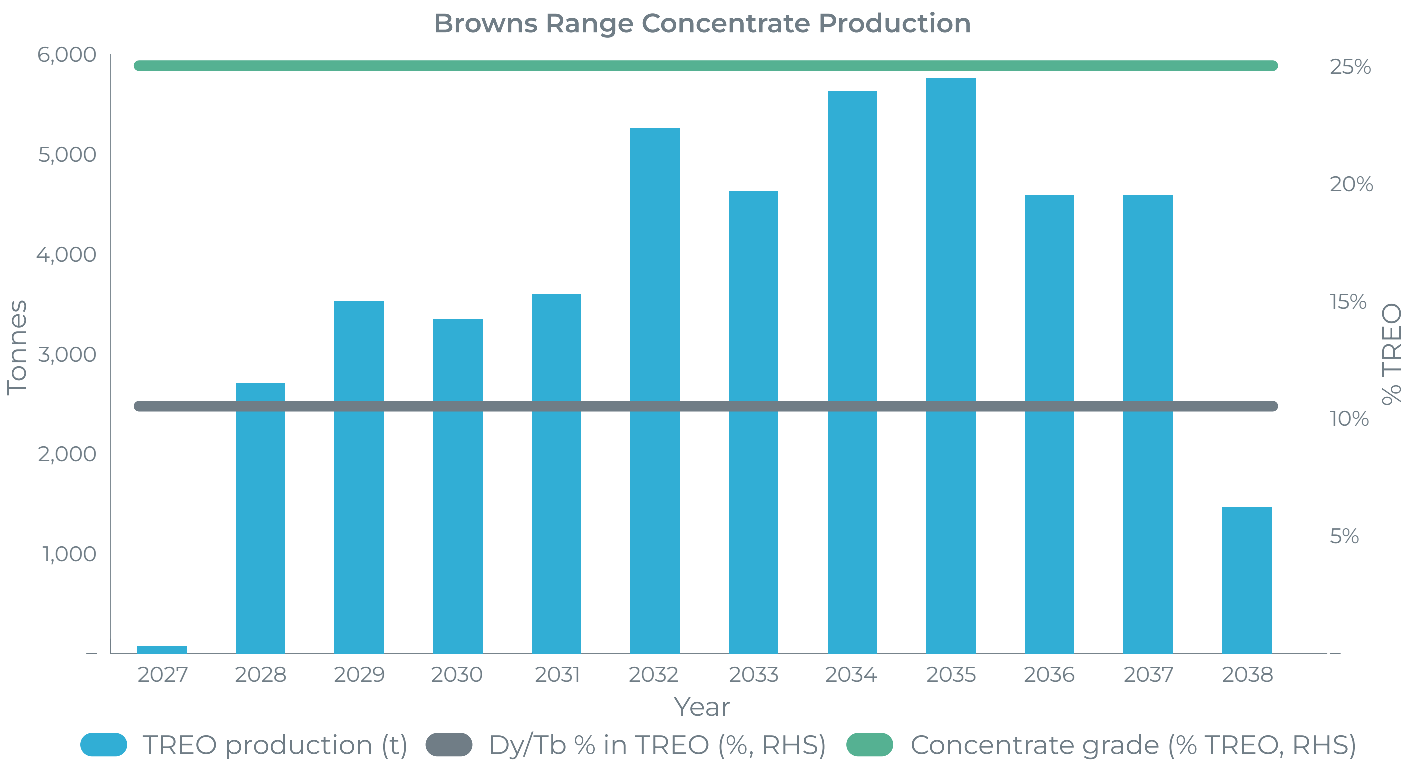


Figure 49 Concentrate production and grades

Sensitivity Analysis

An extensive sensitivity analysis was completed for the Project, highlighting its economic outcomes across various critical inputs, including recovery, capital costs, operating costs, A$:US$ exchange rate and the rare earth pricing. The results of the analysis are shown in the below figures. The analysis reveals that although the Project exhibits some vulnerability to fluctuations in capital and operating costs, it is considerably more influenced by shifts in variations of REO prices, process plant recovery and A$:US$ exchange rate.

This pronounced exposure to pricing movements creates a compelling value proposition for shareholders. With prices for key magnet-related rare earth elements including Dy and Tb expected to rise in the near term due to growing demand from electric vehicles, renewable energy, and advanced technology sectors, even marginal price gains could significantly enhance the Project's financial performance.

The analysis highlights the Project's strong leverage to price appreciation, where increased revenues from higher REO prices directly contribute to improved profitability, stronger cash generation, and elevated investor returns. This positions the Project to capitalise on favourable market dynamics, offering shareholders exposure to a high-growth sector underpinned by long-term demand trends and substantial value creation potential.

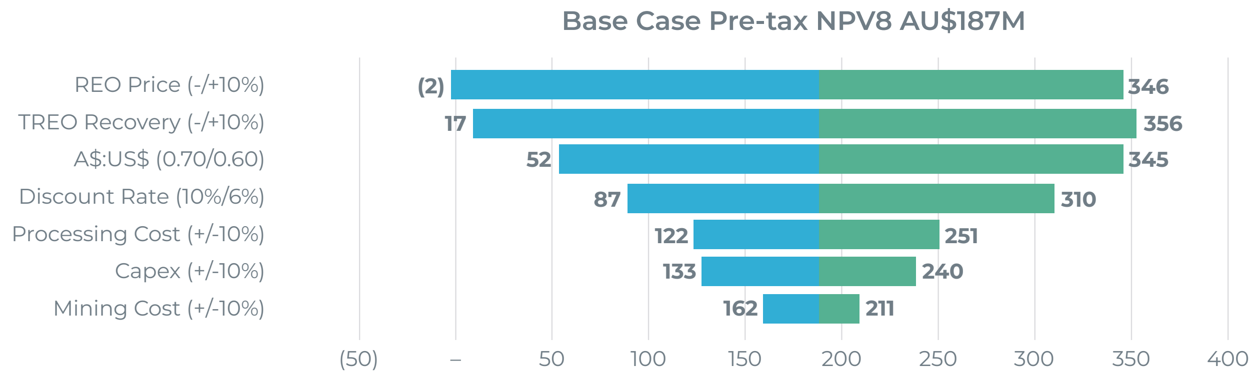


Figure 50 NPV sensitivity (Base case)

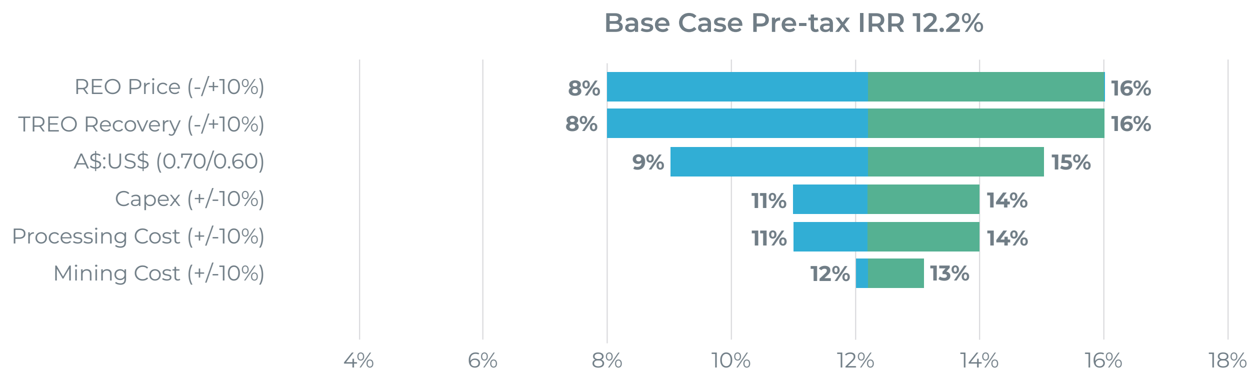


Figure 51 IRR sensitivity (Base case)

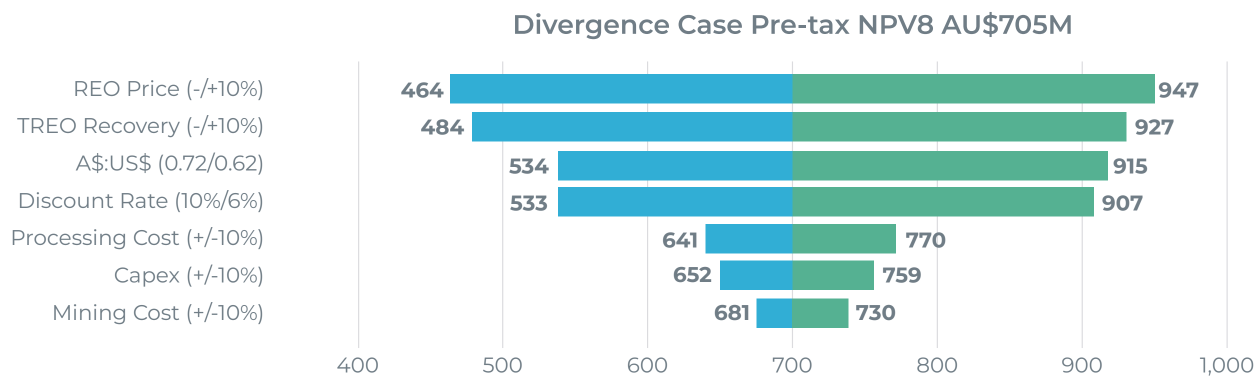


Figure 52 NPV sensitivity (Divergence Case)

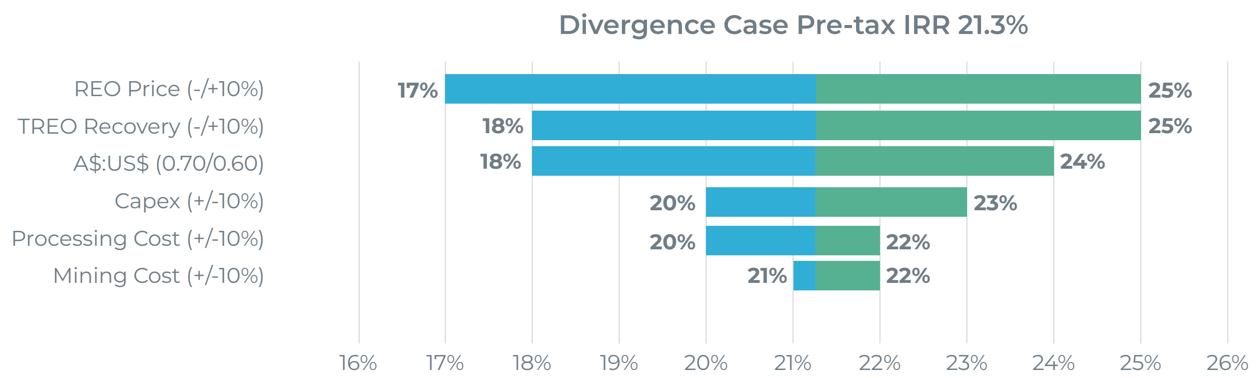


Figure 53 IRR sensitivity (Divergence Case)

Key Risks

Northern Minerals maintains a detailed Project risk register and project risk workshops have been conducted as part of the DFS process with advice from MYR Consulting. There are specific risks which relate directly to the Project and Northern Mineral's business activities, while others are of a more general nature. These risk factors, individually or in combination, may adversely affect the operating and financial performance or position of Northern Minerals and can be largely beyond the control of Northern Minerals.

All risks, controls and mitigation strategies are included in the detailed Project risk register for ongoing implementation and review.

Funding

Northern Minerals is reliant on receipt of further debt and equity funding to develop the mine and commercial scale processing and commence production.

The DFS outlines estimates pre-production capital expenditure of ~$592M (including contingency, but excluding working capital, finance costs, sustaining capital and corporate costs associated with project development) to construct the Project. Northern Minerals continues to progress its funding strategy including ongoing discussions with Northern Australia Infrastructure Facility, Export Finance Australia and other international export credit agencies to determine whether these institutions may lend to the Project. Any consideration of finance I subject to Northern Minerals meeting relevant agency requirements and necessary levels of due diligence. Through these discussions, Northern Minerals notes they are aligned with government strategy for critical minerals and these government agencies are aware of the strategic value of supporting rare earth development projects provide. Challenges around rare earth projects include higher construction costs than other mining projects and the lack of transparent pricing and a spot market, limiting the ability for commercial financiers to price and assess market risk. While these discussions remain ongoing, no legally binding funding commitments or approvals have been secured as at the date of this release. Government funding approval processes are subject to a range of factors including changes in policy and administration, protracted decision-making processes, and community expectations. There is no certainty that government funding will be made available or secured on acceptable terms.

Northern Minerals' strategic partnership with Iluka includes a funding commitment to provide additional equity funding post FID via a placement (subject to certain conditions) and the grant of put and call options over additional NTU shares. Upon NTU's satisfaction of certain conditions precedent, Iluka can subscribe to an initial ~$53 million[1] of Northern Minerals equity funding component required to develop the Project.

In addition, the Company is in discussions with various strategic investment groups who have expressed interest in potentially funding part of the equity component of the Project funding. The Company is seeking to finalise its "capital stack" and conditional arrangements with these and other potential financiers within next 3 to 6 months, with a FID subject to finalising these funding arrangements.

Rare earths are not exchange traded and there is no spot market. As such, traditional debt financing may not be available, or where available, may be subject to restrictions on operating, financing and other development activities. Debt financing may also increase Northern Minerals' exposure to risks associated with refinancing and covenant-related obligations, in addition to other risks:

- while Northern Minerals may execute debt financing arrangements, there can be no guarantee that Northern Minerals will satisfy any conditions precedent under those documents, such that it is able to access the debt;
- if Northern Minerals is required to raise a significant portion of the capital cost from the equity market before debt drawdowns are available, no assurance can be given that Northern Minerals can raise the required equity capital; and

1 Initial capital contribution based on a maximum issue price of $0.06 per share, issuing an aggregate of up to 883.3 million additional shares under the Tranche 2A placement and the exercise of the Tranche 2B put or call option of the Iluka Subscription Agreement. Number of shares issued and price per share are subject to certain conditions being satisfied, including a positive FID for the Project, secured Project funding, completion of Iluka due diligence and continuation of the Iluka Supply Agreement. Further details are available in previously released ASX announcement (26 October 2022, "NTU – Strategic Partnership with Iluka Resources").

- any debt financing agreement may contain events of default which, if triggered, may result in the financiers terminating the debt financing arrangement and enforcing their security, which could have a material adverse impact on Northern Minerals and its overall operational and development plans.

Failure to raise the expected funds means that Northern Minerals would need to seek alternative sources of financing, which may only be available on unfavourable terms or may not be available at all. Failure to secure funds or securing funds on unfavourable terms could hinder Northern Mineral's ability to execute its operational and development plans.

Production and Project Development

There can be no assurances that the Project will be implemented as planned by Northern Minerals, and it may cost more or take longer than anticipated, or fail to occur for a number of reasons, including the occurrence of many of the events outlined in these risk factors.

Reaching commercial production is dependent on a number of steps, including successful completion of the DFS, a positive FID, receipt of sufficient funding, receipt of necessary regulatory approvals and construction of the mine and commercial-scale process plant. The Project may not proceed if any step is not successfully completed which may occur for any number of reasons.

Furthermore, development of and production from rare earths projects is subject to many risks, including low side reserve outcomes, cost overruns, and production delays, decreases or stoppages, which may be the result of construction delays, commissioning delays, facility shutdowns, inclement weather conditions, mechanical or technical failure, scheduling disruptions, shortages, volatility in the price of consumables and other unforeseen events. Construction issues or commissioning delays could result in Northern Minerals lowering reserve and production forecasts, loss of revenue, increased working capital requirements, and additional operating costs to restore production. In some instances, a loss of production may require significant capital expenditure to resolve, which could require the Northern Minerals to seek additional funding. These risks can adversely affect, delay or prevent the successful implementation of the Project.

The Project's rare earths and other products may fail to meet product quality requirements and material specifications required by buyers (including Iluka under the Iluka Supply Agreement). Buyers may have the right to reject such products under the terms of the relevant offtake agreement, which may result in Northern Minerals needing to sell such products on less favourable terms and/or re-supply product to the contract specification, which could have a material adverse effect on Northern Minerals' financial performance and position.

Volatility of the Price of Rare Earth Elements

Northern Minerals' future revenue, and its ability to achieve the economic outcomes set out in the DFS will be primarily affected by market fluctuations in rare earth prices. This is because a pricing component of Browns Range products under the Supply Agreement with Iluka is calculated by pricing formulae that reference published market prices of various rare earth materials. The DFS financial assessment has assumed that the Iluka Supply Agreement pricing structure remains in place after the total contracted quantity of 30,500 t contained TREO has been delivered to Iluka under the terms of the agreement. It has also been assumed that any annual production volumes in excess of the maximum annual quantity of 5,500 tpa contained TREO are subject to Iluka exercising its right of first refusal and purchasing the excess volumes as per the agreement pricing structure. There is no certainty that an agreement may be reached to extend the term of agreement beyond the total contracted quantity, or that Iluka would purchase volumes in excess of the maximum annual quantity. Therefore, depending on the market prices at the time, the revenue received on sale of those additional quantities on the spot market or to other customers may be higher or lower than forecasted in this DFS.

The market prices of rare earths have been volatile in the past because they are influenced by numerous factors and events that are beyond the control of Northern Minerals. These include:

- Supply side factors which are a significant influence on price volatility for rare earth materials. Supply of rare earth materials is dominated by Chinese producers. The Chinese Central Government regulates production via quotas and environmental standards. Over the past few years, there has been significant restructuring of the Chinese market in line with China Central Government policy. However, periods of over supply or speculative trading of rare earths can lead to significant fluctuations in rare earth pricing.
- Demand side factors which are also a significant influence on price volatility for rare earth materials. Demand for end products that utilise rare earths including internal combustion vehicles, hybrid vehicles, electric vehicles and electronic devices fluctuates due to factors including global economic trends, regulatory developments and consumer trends. Adverse changes

in such factors could reduce demand for rare earths which could lead to a fall in rare earth pricing.

- Geopolitical Factors: Recently, rare earths have been the focus of significant attention, including as a result of the recent trade tensions between the US and China. Volatility in rare earth prices creates revenue uncertainty and if the Company is successful in getting into production, careful management of the Company's financial performance and cash flows will be required to ensure that operating cash margins are maintained despite falls in rare earth prices. Changes in rare earth prices may have a positive or negative impact on operation and production plans and the Company's ability to fund those plans, including securing project funding for pre-production costs (all capital required to construct and commission the Project). Strong rare earth prices, as well as real or perceived disruptions in supply, may create economic incentives to identify or create alternate technologies that do not use or reduce the use of rare earths, which ultimately could depress future long-term demand for rare earths. If industries reduce their reliance on rare earth products, the resulting change in demand could have a material adverse effect on Northern Minerals' business. Strong rare earth prices could also incentivise third parties to develop additional mining projects to produce rare earth materials, which would increase the supply of rare earth materials. If prices for rare earths were to decline due to a decrease in demand for or additional supply of rare earths, this could impair Northern Minerals' ability to obtain financing for current or additional projects and its ability to find purchasers for its products at prices acceptable to Northern Minerals. It is impossible to predict future rare earths price movements with certainty. Any sustained low rare earths prices or further declines in the prices of rare earths, including as a result of periods of oversupply and/or speculative trading of rare earths, will adversely affect Northern Minerals' business, results of operations and its ability to finance planned capital expenditures, including development projects.

The Company's financial assumptions rely on a price forecast from CRU that is higher than the current spot price, with the current spot price being 48% of the current Project average LOM implied Base Case price and 37% of the current Project average LOM implied Divergence Case. This creates a risk to the project, as future revenues and economic returns are dependent on these elevated price expectations being realised. If market conditions do not align with CRU's forecast by the time the project enters production, the project may face weaker-than-expected cash flows, lower profitability, and potential challenges in meeting financing or investment return targets.

Economic Conditions and Other Global or National Issues

General economic conditions, laws relating to taxation, new legislation, trade barriers, movements in interest and inflation rates, current exchange controls and rates, national and international political circumstances (including wars, terrorist acts, sabotage, subversive activities, security operations, labour unrest, civil disorder and states of emergency), natural disasters (including fires, earthquakes and floods), and quarantine restrictions, epidemic and pandemics, may have an adverse effect on the Northern Minerals operations. For example, the ongoing international conflicts, and the current interest rate environment have created and will continue to create significant uncertainties and volatility in global markets. Given the sensitivity of the Project's economics to exchange rate movements, such volatility may have a material impact on the Project's viability. Macroeconomic factors may also affect global supply chains and place upward pressure on input costs. Any of these events and resulting fluctuations may materially adversely impact the estimated inputs which economic assumptions of the DFS have been based on, the market price of Northern Minerals' shares and its ability to obtain funding.

Changing Industry Trends

Changes in technologies and consumer trends present both opportunities and risks to Northern Minerals. New alternative technologies may emerge that may reduce the use of rare earths products or change the predominant way in which rare earth mining is undertaken. Changes in the sentiment or conditions in the countries and sectors in which Northern Minerals and its commercial partners (including Iluka) sell or intend to sell their products may create revenue uncertainty and could materially adversely impact Northern Minerals' financial performance and growth.

ESG Risks

The current global supply chain for heavy rare earths is exposed to considerable ESG risks which may adversely affect Northern Minerals its customers or the supply chain generally. Northern Minerals could be adversely affected if there are material changes to legal or regulatory requirements around ESG issues, especially if these are not identified and dealt with. Evolving community attitudes towards, and increasing regulation and disclosure in relation to, ESG issues (e.g. the integrity and traceability of supply chains) may also affect the operation of the Northern Minerals business. Increased expectations, and in particular the failure to meet those expectations, with respect to ESG matters may impact the profitability or value of the

Northern Minerals business, restrict Northern Minerals ability to attract financing or investment, result in heightened compliance costs associated with meeting prevailing regulatory and disclosure standards or adversely impact the reputation of Northern Minerals any of which may have an adverse effect on Northern Minerals business, financial position and prospects.

Environmental

Northern Minerals' exploration, development and production activities are subject to environmental laws, regulations and social responsibility commitments. The legal framework governing this area is complex and constantly developing. There is a risk that the environmental laws and regulations may become more onerous, making Northern Minerals operations more expensive or causing delays. Non-compliance with these laws and regulations may potentially result in fines, restrictions on activities or requests for improvement actions from the regulator (which may be costly) or could result in reputational harm. Northern Minerals may also become subject to liability for pollution or other hazards against which it has not insured or cannot insure, including those in respect of past activities for which it was not responsible. Northern Minerals operations are subject to Western Australian and Commonwealth environmental laws and regulations, including laws and regulations on hazards and discharge of hazardous waste and materials. The mining and processing of Normally Occurring Radioactive Materials ("NORM") and the disposal of radioactive waste is subject to additional laws and regulations. The cost of compliance with these laws and regulations may impact the cost of exploration, development, construction, operation of the production facilities and mine closure costs. Undertaking the Project will require a number of primary and secondary environmental approvals. While all primary approvals for construction commencement are in place, there is no guarantee that other required approvals will be granted. Similarly, there is no guarantee that those approvals will be granted on conditions or for a term that would be economic. Failure to obtain necessary approvals on desirable terms when anticipated may prevent or delay the Northern Minerals from developing the Project.

Title/Land Tenure

Securing and maintaining tenure over mining tenements is critical to the future development of Northern Minerals projects. All mining tenements that Northern Minerals may acquire either by application, sale and purchase or farm in are regulated by the applicable state mining legislation. While all mining tenements required for development of the Project contemplated by this DFS have been granted, there is no guarantee that applications for mining tenements which may be required for expansions of the Project to extend the LOM will be granted as applied for (although the Company has no reason to believe that tenements will not be granted in due course). Various conditions may also be imposed as a condition of grant. In addition, the relevant minister may need to consent to any transfer of a tenement to the Company. Renewal of titles is made by way of application to the relevant department. There is no guarantee that a renewal will be automatically granted other than in accordance with the applicable state mining legislation. In addition, the relevant department may impose conditions on any renewal, including relinquishment of ground.

Native Title

Northern Minerals has entered into a native title agreement with the Jaru People in respect of the Project. Under the native title agreement, Northern Minerals has agreed to certain financial and non-financial commitments to the Jaru People in return for being permitted to undertake operations on the Project site. Compliance with the terms of the native title agreement are pre-requisites to continued access to the Project site. It is possible that areas containing sacred sites or sites of significance to Aboriginal people in accordance with their tradition that are protected under the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) exist on Northern Mineral's mining tenements. However, it is not possible to know definitively that all relevant native title claims that may be made in relation to an area (such as the tenements underlying the Project) have been made, as Aboriginal peoples claiming native title over an area may do so at any time. As a result, land within the tenements may be subject to restrictions on exploration, mining or other uses and/or significant approval hurdles may apply. There is a risk that Northern Minerals operations require heritage survey work to be undertaken or engagement and/or agreement with affected Aboriginal people, which may increase the timeframe and cost of commercialising the Project. The Company is also subject to legislative and social responsibility commitments in relation to native title. Changes in these may impact Northern Minerals operations and financial performance.

Reliance on Key Personnel and Advisors

The ability of Northern Minerals to achieve its objectives depends on the engagement of key employees, directors and external contractors and advisers that provide management and technical expertise.

If Northern Minerals cannot secure technical expertise (for example to carry out development activities) or if the services of the present management or technical team cease to be available to Northern Minerals, this may affect its ability to achieve its objectives either fully or within the timeframes and the budget that it has forecast. Additionally, labour shortages, industrial disruptions, work stoppages and accidents in the course of operations may adversely affect Northern Minerals operational and financial performance.

Access

There is a substantial level of regulation and restriction on the ability of exploration and mining companies to have access to land in Australia. Negotiations with both native title holders and landowners/occupiers are generally required before gaining access to land for exploration and mining activities. Inability or delays in gaining such access may adversely impact Northern Minerals' ability to undertake its proposed activities. Northern Minerals may need to enter into compensation and access agreements before gaining access to land.

Force Majeure

Northern Minerals' current or future projects and the price of the Company's shares may be adversely affected by risks outside of their control, including labour unrest, civil disorder, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics or quarantine restrictions. If any of these events or other similar events occur, there may be a material adverse impact on the Company's operations, financial performance and viability.

Operating Risks

The operations of Northern Minerals are subject to operating risks and hazards including, but not limited to, fire, explosions, environmental hazards, technical failures, unusual or unexpected geological conditions, adverse weather conditions, cyclones and other incidents or conditions. The occurrence of any of these risks could result in substantial losses to Northern Minerals due to personal injury or loss of life; damage to or destruction of property, natural resources, or equipment; pollution or other environmental damage; clean up responsibilities; regulatory investigation and penalties; or suspension of operations. Damages occurring to third parties as a result of such risks may give rise to claims against Northern Minerals. The occurrence of any of these circumstances could result in Northern Minerals not realising its operational or development plans or in such plans costing more than expected or taking longer to realise than expected. Any of these outcomes could have an adverse effect on Northern Minerals' financial and operational performance. Materials handling risks remain as Northern Minerals moves from development to construction, commissioning and production. Product recoveries are dependent upon metallurgical processes and contain elements of risk, such as changes in the mineralogy in the ore deposit resulting in inconsistent product recovery, adversely affecting the economic viability of the product

Occupational Health and Safety

Exploration and production activities may expose Northern Minerals' staff and contractors to potentially dangerous working environments. If any of the Company's employees or contractors suffers injury or death, compensation payments or fines may be payable and such circumstances could result in the loss of a licence or permit required to carry on the business. Such an incident may also have an adverse effect on the Company's business (including financial position) and reputation.

Nature of Mining

Mineral mining involves risks, which even with a combination of experience, knowledge and careful evaluation may not be able to be fully mitigated. Mining operations are subject to hazards normally encountered in exploration and mining. These include unexpected geological formations, rock falls, flooding, dam wall failure and other incidents or conditions which could result in damage to plant or equipment, which may cause a material adverse impact on Northern Minerals operations and its financial results. Projects may not proceed to plan with potential for delay in the timing of targeted output, and Northern Minerals may not achieve the level of targeted mining output. Mining output levels may also be affected by factors beyond Northern Minerals' control.

Mineral Resource and Ore Reserve Estimates

No assurance can be given that the anticipated tonnages and grades of ore will be achieved during production or that the anticipated level of recovery will be realised. Mineral resource and ore reserve estimates are based upon estimates made by Northern Minerals personnel and independent consultants. Estimates are inherently uncertain and are based on geological interpretations and inferences drawn from drilling results and sampling analyses. Northern Minerals has limited the inclusion of production from lower confidence Inferred Mineral Resources, with higher confidence Probable Ore Reserves accounting for approximately 97% of production in the first six years and approximately 85% of total production in the DFS. Material variances to the Mineral Resource and Ore Reserve may have a negative impact on the forecast Project revenue.

Northern Minerals will periodically update its Mineral Resource estimate, and associated Ore Reserve estimates as new data is obtained, or revised estimation methodologies are adopted. These ongoing updates may lead to changes in the published Mineral Resource estimate. There is no certainty that any mineral resources or ore reserves identified by Northern Minerals will be realised, that any anticipated level of recovery of minerals will be realised, or that an identified ore reserve or mineral resource will be a commercially mineable (or viable) deposit which can be legally and economically exploited. Further, the grade of mineralisation which may ultimately be mined may differ materially from what is estimated. The quantity and resulting valuation of ore reserves and mineral resources may also vary depending on, amongst others, metal prices, cut off grades and estimates of future operating costs (which may be inaccurate against actual grades or costs realised should Northern Minerals be successful in commencing production). Production can be affected by many factors. Any material change in the quantity of ore resources, mineral reserves, grade, or stripping ratio may affect the economic viability of any project undertaken by Northern Minerals. Northern Minerals' estimated mineral resources and ore reserves should not be interpreted as assurances of commercial viability or potential or of the profitability of any future operations. Northern Minerals cannot be certain that its mineral resource and ore reserve estimates are accurate and cannot guarantee that it will recover the expected quantities of metals. Future production could differ dramatically from such estimates including for, but not limited to, the following reasons:

- Actual mineralisation or rare earths grade could be different from those predicted by drilling, sampling, feasibility or technical reports
- Increases in the capital or operating costs of the mine
- Decreases in rare earth oxide prices
- Changes in the LOM plan
- The grade of rare earths may vary over the life of a Northern Minerals project and Northern Minerals cannot give any assurances that any particular mineral resource or ore reserve estimate will ultimately be recovered
- Metallurgical performance could differ from forecast.

The occurrence of any of these events may cause Northern Minerals to adjust its mineral resource and reserve estimates or change its mining plans. This could negatively affect Northern Minerals financial condition and results of operations. Moreover, short term factors, such as the need for additional development of any Northern Minerals project or the processing of new or different grades, may adversely affect Northern Minerals.

Systematic grade control drilling programs have been designed at a nominal 25m by 25m spacing. The programs are incorporated to support ongoing mine planning (both from a workflow and costings perspective), from surface for open pit operations and the upper levels of the underground mine, and from underground drill drives targeting the mid to lower portions of the orebody. Increasing the density of drilling data is intended to improve confidence in the geological interpretation and grade continuity. Drilling campaigns have been sequenced to ensure timely delivery of assay data, updates to interpretations of mineralised volumes, and grade estimates to ensure the expedient production of grade control models for informing limits of the mine design, ore/waste delineation, and production scheduling. Where higher contributions of Inferred mineralisation exist later in the forecast mine production plan, additional grade control drilling will be planned as part of the normal course of business. Grade control drilling and models are considered critical inputs to mine planning processes, intended to inform updates to Mineral Resource estimate categorisation. However, there can be no certainty that the planned drilling will result in an improvement in the confidence of the geological interpretation or grade continuity, and therefore no certainty the drilling will result in changes to or increased confidence of Mineral Resource estimates, improved mine designs, ore/waste delineation, or production scheduling.

Material Contracts

Northern Minerals' relationships with third parties (including Iluka) are underpinned by contractual arrangements. There are risks that these material contracts may contain unfavourable provisions, or be terminated, not renewed or renewed on less favourable terms.

Iluka Supply Agreement

Northern Minerals has entered into the Supply Agreement with Iluka in respect of rare earths product from the Project. The Supply Agreement is subject to a number of conditions. The Company notes that certain conditions precedent have not been notified as satisfied by either party before the applicable satisfaction dates specified under the Supply Agreement. Conditions yet to be notified as satisfied include those relating to Northern Minerals' release of the DFS, close of the Project's financing arrangements and final investment decision, as well as Iluka having reached financial close, made its first drawdown and receiving lender consent to the Iluka Supply Agreement under its Eneabba Rare Earths Refinery financing arrangements. The passing of the end dates may give rise to either party exercising termination rights under the Iluka Supply Agreement. Neither party has exercised, nor indicated to that they will exercise, their termination right as at the date of the DFS. The Company and Iluka are in ongoing discussions to facilitate satisfaction of the conditions outstanding or agree suitable extensions to the appliable satisfaction dates where appropriate. There can be no guarantee that these discussions will result in an agreement being reached.

Iluka has a right of first refusal to purchase rare earths product from the Project for a two-year period from the date of the agreement if terminated due to the Company's failure to satisfy a condition.

If the Supply Agreement is terminated and Iluka does not exercise any right of first refusal to purchase the product, or if the agreement remains on foot but Iluka fails to take the expected quantities under the Supply Agreement, the Company will seek to enter into additional or alternative supply or offtake arrangements for the product produced at the Project. There is no certainty that Northern Minerals will be able to enter into additional or alternative arrangements or that such arrangements will be on terms satisfactory to Northern Minerals. Failure to agree additional or alternative arrangements on acceptable terms may adversely impact the forecast financial information included in the DFS and Northern Minerals' ability to develop or sustain the Project as it has been presented under the DFS.The Supply Agreement is structured on the basis that Northern Minerals must sell and deliver, and Iluka must purchase and take, 100% of the product produced at the Project, up to a maximum annual quantity. Northern Minerals also has an obligation to supply and sell, and Iluka must purchase and take, a minimum annual quantity.

Similarly, a failure of Iluka to take the contemplated quantities of product on the agreed terms or otherwise, whether or not in breach of the Supply Agreement, may adversely affect the revenue to be derived from the Browns Range Project.

Competent Person's Statement

The information in this report that relates to Ore Reserves for the Browns Range Heavy Rare Earth Project is based on information compiled by Mr Daniel Donald, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Daniel Donald is employed by Entech and is an independent consultant contracted by the Company for professional services. Mr Daniel Donald has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Daniel Donald consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information for the Wolverine MRE is extracted from the NTU announcement to the ASX on 16 January 2025. The information for the BRPP, Gambit West, and Gambit MREs is extracted from the NTU announcement to the ASX on 28 September 2018. The information for the Dazzler MRE is extracted from the NTU announcement to the ASX titled 'NTU Over 50% increase in Dazzler high-grade mineral resource' on 7 April 2020. The information for the Cyclops and Banshee MREs is extracted from the NTU announcement to the ASX titled 'Further increase in Browns Range Mineral Resource' on 15 October 2014. The information for the Area 5 MRE is extracted from the NTU announcement to the ASX titled 'Wolverine HRE Resource Doubled in upgrade at Browns Range' on 26 February 2014. The information for the above MREs is available to view on the Company's website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements for these Mineral Resources and that all material assumptions and technical parameters underpinning the estimates in these market announcements 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 announcements..

Appendix 1: 2025 Browns Range Global MRE

Browns Range WA Global Mineral Resource estimate as at 15 January 2025 reported above a 0.15 % TREO cut-off grade

Deposit	Classification	Tonnage Mt	TREO %	Dy_2O_3 kg/t	Y_2O_3 kg/t	Tb_4O_7 kg/t	HREO / TREO %	TREO t
Wolverine OP	**Measured**	0.1	0.91	0.84	5.4	0.12	92	1,000
	Indicated	0.7	0.76	0.67	4.42	0.09	90	5,200
	Inferred	0.1	0.3	0.2	1.36	0.03	69	300
	Subtotal	0.9	0.72	0.63	4.19	0.09	89	6,500
Wolverine UG	**Measured**	0	0	0	0	0	0	0
	Indicated	4.2	1.19	1.05	7.1	0.15	91	49,200
	Inferred	2.3	0.64	0.55	3.7	0.08	87	14,800
	Subtotal	6.4	0.99	0.88	5.87	0.13	89	64,000
Wolverine Total	**Measured**	0.1	0.91	0.84	5.4	0.12	92	1,000
	Indicated	4.9	1.13	1.00	6.72	0.15	91	54,400
	Inferred	2.4	0.63	0.54	3.6	0.08	87	15,100
	Subtotal	7.3	0.96	0.84	5.66	0.12	90	70,500
Gambit West	**Measured**	0	0	0	0	0	0	0
	Indicated	0.12	1.8	1.62	11.0	0.22	94	2,100
	Inferred	0.13	0.5	0.40	2.67	0.05	81	700
	Subtotal	0.25	1.11	0.97	6.56	0.13	91	2,800
Pilot Plant Stockpiles	**Measured**	0	0	0	0	0	0	0
	Indicated	0.16	0.95	0.83	5.5	0.12	89	1,500
	Inferred	0.03	0.26	0.20	1.35	0.03	79	100
	Subtotal	0.2	0.82	0.71	4.71	0.1	88	1,600
Gambit	**Measured**	0	0	0	0	0	0	0
	Indicated	0	0	0	0	0	0	0
	Inferred	0.2	0.89	0.83	5.62	0.11	96	1,900
	Subtotal	0.2	0.89	0.83	5.62	0.11	96	1,900
Area 5	**Measured**	0	0	0	0	0	0	0
	Indicated	1.38	0.29	0.18	1.27	0.03	69	4,000
	Inferred	0.14	0.27	0.17	1.17	0.03	70	400
	Subtotal	1.52	0.29	0.18	1.26	0.03	69	4,400

Deposit	Classification	Tonnage Mt	TREO %	Dy_2O_3 kg/t	Y_2O_3 kg/t	Tb_4O_7 kg/t	HREO / TREO %	TREO t
Cyclops	**Measured**	0	0	0	0	0	0	0
	Indicated	0	0	0	0	0	0	0
	Inferred	0.33	0.27	0.18	1.24	0.03	70	890
	Subtotal	0.3	0.27	0.18	1.24	0.03	70	890
Banshee	**Measured**	0	0	0	0	0	0	0
	Indicated	0	0	0	0	0	0	0
	Inferred	1.7	0.21	0.16	1.17	0.02	87	3,500
	Subtotal	1.7	0.21	0.16	1.17	0.02	87	3,500
Dazzler	**Measured**	0	0	0	0	0	0	0
	Indicated	0	0	0	0	0	0	0
	Inferred	0.2	2.33	2.17	13.9	0.29	95	5,000
	Subtotal	0.2	2.33	2.17	13.9	0.29	95	5,000
Total	**Measured**	0.1	0.91	0.84	5.40	0.12	92	1,000
	Indicated	6.6	0.96	0.83	5.62	0.12	86	62,000
	Inferred	5.1	0.54	0.46	3.06	0.06	86	27,500
	Subtotal	11.7	0.77	0.67	4.49	0.09	86	90,500

Notes:

- Rounding may have caused computational discrepancies.
- TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- HREO = Heavy Rare Earth Oxides – Total of Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3.
- HREO % = HREO/TREO*100
- Wolverine Open Pit MRE constrained within open pit design, and above 0.15 % TREO COG
- Wolverine Underground MRE reported below base of open pit design, i.e., 325 mRL, and above 0.15 % TREO COG

Appendix 2: JORC Code, 2012 Edition, Table 1

Wolverine Deposit Mineral Resource Estimation

Matters relating to **Section 1 Sampling Techniques and Data, Section 2 Reporting of Exploration Results**, and **Section 3 Estimating and Reporting of Mineral Resources**, of Table 1 have been included in the still current ASX announcement released by Northern Minerals on 16 January 2025 ("2025 – Wolverine Mineral Resource Estimate", available at www.northernminerals.com.au).

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Wolverine was sampled using a combination of reverse circulation (RC) drilling, diamond core from surface and diamond core tails. A total of 243 RC drill holes, 85 diamond holes and 66 RC holes with diamond tails were available for the resource estimate, for an overall total of 73,828.41 metres drilled. • Holes were typically drilled to UTM grid south at a dip of -60 degrees. • In the field a portable XRF handheld tool was used to provide a preliminary indication of mineralisation and assist with sample selection. Zones of geological interest and mineralised zones were identified and marked up to geological contacts by geologists. Diamond core was cut, with half core submitted to an external accredited laboratory for ICP-MS assay analysis.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Surface (DD & RC) holes were angled to intersect the targeted mineralised zones at optimal angles. • RC drilling was typically employed for shallower levels of the resource, with diamond drilling employed to target the deeper resource areas. • RC samples were collected at one metre intervals and subsampled via cone or riffle splitters. • The diamond drill holes sampled and assayed were double or triple tubed HQ or NQ sized core. • Diamond core was half-core sampled at nominal one-metre intervals and constrained to geological boundaries where appropriate. • The pXRF instrument is calibrated and serviced annually or more frequently. At the start of each sampling session, standards and silica blanks are analysed as a calibration check. • Sampling and assay results are carried out under NTU protocols which include QAQC procedures in line with industry standard practice.

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.*	• Diamond core was drilled using either double or triple tube at HQ and NQ sizes. HQ2 and HQ3 were variably employed for shallower parts of the hole depending on prevailing ground conditions, while the majority of diamond core intercepts within the mineralisation are at NQ3 size and sampled at a nominal one metre interval (constrained to within geological intervals). • Diamond core was half-core sampled at nominal one-metre intervals and constrained to geological boundaries where appropriate. Sampling was carried out under NTU Standard Operating Procedures, and protocols and employed QAQC procedures in line with industry guidelines. • RC samples were collected at one metre intervals and subsampled via cone or riffle splitters to achieve a target 2–5-kilogram sample weight. • NTU samples were submitted to an independent contract laboratory for crushing and pulverising. Samples up to 3kg are crushed and pulverised in their entirety. Samples exceeding 3kg are crushed to 2mm from which a split up to 3kg is taken and pulverised, and the coarse reject retained. The pulverised portion is subsampled for analysis. The portion of the pulp of not consumed by analysis is archived for future reference. • Analysis of the rare earth element suite is conducted using a sodium peroxide fusion digest with Inductively coupled plasma mass spectrometry (ICP-MS). Since 2014, portable XRF measurements on the pulp residues have also been conducted at the lab prior to ICP-MS analysis.
Drilling techniques	• *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc).*	• Diamond drill holes used in the estimation were NQ and HQ sized core. PQ sized core was used for establishing collar in 11 holes, converting to HQ once ground conditions stabilised. • Diamond core was orientated using the Reflex ACT orientation tool. • RC drilling was with nominal diameters of either 115 mm or 140 mm. • RC precollars to diamond tails range in depth from 47.9 m to 240.4 m. • RC drilling was completed using face sampling hammer with hole depths ranging from 18 m to 324 m.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. • Diamond recovery is measured by measuring the recovered core and comparing to the drilled interval between drillers blocks. Assessment showed that more than 98% of core intervals had recoveries greater than 90%. • RC recovery was assessed by a combination of weight of bulk sample against a nominal recovery mass, and via subjective assessment based on volume recovered. • RC recoveries were observed to be generally acceptable with recoveries typically 80% or greater. • Sample recoveries for RC and diamond core were digitally recorded in geology logs and entered the database.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Diamond drilling has utilised triple tube techniques and drilling fluids where required to assist with maximising recoveries in less competent ground. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. Recovered core was measured and compared against driller's blocks. • RC sample recoveries were visually checked for recovery, moisture, and contamination. The cyclone and splitter were routinely cleaned ensuring no material build up.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/ coarse material.*	• No relationship has been established between sample recovery and grade.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies*	• Diamond core was geologically and geotechnically logged using a predefined code library for lithological, mineralogical, and physical characteristics (such as colour, weathering, fabric) logging codes. • RC logging was completed at the rig by the geologist. Earlier drilling was logged onto paper and transferred to a digital form for loading into the drill hole database. Since early 2012 logging was completed directly onto a laptop in the field using a proprietary geological logging package with in-built validation. Logging information was reviewed by the responsible geologist prior to final load into the database. • RC cuttings were collected into chip trays for each 1 metre interval and photographed. • Core trays were photographed after mark-up prior to sampling. • Geotechnical logging of all diamond core consisted of recording core recovery, RQDs, number of fractures, core state (i.e., whole, broken) and hardness. In addition, nine diamond holes (BRWD0026-0034) were drilled specifically for geotechnical purposes and were logged by both NTU geologists and external consultants. Samples were also selected for destructive testing. • This detail is considered common industry practice and is at the appropriate level of detail to support mineralisation studies.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Logging was qualitative in nature except for the determination of core recoveries and geotechnical criteria such as RQD and fracture frequency which was quantitative. Core photos were collected by geologists for all diamond drilling to aid geological interpretation.
	• *The total length and percentage of the relevant intersections logged.*	• All recovered intervals from drill holes were geologically logged in full.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all cores taken.*	• Diamond core was cut in half using an electric core saw. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features, together with indicative results from handheld XRF measurements. • Core selected for duplicate analysis was further cut to quarter core with both quarters submitted individually for analysis. Where possible, core was sampled to leave the orientation line in the core tray. • Half and quarter core is retained. • Where whole core intervals were submitted for geotechnical testing, the returned intervals were submitted in their entirety for ICP-MS assay.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• RC samples were collected from the full recovered interval by either riffle splitting or using a static cone splitter. The majority of samples were collected dry with a minor number being moist due to ground conditions or excessive dust suppression. Samples were split without drying.
	• *For all sample types, the nature, quality, and appropriateness of the sample preparation technique.*	• The sample preparation techniques employed for the samples follow industry standard practice at Intertek Genalysis Laboratory. Samples are oven dried, crushed if required and pulverised prior to a pulp packet being removed for analysis. • Sample sizes are considered appropriate to correctly represent the mineralisation based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology, and assay value ranges.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Field QAQC procedures included the field insertion of certified reference materials (standards) having a range of values reflecting the general spread of values observed in the mineralisation. • Drilling prior to July 2012 did not include the insertion of standards, as suitable materials were not sourced. • Blanks were also inserted in the field and developed from local host rock following chemical analysis. • Field duplicates were collected by either a second sample off the splitter (RC) or by quarter core samples of the original half core sample (diamond) and separate submission and analysis at the laboratory. • Insertion rates targeted 1:20 for duplicates, blanks, and standards, with increased frequency in mineralised zones.
	• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*	• Field duplicates were regularly taken from RC samples at Wolverine. 519 duplicates were available. Similarly, duplicate analysis was performed on diamond core, where two quarter cores over the same interval were independently assayed. For diamond core samples, 634 pairs were available. • Insertion rates for RC and diamond core targeted 1:20 for field duplicates, with increased frequency in mineralized zones.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample sizes are appropriate for the grain size of the material being sampled.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Samples assayed by Genalysis for rare earth elements were fused with sodium peroxide within a nickel crucible and dissolved with hydrochloric acid for analysis. Fusion digestion ensures complete dissolution of the refractory minerals such as xenotime, which are only partially dissolved if the pulp is digested in acids. The digestion solution, suitably diluted, is analysed by ICP Mass Spectroscopy (ICP-MS) for the determination of the REE (La – Lu) plus Y, Th and U.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• Northern Minerals extensively uses portable X-ray fluorescence (pXRF) technology. In the field a series of Niton (XL3T-950 GOLDD+) and Olympus Vanta XRF handheld tools were used to assist with the identification of mineralised zones for sample collection and submission. A reading time of 30 seconds was used, with readings taken for every metre of RC drilling. Intervals for which readings returned yttrium (Y) of 200 ppm or greater were selected for analysis, as were a selection of sub 200 ppm yttrium samples. These pXRF readings are designated as “Field pXRF”. • Since 2014, samples submitted for analysis at Genalysis have been analysed by pXRF following the standard laboratory preparation, i.e., drying, splitting, pulverisation. Yttrium was analysed using an Olympus InnovX Delta Premium, with a 30 second reading time. Cerium was analysed using a Niton (XL3T-950 GOLDD+), 30 second reading time. • For drilling completed between 2014 and 2017, only samples selected on the basis of laboratory pXRF results (+1000 ppm), or of geological interest, have then been progressed to full analysis via ICP-MS and/or ICP-OES. The remaining samples individual rare earth element values were assigned from pXRF (Niton and Olympus) from laboratory prepared pulp residues. • Where pXRF analysis from pulp residues were used in the Mineral Resource estimates, the final rare earth element values were assigned from the raw analysis using correlation studies upon samples for which both pXRF and ICP-MS were available. Rare Earth Oxide derived from pXRF instruments contributes less than 1% of the contained Rare Earth Oxide in the total Mineral Resource estimate. • In the absence of ICP-MS or pXRF data from pulp residues, Field pXRF readings have been set to zero for the resource estimation.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established*	• Certified reference materials, using values across the range of mineralisation, were inserted randomly. • Insertion rates targeted 1:20 for duplicates, blanks, and standards, with increased frequency in mineralised zones. • Results highlight that sample assay values are suitably accurate and unbiased. Blanks were inserted in the field and developed from local host rock following chemical analysis. • Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits, and replicates as part of the in-house procedures. • Umpire laboratory campaigns are used to routinely conduct round robin analysis. Results of round robin analysis are acceptable. • Certified reference materials demonstrate that sample assay values are accurate.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• Diamond drill core photographs have been reviewed for the recorded sample intervals. High range values are routinely resubmitted for repeat analysis with results comparing within acceptable limits. • Six twinned holes, Diamond to RC, have been conducted with results being comparable and acceptable.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Earlier primary data (2011) was collected using paper logs and transferred into Excel spreadsheets for transfer into the drill hole database. Since early 2012, primary data was collected into a proprietary logging package (OCRIS) with in-built validation. Details were extracted and pre-processed prior to loading. • In 2011 and 2012 data was managed and stored off site using acQuire software. Since 2013, Datashed has been used as the database storage and management software and incorporates numerous data validation and integrity checks, using a series of defined data loading tools. Data is stored on a SQL server by Northern Minerals Ltd subject to electronic backup. • All data was checked by the responsible geologist and digitally transferred to Perth for loading to the database.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *Discuss any adjustment to assay data.*	• The assay data were converted from reported elemental assays for a range of elements to the equivalent oxide compound as applicable to rare earth oxides. Oxide calculations are completed by the laboratory and checked by Northern Minerals. • No issues were identified. The oxides were calculated from the element according to the following factors below: CeO_2 –1.2284, Dy_2O_3 – 1.1477, Er_2O_3 – 1.1435, Eu_2O_3 – 1.1579, Gd_2O_3 – 1.1526, Ho_2O_3 – 1.1455, La_2O_3 – 1.1728, Lu_2O_3 – 1.1371, Nd_2O_3 – 1.1664, Pr_6O_{11} – 1.2082, Sm_2O_3 – 1.1596, Tb_4O_7 – 1.1421, Tm_2O_3 – 1.1421, Y_2O_3 – 1.2699, Yb_2O_3 – 1.1387
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Drill collar locations have been surveyed with a high accuracy KGPS receiver with an accuracy of +/- 0.02 metres. • Collars were surveyed GPS by a suitably qualified independent surveying contractor in 2013, and since 2014 by trained NTU staff. • Down hole surveys were completed by the drilling contractor using an AXIS Champ gyroscope survey tool at the time of drilling.
	• *Specification of the grid system used.*	• The grid system used is MGA94 Zone 52. All reported coordinates are referenced to this grid.
	• *Quality and adequacy of topographic control.*	• Topographic surfaces were prepared from LIDAR survey data collected in 2013. Ground control was established by contract surveyors. Accuracy is considered to be better than 20cm.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drilling of the Wolverine deposit has been completed on a nominal 25 m by 25 m in grid spacing although this increases to broader spacing at the lateral extremities of the deposit. Holes were almost routinely collared to UTM grid south at a dip of -60 degrees. The spacing of down hole intercepts of the mineralisation varies from the nominal collar spacing due to deviation of drill holes.
	• *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied*	• The Data spacing, and distribution, is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimate. • The classifications applied and reported throughout this document incorporate drill hole spacing and other factors in the relative confidence levels communicated in the Mineral Resource estimate.
	• *Whether sample compositing has been applied*	• No sample compositing applied prior to laboratory analysis.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The mineralisation is interpreted to be a steeply dipping, roughly planar feature striking approximately east west and dipping at 75 degrees to the north. Resource drilling is exclusively conducted at -60 degrees to the south and as such drill holes intersect the mineralisation at acceptable angles. As such the orientation of drilling is not likely to introduce a sampling bias.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Current knowledge indicates that the orientation of drilling with respect to overall structural and lithological trends is not expected to introduce any sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody is managed by NTU. • Samples are collected on site under supervision of a responsible geologist and stored in bulk bags on site prior to transport by company truck or utility to Halls Creek commercial transport yard. The samples were stored in a secure area until loaded and delivered to Genalysis Laboratory in Perth. Laboratory dispatch sheets are completed and forwarded electronically as well as being placed within the samples transported. Dispatch sheets are compared against received samples and discrepancies reported and corrected.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Wolverine Deposit is located on Mining License M80/627. • The tenement is located within the company's Browns Range Project approximately 145 kilometres south-east of Halls Creek and adjacent to the Northern Territory border in the Tanami Desert. • Northern Minerals owns 100% of all mineral rights on the tenement. • The fully determined Jaru Native Title Claim is registered over the Browns Range Project area and the fully determined Tjurabalan claim is located in the south of the project area. • The tenements are in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No previous systematic exploration for REE mineralisation has been completed by other parties prior to Northern Minerals at Browns Range. Regional exploration for uranium mineralisation was completed in the 1980s without success
Geology	• *Deposit type, geological setting, and style of mineralisation.*	• The Browns Range deposits including Wolverine are unconformity related HREE style deposits. They are located on the western side of the Browns Range Dome, a Paleoproterozoic dome formed by a granitic core intruding the Paleoproterozoic Browns Range Metamorphics (meta-arkoses, feldspathic meta-sandstones, and schists) and an Archaean orthogneiss and schist unit to the south. The dome and its aureole of metamorphics are surrounded by the Mesoproterozoic Gardiner Sandstone (Birrindudu Group). The Browns Range xenotime mineralisation is typically hosted in hydrothermal quartz and hematite veins and breccias within the meta-arkoses of the Archaean Browns Range Metamorphics. Various alteration styles and intensities have been observed; namely silicification, sericitization and kaolinite alteration.

Criteria	JORC Code explanation	Commentary
Drill hole information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *– easting and northing of the drill hole collar* *– elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *– dip and azimuth of the hole* *– down hole length and interception depth* *– hole length* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Exploration Results are not being reported. • All relevant drill data has been publicly released by the company on the ASX in prior announcements.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration Results are not being reported. • All relevant drill data has been publicly released by the company on the ASX in prior announcements.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	• Exploration Results are not being reported. • All relevant drill data has been publicly released by the company on the ASX in prior announcements.

Criteria	JORC Code explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Exploration Results are not being reported. • All relevant drill data has been publicly released by the company on the ASX in prior announcements. • Relevant diagrams for the resource have been included within the main body this ASX release.
Balanced Reporting	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration Results are not being reported. • Previous exploration results are the subject of previous reports. The results of all drill holes have been reported. Where holes were not reported with significant intercepts there were no significant results.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• At Browns Range Project WA, airborne magnetic and radiometric surveys were acquired by Northern Minerals in 2011 and 2023. Hyperspectral data captured during October 2012 by Hy vista Corporation Pty Ltd. Very high resolution "Ultracam" aerial photography was captured by Hyvista during the Hyperspectral survey. • Regional reconnaissance including geological mapping, rock chip sampling and also geochemical soil sampling completed over all the prospects reported herein. Ground based radiometric surveys were also completed. • Several Mineral Resource estimates have been completed for the Wolverine deposit between 2012 and 2023. • Comprehensive metallurgical test work has been undertaken since 2010 allowing the successful development of a process flowsheet incorporating beneficiation and hydrometallurgy circuits. A trial mine and pilot plant operation, including ore extracted from Wolverine, was undertaken between 2017 and 2022 to demonstrate proof of concept of the flowsheet and de-risk the project. • Geotechnical studies by external consultants have been undertaken on diamond core from Wolverine between 2013 and 2023 in support of mine planning for open pit and underground operations.

Criteria	JORC Code explanation	Commentary
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Relevant diagrams have been included within the main body of this ASX release indicating potential for mineralisation extension in the down plunge orientation.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	• The drilling database for the Wolverine Project is maintained by Northern Minerals Ltd (NTU). Database inputs were logged electronically at the drill site. The collar metrics, assay, lithology and downhole survey interval tables were uploaded manually then checked and validated by NTU personnel. • 2011 drilling was logged onto paper and transferred to a digital form for loading into the drill hole database. To cut validation time and errors, from 2012, logging was completed directly onto a laptop in the field using a proprietary geological logging package with in-built validation. All data transfer is electronic, with no double handling of data. Sample numbers are unique. Logging and survey information was reviewed by the responsible geologist prior to final load into the database. The data is stored in a single database for the Browns Range project.

Criteria	JORC Code explanation	Commentary
Database integrity	*Data validation procedures used.*	• The first validation starts at the field logging package during data entry. Data validations are routinely run prior to uploading of data to the database. Many check routines and rules are run to ensure referential integrity, such as overlapping intervals, repeat sample IDs, out of range density measurements, survey azimuth deviations >10 degrees, drill hole dip deviations >5 degrees, and missing samples have been developed firstly using AcQuire (2011-12) and then in Datashed (2013 onwards). Internal validations are completed when data is loaded into spatial software for geological interpretation and resource estimation. This was routinely completed for the Browns Range dataset(s). Outlier assays are routinely checked via QAQC reports automated from the database and followed up by the responsible geologist. This is completed by checking standards, blanks, and duplicate data. • The drill hole data is considered suitable for underpinning Mineral Resource estimation of global rare earth oxide tonnes and incorporated drilling results available up to and including 22 July 2024. • For this MRE, database checks included the following: • Checking for duplicate drill hole names and duplicate coordinates in the collar table. • Checking for missing drill holes in the collar, survey, assay, and geology tables based on drill hole names. • Checking for survey inconsistencies including dips and azimuths <0˚, dips >90˚, azimuths >360˚, and negative depth values. • Checking for inconsistencies in the 'From' and 'To' fields of the assay and geology tables. The inconsistency checks included the identification of negative values, overlapping intervals, duplicate intervals, gaps, and intervals where the 'From' value is greater than the 'To' value. • Adding an end of hole (EOH) survey by copying the last known survey downhole to the EOH.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• The Competent Person, Mr Dale Richards, is a full-time employee of Northern Minerals and conducts regular site visits to the Browns Range project, including the Wolverine deposit. • The latest site visit was conducted during September 2024. During the visit, Standard Operating Procedures were reviewed. • No material issues or risks pertaining to the MRE update were identified, observed, or documented during the visit.
	If no site visits have been undertaken indicate why this is the case.	• Not applicable – site visits have been undertaken as described above.

Criteria	JORC Code explanation	Commentary
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	• The Browns Range REE mineralisation is one of only a few hydrothermal xenotime mineralisation styles documented globally. Detailed mapping, structural, alteration and mineralisation studies have been completed by NTU geologists and contracted specialists between 2011 and 2014. These data and close spaced drilling, generally <25 m, has led to a good understanding of mineralisation controls. The REE mineralisation is hosted by approximately east-west striking structures and veins, within a coarse sedimentary package on the western side of the regionally extensive Browns Range Dome. This is a feature seen within the Browns Range Mineral Resources at Wolverine, Gambit, Gambit West, Area 5, Cyclops, and Banshee localities. Breccia and quartz vein structures are mappable and can be followed with confidence under transported cover using geochemistry and step-out drilling. There is associated sericite-hematite-silica alteration. The geological work is continually being refined. Currently, spectral, dating, geochemical, microprobe and fluid inclusion work are underway, coordinated by external research institutions.
	Nature of the data used and of any assumptions made.	• Geological data used for interpretation was gathered from drilling with detailed geological core logging and associated assay data. • Interpretation of the main mineralisation zone was largely based on the geometry of the bounding faults, the Capybara and Hamster Faults, and truncated to the east by Kurts Cut-Off Fault. This zone is defined by breccia logging, structural modelling, and a nominal total rare earth oxide (TREO) grade of 150 ppm.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	• The structural framework that defines the main mineralisation zone at Wolverine is well understood. Modelling of controls on REE distribution throughout the zone has been defined and can potentially be further refined in future using whole rock geochemistry or mineralogy. • The accuracy of the geological interpretation has been improved through the 2024 refinement of the structural model with new drilling data. This has not materially changed the interpretation.

Criteria	JORC Code explanation	Commentary
Geological interpretation	*The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	• Interpretation of the main mineralisation zone was largely based on the geometry of the bounding faults, the Capybara and Hamster Faults, and truncated to the east by Kurts Cut-Off Fault. This zone is defined by breccia logging, structural modelling, and a nominal total rare earth oxide (TREO) grade of 150 ppm. • Within this zone six different, breccia styles (polymict + xenotime, hematite, sericite, quartz, generic monomict and unbrecciated) were modelled using hierarchical indicator radial basis function (RBF) models based on brecciation intensity within the main mineralised zone. • Sub-ordinate, sub-parallel hanging wall (four) and footwall (two) domains were defined by breccia logging and a nominal total rare earth oxide (TREO) grade of 150 ppm. • To the west, the lateral extent and orientation of these lithologies is limited by logging data. • In hanging wall sub-horizontal sedimentary units, low-grade, strata bound domains (11) were modelled where anomalous TREO grades were present. • Geological observation has underpinned the resource estimation and geological model. Rock type, alteration style, degree of brecciation, intensity of alteration, structural measurements and geochemistry were used to define the footwall and hanging wall boundaries. The geological model was developed as an iterative process of checking against logging, photography and relogging core/rock chips as needed during interpretation. The extents of the geological model were constrained by drilling. Geological boundaries had only minimal extrapolation beyond drilling, but not beyond nominal sample spacing, in line with the resource classification criteria and as appropriate for this style of mineralisation for Indicated or Inferred. • Key factors that are likely to affect the continuity of grade are: the inherent variability of brecciated rocks. The breccia rock characteristics can change rapidly from centimetre to metre scale, and since the deposit is structurally hosted, there is also inherent disruption of continuity by faulting at different scales.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The main mineralised structure at Wolverine extends approximately 650 m in strike (east to west), up to 44 m across strike and from surface to -250 mRL (approximately 700 m down dip). Within this zone the bulk of the economic mineralisation has a strike extent of 200 m to 350 m.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• Interpretations of domain continuity were undertaken in Leapfrog Geo™ software. The mineralisation intercepts correlating to individual domains were manually selected prior to creating vein models using Leapfrog Geo™ implicit modelling software. • Breccia domains were generated in Leapfrog Geo™ using a hierarchical indicator radial basis function (RBF) models based on brecciation intensity within the main mineralised zone. • Sample data were composited to a 1 m downhole length using a best fit method. Residual composite lengths (0.0 m – 0.5m) were reviewed for metal loss against the raw samples, and a residual length of 0.4 m was decided upon, whereby composites less than 0.4 m long were discarded. Generally, under 1% of metal was lost per REE, per domain. • Top-caps were applied prior to block grade estimation. • Exploratory Data Analysis (EDA) and variography analysis of the capped and declustered, composited REE variables was carried out within individual breccia domains on representative elements for each rare earth grouping, i.e., Yttrium (HREE), Europium (MREE) and Cerium (LREE). Analysis of these representative elements was then compared against the other elements in that group and adjusted to best fit if required. Any individual element that did not fit within a group was analysed and estimated separately. • The unbrecciated domain and sub-ordinate hanging wall and footwall domains showed relational similarities, underpinned by observed spatial and statistical analysis. The hanging wall and footwall domains had EDA outcomes applied from the unbrecciated domain. • All EDA was completed in Supervisor™ software and exported for further visual and graphical review. • • An Ordinary Kriging (OK) interpolation approach in Datamine Studio RM™ was selected for all domains within the main breccia and subordinate hanging wall and footwall domains. Subhorizontal, strata-bound hanging wall domains were estimated with an Inverse Distance Squared (ID2) approach. Based on contact analysis and an understanding of the diffuse boundary between the breccia styles, a soft boundary was used between breccia types for estimation. All other estimates used domain boundaries as hard boundaries for grade estimation where only composite samples within that domain are used to estimate blocks coded as falling within that domain.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• Estimation parameters, including estimate block size and search neighbourhoods, were derived through Kriging Neighbourhood Analysis (KNA). • Following variography analysis, a variety of separate untransformed, log and normal scores variogram spherical, anisotropic models were applied to rare earth groups and individual domains and domain groups as noted above. Nugget values ranged from 0.03 to 0.32. Sill + nugget of the first variogram structure ranged from 0.18 to 0.75 with ranges of 13 m to 100 m. The second variogram structure had ranges from 31 m to 454 m.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• A check estimate was undertaken for all domains and REE's using inverse distance squared. The check estimate results were, on average, 2.8% lower in metal content across REE's and domains. • Previous estimate, announced in 2022 did not include infill and extensional drilling down dip, drilled between 2022 and 2024. • Reconciliation reports on the data from the trial pit which operated from 15 July 2017 through to 26 November 2017 between mined material and block model demonstrates good confidence – 2.5 rel.% difference.
	The assumptions made regarding recovery of by-products.	• No assumptions have been made regarding by products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	• In addition to the rare earth elements, aluminium, arsenic, barium, calcium, iron, lithium, magnesium, phosphorus, potassium, sulphur, scandium, silicon, thorium, and uranium were estimated

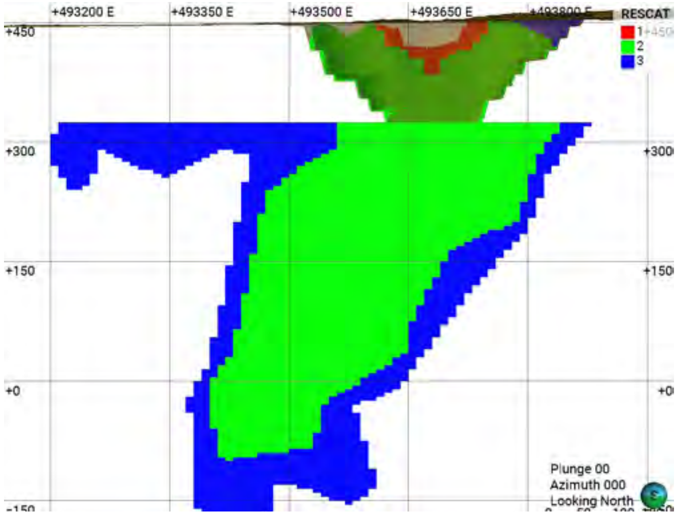
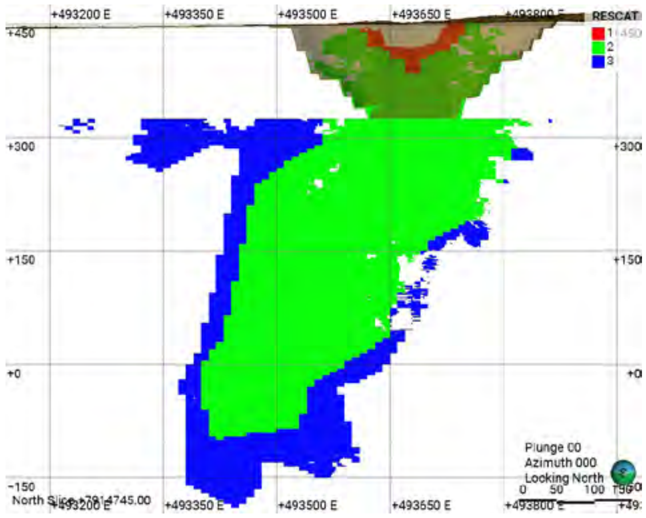
Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	*In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	• Interpolation of rare earth elements was undertaken using Ordinary Kriging (OK) in Datamine Studio RM™ within parent cell blocks. Dimensions for the interpolation were X: 10 mE, Y: 5 mN, Z: 5 mRL, with sub-celling of X: 2.50 mE, Y: 1.25 mN, Z: 1.25 mRL. Considerations relating to appropriate block size include drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisations (QKNA). • RC, RCDD and DD data were used in the MRE. The average drill spacing ranges from 10 m to 50 m, with a nominal 25 m spacing maintained for all classified domains. • Given that the deposit is well drilled (nominal 25 m drill spacing), a three-pass estimation search strategy was employed. Search ranges varied by domain and by rare earth element grouping (LREE, MREE, HREE), from 70 m – 460 m. Sub-horizontal hanging wall domains were estimated with no anisotropy and a range of 1,000 m. For the first pass a minimum of 6 samples were used and a maximum of 10 to 16. The second and third passes dropped the minimum samples required to 4 and 2, respectively, for all domains.
	Any assumptions behind modelling of selective mining units.	• Not applicable – no assumptions have been made.
	Any assumptions about correlation between variables	• Rare earth elements were investigated for correlation within breccia domains. Yttrium and MHREE showed strong correlation (> 0.95), likewise Cerium and the other LREE. This relationship was utilised in geostatistical analysis. Where a REE did not correlate well with Y or Ce it was treated separately for geostatistical purposes.
	Description of how the geological interpretation was used to control the resource estimates.	• Within the breccia domains in the main mineralisation zone, boundaries between domains were treated as a soft boundary (i.e., domain 1003 utilised composites from domains 1002 and 1004) due to the lack of a hard boundary between breccia types and the implicit modelling technique used to define these domains. All other domains in the hanging wall and footwall had hard boundaries applied for estimation purposes. • Digital terrain models (DTMs) were prepared for cover sediments. • Weathering surfaces and volumes for transported, oxidised, transition and fresh zones were updated for the estimate.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	*Discussion of basis for using or not using grade cutting or capping.*	• The top capping analysis and application looked at rare earth groupings within individual domains (sub-ordinate footwall and hanging wall domains were grouped for this analysis). Care was taken to ensure that the samples capped were the same for each element and any element that did not align with other elements in the group was treated separately for top capping and subsequent EDA and estimation.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	• Validation of the estimation outcomes was completed by global and local bias analysis (swath plots), and statistical and visual comparison (cross and long sections) with input data.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The density was measured on air dried core in the field, with one in 20 samples checked externally by Genalysis Laboratory, Perth. • The moisture content in mineralisation is considered low. • Tonnage was estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource cut-off grade has been calculated using benchmarked commodity pricing, and cost data from the in-progress feasibility study. The calculated COG has been evaluated considering the proposed mining method. • A nominal grade cut off at 0.15% TREO has been used to report the Mineral Resource at the deposit for both open pit and underground.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Feasibility Studies (FS) including mining studies were completed on the Wolverine resource as reported in 2015. • Mining studies were continued internally during 2023 -2024 as part of the in-progress FS update. • Possible mining scenarios considered for this Resource estimate include a combination of conventional open pit and mechanised underground mining techniques, including long hole open stoping and sub level caving mining methods.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• FS level metallurgical studies were completed on the Wolverine resource in 2015. These showed the deposit is amenable to metallurgical recovery and has reasonable prospects for eventual economic extraction. • During 2024, additional Metallurgical testwork was completed with the results confirming the metallurgical recovery and reasonable prospects for eventual economic extraction.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Wolverine deposit is located on Mining License M80/627, with all environmental approvals in place to ensure that there are no known impediments to reporting the MRE.

Criteria	JORC Code explanation	Commentary
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	• Bulk density has been estimated from density measurements carried out on diamond core samples of variable length using the Archimedes method of dry weight versus weight in water. • Field density measurements were completed as a minimum of one in every four metres outside mineralised zones, and one in every two metres within the mineralised zone for diamond core. • The following bulk density mean values were applied in the block model: • Cover and oxide: Main fault breccia 2.49 t/m3, Footwall breccia 2.44 t/m3, Hanging wall breccia 2.44 t/m3, Sub-horizontal bedding 2.44 t/m3, Waste 2.44 t/m3. • Transitional: Main fault breccia 2.59 t/m3, Footwall breccia 2.47 t/m3, Hanging wall breccia 2.50 t/m3, Sub-horizontal bedding 2.47 t/m3, Waste 2.47 t/m3 • Fresh: Main fault breccia 2.61 t/m3, Footwall breccia 2.58 t/m3, Hanging wall breccia 2.54 t/m3, Sub-horizontal bedding 2.54 t/m3, Waste 2.54 t/m3
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	• Laboratory bulk density measurements are routinely tested. The water immersion method, covering void spaces with clear tape, is appropriate to adequately account for porosity. • The immersion method used on diamond core is an industry standard method that accounts for vugs, porosity, and some void spaces.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• An average bulk density based on mineralisation domain, weathering and lithology coding has been assigned for tonnage reporting.

Criteria	JORC Code explanation	Commentary
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	• Mineral Resources were classified as Measured, Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. Additional considerations were the stage of project assessment, amount of DD drilling undertaken and current understanding of mineralisation controls. • Measured Mineral Resources were defined where a strong level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where: – Blocks were well supported by drill hole data with the average distance to the nearest sample being within 10 m or less. – Estimation quality was considered good, as delineated by kriging efficiency above 0.9. • Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where: – Blocks were well supported by drill hole data with the average distance to the nearest sample being within 25 m or less. – Estimation quality was considered reasonable, as delineated by kriging efficiency between 0.6 and 0.9. • Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where: – Blocks were supported by drill hole data with the average distance to the nearest sample being within 50 m or less. – Estimation quality was considered low, as delineated by kriging efficiency below 0.6. • The above criteria were used as guidelines, and final block classification was within a boundary that approximated the classification criteria visually. As such, there may be blocks that do not satisfy the above criteria. • The reported Mineral Resource for open pit is constrained within the selected FS pit design, and above 0.15% TREO COG. • The reported Mineral Resource for underground is reported taking into account possible mechanised mining methods, and 0.15% TREO COG. • Resources were reported inside the tenement M80/627. • Mineralisation within the model which did not satisfy the criteria for classification as Mineral Resources remained unclassified.

Criteria	JORC Code explanation	Commentary
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	• Mineralisation classified, but which did not meet the requirements of Reasonable prospect for eventual economic extraction were excluded from the MRE.  • Image above showing Main zone MRE classification for Open pit (>325mRl) and Underground <325mRl. (No COG applied) Red = measured, Green =indicated, blue = inferred. Grey wireframe = topographic surface. Black wireframe = Pilot plant trial open pit.  • Image above showing Main zone MRE classification for Open pit (>325mRl) and Underground <325mRl. (0.15% TREO COG applied) Red = measured, Green =indicated, blue = inferred. Grey wireframe = topographic surface. Black wireframe = Pilot plant trial open pit.

Criteria	JORC Code explanation	Commentary
Classification	*Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*	• Appropriate account has been taken of relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	• The Competent Person believes that the classification applied appropriately reflects the confidence which can be assigned to the grade and tonnages estimates.
Audits or reviews	*The results of any audits or reviews of MREs.*	• The Mineral Resource Estimate (MRE) of global rare earth oxide resources at the Wolverine deposit (as at 22 July 2024) was compiled by Entech Pty Ltd (Entech), under supervision of the Northern Minerals Competent Persons (Kurt Warburton and Dale Richards). • During the compilation process Northern Minerals and Entech engaged in peer review of approaches to domaining, interpolation and classification. Internal data audits and validation processes focused on independent resource tabulation, block model validation and verification of technical inputs. • Entech considers that the MRE is suitable for reporting to the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves 2012 (the JORC Code) guidelines and for input into feasibility mining studies. • An Independent audit of the Mineral Resource estimate was conducted by AMC Consultants PTY Ltd (AMC) • AMC considers the Global MRE is suitable for reporting to the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves 2012 (the JORC Code) guidelines and for input into feasibility mining studies.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the MRE using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	• The available data supports a combination of Measured, Indicated and Inferred based upon the geological understanding of the deposit, geological and mineralisation continuity, drillhole spacing, search and interpolation parameters and analysis of available density information. • Consideration has been given to all factors that are material to the Mineral Resource outcomes, including but not limited to confidence in volume and grade delineation, quality of data underpinning Mineral Resources, mineralisation continuity and variability of alternate volume interpretations and grade interpolations (sensitivity analysis). • In addition to the above factors, the classification process considered nominal drill hole spacing, estimation quality (number of holes, number of samples, distance to informing samples), specifically. • All factors that have been considered when classifying the Mineral Resource are discussed in Sections 1, 2 and 3 of this table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	• The Mineral Resource Statement relates to global tonnage and grade estimates.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Campaign production data from the processed component of the Wolverine Trial Pit stockpile volumes are limited, and do not provide adequate volume for production reconciliation studies. The Stockpile Mineral Resource estimate includes volumes extracted from the Wolverine Trial Open Pit and The Gambit West Trial Open Pit.

Browns Range Pilot Plant Stockpile Mineral Resource Estimation

Matters relating to **Section 1 Sampling Techniques and Data, Section 2 Reporting of Exploration Results**, and **Section 3 Estimating and Reporting of Mineral Resources**, of Table 1 have been included in the still current ASX announcement released by Northern Minerals on 28 September 2018 ("Mineral Resource and Ore Reserve update – Post Trial Mining Operations at June 30 2018", available at www.northernminerals.com.au).

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The stockpiles were sampled while in-situ using a combination of Reverse Circulation and diamond drilling, prior to excavation. • Diamond drill holes used in the estimation were NQ and HQ variant sized core. RC drilling was with nominal diameters of either 115mm or 140mm. Diamond core was orientated using the Reflex ACT orientation tool. RC drilling was completed using face sampling hammer. • Diamond core was drilled using either double or triple tube at HQ and NQ sizes. HQ variants were employed for shallower parts of the hole depending on prevailing ground conditions, while the majority of diamond core intercepts within the mineralisation are at NQ size and sampled at a nominal one metre interval (constrained to within geological intervals). RC drill holes were sampled at one metre intervals exclusively and split targeting 2-5 kilogram sample weight. Diamond and RC samples were dried, crushed, split and pulverised by Intertek Genalysis Laboratory in Perth prior to analysis of the rare earth element suite using ICP-MS.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond drilling utilised triple tube techniques and drilling fluids in order to assist with maximising recoveries. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. Recovered core was measured and compared against driller's blocks .RC sample recoveries were visually checked for recovery, moisture and contamination. The cyclone and splitter were routinely cleaned ensuring no material build up.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Diamond core recovery was not assessed. RC recovery was assessed via subjective assessment based on volume recovered. RC recoveries were observed to be generally acceptable at field inspections. RC and diamond recovery information is recorded in the geologist logs and entered into the database. • Diamond drilling utilised triple tube techniques and drilling fluids in order to assist with maximising recoveries. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. Recovered core was measured and compared against driller's blocks. Geologists were based at the RC rig, and inspected regularly to ensure procedures being used. RC samples were visually checked for recovery, moisture and contamination. The cyclone and splitter were routinely cleaned ensuring no material build up. No known relationship exists.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Diamond core was geologically and geotechnically logged using predefined lithological, mineralogical and physical characteristics (such as colour, weathering, fabric) logging codes. RC logging was completed on one metre intervals at the rig by the geologist. The information collected is sufficient to support mineral resource estimation, mining studies, metallurgical studies. • Logging was generally qualitative in nature except for the determination of core recoveries and geotechnical criteria such as RQD and fracture frequency which was quantitative. Core photos were collected for all diamond drilling. All recovered intervals were geologically logged.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Diamond core was cut in half using an electric core saw. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features, together with indicative results from hand held XRF measurements. Core selected for duplicate analysis was further cut to quarter core with both quarters submitted individually for analysis. Where possible, core was sampled to leave the orientation line in the core tray. • RC samples were collected from the full recovered interval by either riffle splitting or using a static cone splitter. The majority of samples were collected dry with a minor number being moist due to ground conditions or excessive dust suppression. Samples were split without drying. • The sample preparation techniques employed for the diamond and RC samples follow industry standard practice at Intertek Genalysis Laboratory in Perth. Samples are oven dried, crushed if required and pulverised prior to a pulp packet being removed for analysis. • Duplicates are taken at the following stages and analysed to assess acceptability of sub-sampling;Field Split;Coarse Crush Dup;Pulp Dup. • Field splits were regularly taken from RC samples. Quarter core splits were taken from Diamond samples. Results obtained indicate sampling suitable for Mineral Resource Estimation • Sample sizes are appropriate to the grain size of the mineral being sampled.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples assayed by Intertek Genalysis for rare earth elements were fused with sodium peroxide within a nickel crucible and dissolved with hydrochloric acid for analysis. Fusion digestion ensures complete dissolution of the refractory minerals such as xenotime. The digestion solution, suitably diluted, is analysed by ICP Mass Spectroscopy (ICP-MS) for the determination of the REE (La – Lu) plus Y, Th, U. The technique is considered total. Northern Minerals extensively uses portable X-ray fluorescence (pXRF) technology. • In the field a series of Niton (XL3T-950 GOLDD+) XRF hand held tools were used to assist with the identification of mineralized zones for sample collection and submission. A reading time of 30 seconds was used, with readings taken for every metre of RC drilling. Intervals for which readings returned Yttrium (Y) of 200ppm or greater were selected for laboratory analysis, as were a selection of sub 200ppm Yttrium samples. As of 2014, samples submitted for analysis at Intertek Genalysis have been analysed by pXRF following the standard laboratory preparation, i.e., drying, splitting, pulverisation. Yttrium was analysed using an Olympus InnovX Delta Premium, 30 second reading time. Only selected samples have then been progressed to full analysis via ICP-MS. Where pXRF analysis were used in the Mineral Resource estimates, the final rare earth element values were assigned from the raw analysis using correlation studies upon samples for which both pXRF and ICP-MS were available. Rare Earth Oxide derived from pXRF instruments contributes 5% of the contained Rare Earth Oxide in this total Mineral Resource estimate. In the Indicated classification material, it represents 4% of the metal. In the Inferred classification material, it represents 22% of the metal.iCertified reference materials, using values across the range of mineralisation, were inserted blindly and randomly. Results highlight that sample assay values are suitably accurate and unbiased. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. Umpire laboratory campaigns are used to routinely conduct round robin analysis. Results of round robin analysis are acceptable.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Diamond drill core photographs have been reviewed for the recorded sample intervals. High range values are routinely resubmitted for repeat analysis with results comparing within acceptable limits. • Twinned holes, Diamond to RC, have been conducted with results being comparable and acceptable. • Earlier primary data (2011) was collected using paper logs and transferred into Excel spreadsheets for transfer into the drill hole database. Since early 2012, primary data was collected into a proprietary logging package (OCRIS) with in-built data validation. Details were extracted and pre-processed prior to loading. In 2011 and 2012 data was managed and stored off site using acQuire software. In 2013 Datashed was used as the database storage and management software and incorporated numerous data validation and integrity checks, using a series of defined data loading tools. Since 2013, data is stored on a SQL server subject to electronic backup. Where ICP-MS analysis were available from the laboratory no modification were made. Low range samples were analysed by pXRF and not by ICP-MS, and in these instances final REE grades were assigned on the basis of regression studies.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill collar locations were surveyed using high accuracy GPS. Down hole surveys were completed using single shot or multi shot cameras at the time of drilling with down hole gyroscopic surveys conducted at the completion of drilling where practical. Survey accuracy of both collars and down hole is considered acceptable. • The grid system used is MGA94 Zone 52. All reported coordinates are referenced to this grid. • Topographic control is based on Lidar survey data collected in 2013 with accuracy considered to be better than 20cm.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drill spacing, while variable, on average is 35BCM of Mineral Resource per 1m of drilled sample. • The degree of geological and grade continuity demonstrated by the data density is sufficient to support the definition of Mineral Resources and the associated classifications applied to the Mineral Resource estimate as defined under the 2012 JORC Code. • No compositing was performed on the samples prior to laboratory analysis.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• All mineralisation is interpreted to be a steeply dipping, roughly planar features striking generally east-west and dipping at 75-90 degrees. Resource drilling is exclusively conducted at mainly -60 degrees dips and as such drill holes intersect the mineralisation at acceptable angles. As such the orientation of drilling is not likely to introduce a sampling bias. The orientation of drilling with respect to mineralisation is not expected to introduce any sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Samples are collected on site under supervision of a responsible geologist and stored in bulka bags on site prior to transport by company truck or utility to Halls Creek commercial transport yard. The samples were stored in a secure area until loaded and delivered to Intertek Genalysis Laboratory in Perth. Laboratory dispatch sheets are completed and forwarded electronically as well as being placed within the samples transported. Dispatch sheets are compared against received samples and discrepancies reported and corrected.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All relevant data was reviewed by the competent person in the course of this Mineral Resource estimation. Review of the data integrity and consistency of the drill hole database shows sufficient quality to support resource estimation.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The deposit is located wholly within Mining Lease M80/627. The tenement is located in the company's Browns Range Project approximately 150 kilometres south-east of Halls Creek and adjacent to the Northern Territory border in the Tanami Desert. Northern Minerals owns 100% of all mineral rights on the tenement. The Jaru Native Title Claim is registered over the Browns Range Project area and the fully determined Tjurabalan claim is located in the south of the project area. • The tenement is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• This Mineral Resource is not insitu. Not relevant for reporting a stockpile Mineral Resource.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• This Mineral Resource is not insitu. Not relevant for reporting a stockpile Mineral Resource.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *– easting and northing of the drill hole collar* *– elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *– dip and azimuth of the hole* *– down hole length and interception depth* *– hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No exploration results have been reported in this release. This section is not relevant to reporting Mineral Resources.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No exploration results have been reported in this release. This section is not relevant to reporting Mineral Resources.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• No exploration results have been reported in this release. This section is not relevant to reporting Mineral Resources.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• No exploration results have been reported in this release. This section is not relevant to reporting Mineral Resources.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• No exploration results have been reported in this release. This section is not relevant to reporting Mineral Resources.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No exploration results have been reported in this release. This section is not relevant to reporting Mineral Resources.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• No exploration results have been reported in this release. This section is not relevant to reporting Mineral Resources.

Section 3: Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• 2011 drilling was logged onto paper and transferred to a digital form for loading into the drill hole database. In an effort to cut validation time and errors, from 2012 logging was completed directly onto a laptop in the field using a proprietary geological logging package with in-built validation. All data transfer is electronic, with no double handling of data. Sample numbers are unique. Logging and survey information was reviewed by the responsible geologist prior to final load into the database. The data is stored in a single database for the Browns Range project. • The first validation starts with the field logging software package during data entry. Data validations are routinely run prior to uploading of data to the database. Many check routines and rules are run to ensure referential integrity, such as overlapping intervals, repeat sample IDs, out of range density measurements, survey azimuth deviations >10 degrees, drill hole dip deviations >5 degrees, and missing samples have been developed firstly using AcQuire (2011-12) and then in Datashed (2013).Before Resource Estimation commenced, the data was checked for: Excessive survey deviation, missing/overlapping/duplicate sample interval. Holes were visually plotted in SURPAC and reviewed for obvious location errors.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Competent person, Bill Rayson, has visited Browns Range. No fatal flaws identified.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• This Mineral Resource is not insitu. Not relevant for reporting a stockpile Mineral Resource.

Criteria	JORC Code explanation	Commentary
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• This Mineral Resource is not insitu. Not relevant for reporting a stockpile Mineral Resource.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Grade estimation using Ordinary Kriging (OK) was completed for the Mineral Resource, using Surpac software. Potentially economic elements Yttrium, Lanthanum, Cerium, Praseodymium, Neodymium, Samarium, Europium, Gadolinium, Terbium, Dysprosium, Holmium, Erbium, Thulium, Ytterbium and Lutetium were estimated in standard oxide forms. Total rare earth oxide was then estimated as the sum of the estimated values for La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 +Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 +Y_2O_3. Additionally, the elements uranium and thorium were estimated as elements of potential interest. The ore block markout was used to define the mineralisation domains. The mineralisation domains were used as hard boundaries to select sample populations for data analysis and grade estimation. Sample data was composited to one metre downhole lengths. Maximum search radius was 25m, 5 samples minimum, 25 samples maximum. • No mill reconciled production records exists. • No assumptions were made regarding recovery of by-products. • Estimates were undertaken for U and Th as potential deleterious elements. • This Mineral Resource is not insitu. Block size is not relevant for reporting a stockpile Mineral Resource. • This Mineral Resource is not insitu. Selective mining unit size is not relevant for reporting a stockpile Mineral Resource. • Strong correlation exist (r>0.8) between Y and Sm Eu Gd Tb Dy Ho Er Tm Yb Lu. Similarly, strong correlations exist between Ce and La, Pr, Nd. These correlations have been used in the Mineral Resource estimate to assist with variography and to assign a calculated pXRF grade for elements where no ICP-MS data is available. • The dig block outlines are used to define the mineralisation domains. The mineralisation domains are used as hard boundaries to select sample populations for variography, statistical analysis and estimation. • Decile/Percentile plots, histograms and cumulative probability curves were plotted. No grade cutting or capping was performed. • Block model grades were compared to input composite grades. No reconciliation data is available yet.

Criteria	JORC Code explanation	Commentary
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The density was measured on a mixture of air dried core in the field plus samples checked externally by Genalysis Laboratory(Perth), which were oven dried. Therefore, the tonnages are estimated on a dry basis. The moisture content in mineralisation is considered low.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• No cutoff parameters are applied as no further selectivity is assumed possible. This report is for stockpiled material, and each stockpile has been considered for reporting on the estimated grade of the entire stockpile.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• This is a stockpiled estimate. It has already been mined. Mining loss and recovery factors were applied retrospectively to the insitu estimate to estimate the stockpiled material grade; Gambit West High Grade, 2% Loss, 18% dilution; Gambit West Medium Grade, 2% Loss, 15% dilution; Gambit West Low Grade, 12% Loss, 5% Dilution; Wolverine High Grade, 5 % Loss, 6% dilution; Wolverine Medium Grade, 5% Loss, 5% Dilution; Wolverine Low Grade, 5% Loss, 5% dilution.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Browns Range mineralisation has an extensive history of metallurgical testwork. The majority of testwork has been performed on the Wolverine Deposit, it is reasonable to expect that Gambit West mineralisation will be amenable to similar processing routes. This stockpile estimate contains material from both Gambit West and Wolverine deposits.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• This material is stockpiled for imminent processing at a fully permitted and operational Pilot Plant Processing facility.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density has been estimated from density measurements carried out on diamond core samples of variable length using the Archimedes method of dry weight versus weight in water. Where diamond core coverage was insufficient, grab samples were taken during mining for similar, Archimedes, analysis. • The water immersion method is appropriate to adequately account for porosity in typical Browns Range rock types. • Density in the mineral resource ranged from 2.4 (waste) to 2.59 (high grade). Densities were set by oreblock type and deposit

Criteria	JORC Code explanation	Commentary
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Classification is based upon overall reliability of markups, mineralization continuity, data density and clustering, proportion of metal derived from pXRF regression analysis and grade modelled insitu during mining. Mining practice has also been considered. • Appropriate account has been taken of relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data. • The result appropriately reflects the Competent Persons view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate has not been audited.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. eThese statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Mineral Resource classification applied to the stockpiles implies a confidence level and level of accuracy in the estimates. The Indicated portion of the Mineral Resource has medium confidence, the Inferred portion has low confidence. • These levels of confidence and accuracy relate to the global estimates of grade and tonnes for the stockpiles. • No (mill reconciliation) production data is available yet.

Section 4: Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	*Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*	Mineral Resource estimates for Wolverine deposit and the Browns Range Pilot Plant (BRPP) stockpile, as reported to the ASX on 16 January 2025, were used as the basis for conversion to the Ore Reserve. The Ore Reserve estimate is based on the Measured and Indicated portions of the reported Wolverine MRE, and the Indicated portion of the BRPP stockpile.
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Mineral Resources are reported inclusive of the Ore Reserves.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The Competent Person conducted a site inspection on 21 July 2023 including confirmatory inspection of existing mining voids, stockpiles, and site infrastructure.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Study Status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*	The Ore Reserve is reported as an outcome of a Definitive Feasibility Study on the Browns Range HRE Project completed in August 2025.
	The Code requires that a study to at least Pre-Definitive Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	Modifying factors accurate to the study level have been applied, and the resulting mine plan is technically achievable and economically viable.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	A "Net Processing Revenue" (NPR) function was modelled at the block level, based on in situ block grades, processing recoveries, costs (processing, general and administration), royalties, exchange rate, product price. Wolverine open pit mine planning assessment incorporated estimated open pit mining costs by rock type and elevation in the cut-off value, and mined material was classified as ore if NPR > 0 on a fully costed break-even basis, with incremental (variable cost only) cut-off value of NPR > (A$47) for ore within the pit shell. Wolverine underground mine planning assessment used estimated underground mining costs as the fully costed break-even, and isosurfaces representing NPR > A$90 and NPR >A$50 were used to inform the production envelope for the sublevel cave, the latter representing incremental cost. No NPR cut-off value was specified for the BRPP stockpile as it is an existing discrete parcel of selectively mined ore. The grade of the stockpile is sufficient to justify processing, considering the associated costs, including rehandling to deliver to the new process plant for treatment. The mine plan was validated against final cost and value modelling for the Definitive Feasibility Study

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	*The method and assumptions used as reported in the Pre-Feasibility or Definitive Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	Mineral Resource material was converted to Ore Reserves after completing an optimisation process, detailed mine designs and mining schedules, and associated financial assessment.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	The Ore Reserve is planned to be mined using conventional surface and underground mining methods, using standard diesel-powered mobile fleets. The selected mining methods are appropriate for the deposit based on orebody geometry, geotechnical setting, and economic considerations; unit processes are well-known and widely used. Open pit mining operations will be undertaken by a specialist open pit mining contractor and are planned around a 200 t-class excavator and 90 t trucks. 100% of material is assumed to be drilled and blasted using emulsion-type explosives and 5 m bench heights. Minimum working width 25 m has been applied based on the proposed fleet. Underground mining operations will be undertaken by a specialist underground mining contractor and planned around twin boom jumbo development, 89 mm production drilling, and haulage by 60 t trucks. Underground production will be predominantly via end-on longitudinal sublevel caving, mined on 25 m sublevel intervals. Additional minor discrete areas are planned to be extracted via longhole open stoping. Emulsion-type explosives have been assumed. The existing BRPP stockpile at site will be reclaimed and fed to the new process plant.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Independent consultants prepared the geotechnical analysis and provided relevant parameters for open pit and underground mine design. Also, underground design parameters including material flow modelling, development profiles, and ground support requirements have been analysed with the resulting recommendations used in mine design. Analysis for underground mining also included sequence and schedule parameters for management of caving operations. Open pit grade control was assumed to be carried out in two stages of reverse circulation drilling, planned from surface prior to mining operations and from within the pit during mining operations. Underground grade control drilling was assumed to be carried out from surface prior to mining operations and from underground locations during mining operations.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	*The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*	Mineral Resources used for optimisation, and assumptions around cut-off grades are as detailed previously in this Section 4.
	The mining dilution factors used. *The mining recovery factors used.* *Any minimum mining widths used.*	Open pit model blocks were reblocked to 5m x 5m x 5m to simulate the selective mining unit (SMU) size based on the geometry of the orebody and the size of the proposed mining equipment, resulting in dilution of 8% and ore loss of 7%. Underground production shapes were designed assuming a minimum mining width of 5 m. Cave flow modelling reported dilution of 27% and mining loss of 7%. An additional factor for operational effectiveness was applied resulting in an overall mining loss of 17%. No dilution or mining loss factors have been applied to ore drive development.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion	Ore Reserve estimation is supported by Definitive Feasibility Study level mine designs targeting only the Measured and Indicated Mineral Resource. While the Ore Reserve is primarily based on Measured and Indicated Mineral Resources, the mine design necessitates the inclusion of approximately 3% by mass of Inferred Mineral Resource material. The cost of mining and processing this Inferred material has been accounted for, however it is attributed zero metal grades and does not contribute to payable metal. The Ore Reserve is technically and economically viable without the inclusion of Inferred Mineral Resource.
	The infrastructure requirements of the selected mining methods.	Required mining infrastructure has been allowed for in the Definitive Feasibility Study capital and operating cost estimate and is considered typical for a modern mining operation in this jurisdiction (e.g. mining offices, workshops, stores facilities, laydown areas, power distribution, dewatering equipment, ventilation equipment, explosives storage compound, haul roads).
Metallurgical factors or assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* *Whether the metallurgical process is well-tested technology or novel in nature.*	The metallurgical process was developed to a Definitive Feasibility Study level including the development of a flowsheet and capital and operating costs. The flowsheet consists of crushing, two-stage grinding (SAG mill and ball mill), low intensity and high intensity magnetic separation, flotation, and concentrate filtration, drying and bagging. The process stages are based on well understood conventional unit operations. There are no un-tested novel processes used within the flowsheet. Extensive bench and pilot scale test work has confirmed the process flowsheet is effective in achieving high recoveries from the xenotime mineralisation.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	*The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*	Bench scale test work has been completed for all process unit operations. A pilot scale test was completed at SGS pilot facility in 2013, and a pilot plant was constructed on site at Browns Range and operated from 2018 to 2021. A comprehensive variability test work program for the Wolverine deposit was completed in 2024 with 27 composites selected for variability test work spatially along strike and at depth, and with varying lithology; and the process was determined to be robust. Results of the variability test work demonstrate an overall TREO recovery of 84%.
	Any assumptions or allowances made for deleterious elements.	In addition to the rare earth elements, 17 potential deleterious elements have been estimated in the Wolverine mineral resource block model. The presence of deleterious elements in the Wolverine ore does not impact the processing circuit design or the performance of the processing plant. The suite of assays on the flotation concentrate products for the 2024 Wolverine variability test work program included all the impurity elements defined in the concentrate supply agreement, and determined that the concentration of impurity elements in the concentrate product meets the specifications for deleterious elements in the rare earths concentrate supply agreement (Iluka Supply Agreement). No allowances have been made for deleterious elements.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	A bulk sample totalling 98.3 t was collected from Browns Range in late 2013, which included 15.5 t of drill core sample, with 8.6t from Wolverine and 6.9 t from the Gambit West deposit. The sample processed through the pilot facility at SGS Perth consisted of 90.2 t of the bulk sample, which was composited into three discrete master composite samples. A pilot plant was constructed on site at Browns Range and operated from 2018 to 2021, which processed approximately 46,000 t of feed sourced from trial pits in the Wolverine and Gambit West deposits. Wolverine and Gambit West are both structurally controlled hydrothermal breccia deposits that occur in the Browns Range Metamorphics approximately 1km apart. They have very similar rare earth element distributions and TREO grades. Representativeness of these samples to the entirety of the Wolverine deposit has been assumed due to the similar xenotime mineralogy.
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	The flowsheet has been designed and demonstrated to produce a mineral concentrate that satisfies the specifications of offtake partner Iluka Resources (Iluka) for downstream processing at their Eneabba refinery.

Criteria	JORC Code explanation	Commentary
Environmental	*The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Multiple baseline biological studies have been conducted for the Project from 2014 to 2025, including flora, vegetation, vertebrate fauna, stygofauna, short-range endemic invertebrate species and aquatic invertebrate species. In addition, environmental monitoring on site since 2014 provides a substantial baseline dataset. Hence the Project's potential environmental impacts are well understood. Baseline studies informed environmental impact assessments to support key regulatory approvals. Ministerial Statement 986 was issued in October 2014, with Section 45C Variations approved since as required. The Project has twice been determined (2014 and 2019) to be "not a controlled action" under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act). A change in processing method and resultant increase in radioactivity of the rare earth concentrate means that the Project triggers referral again under the EPBC Act. The referral was submitted to Department of Climate Change, Energy, the Environment and Water in April 2025. Secondary environmental approvals are in progress and on-track to support the full-scale Project development timeline. Waste characterisation studies found waste rock from Wolverine deposit to be low risk for acidic, saline or metalliferous seepage. Waste rock management will involve co-disposal to the waste rock landform (WRL). Tailings from the Project are not considered a radioactive waste material. The WRL location was selected based on the proximity to the Wolverine deposit, lack of mineralisation in this location, suitable geotechnical conditions and suitability to control surface water. The WRL is designed with a perimeter drain which captures any water in contact with the waste rock and this water exits the drainage system via a sediment retention pond.

Criteria	JORC Code explanation	Commentary
Infrastructure	*The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	The site is remote, located in the East Kimberley region of Western Australia. Existing infrastructure includes an 80-person village, airstrip (suitable for aircraft up to 5,700 kg), site access road, water supply, offices, training room and communication links which will support initial construction. The Definitive Feasibility Study comprehensively estimates the costs for all necessary infrastructure items to support the Project including: 352-person village; non-process infrastructure such as offices and workshops; hybrid power station suitable for a maximum demand of 11 MW; fuel storage facilities; tailings storage facility; upgraded access road and on-site roads; upgraded drainage protection; upgraded airstrip suitable for ICAO Code 3C aircraft; upgraded water supply system; upgraded communications systems.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.*	Competitive tender processes were used for key capital cost estimate drivers, namely the process plant, open pit and underground mining and power supply. Other capital cost estimate drivers, including bulk earthworks, were developed based on bills of quantities compiled by engineering consultants based on Definitive Feasibility Study level designs and contractor rates. Budget or database pricing was used for small low risk scopes of work. The estimate for first fills, equipment spares, mobile equipment and commissioning costs are based on market pricing, process plant contractor's recommendations and internal plant operability reviews. Owner's costs were built up on a first principles basis from unit activities and market pricing.
	The methodology used to estimate operating costs.	Operating costs were sourced from competitive market pricing where applicable. Mining operating costs were largely sourced from quotations provided by mining contractors and first principles estimations by independent consultants. Processing, and general and administration operating costs were built up on a first principles basis from unit activities and market pricing. Budget or database pricing was used for low value and low risk items.
	Allowances made for the content of deleterious elements.	The Iluka Supply Agreement includes limits for deleterious elements. All deleterious elements are expected to be within their limits as confirmed during the 2024 variability test work program of the Wolverine deposit, with no additional cost associated with the deleterious elements required. The transport cost of the concentrate product with hazardous classification UN2912 to the Eneabba Refinery has been allowed for.

Criteria	JORC Code explanation	Commentary
Costs	*The source of exchange rates used in the study.*	NTU maintains internal corporate guidance on exchange rates based on current exchange rate and compilation of external advice. The DFS has assumed an US$:A$ exchange rate of 0.65:1.
	Derivation of transportation charges.	All infrastructure components and consumables are assumed delivered to site at estimated road haulage rates received from market pricing for both capital and operating cost estimates. NTU is responsible for the cost of concentrate product transport to the Eneabba Refinery.
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	Penalties for failure to meet specifications have been included in the financial model, as outlined in the terms of the Iluka Supply Agreement, as an adjustment to the product price.
	The allowances made for royalties payable, both Government and private.	Allowances have been made for royalties, land access payments and mine rehabilitation fund. Total royalties of 4.5%, including State Government and Private.

Criteria	JORC Code explanation	Commentary
Revenue factors	*The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*	The rare earth concentrate product price has been assigned based on its full expected elemental makeup including all revenue drivers and deleterious components. The revenue is a function of diluted block modelled grade, modelled comprehensively through the mining, mineral processing and transportation chain where it is expected to be delivered to Iluka under the terms of the Iluka Supply Agreement. The mine planning underpinning the Ore Reserves was conducted using preliminary, fixed point product pricing that was suitable for block model coding and mine design. In the final financial analysis, revenue was then recalculated using an updated pricing model. NTU are party to the Iluka Supply Agreement that provides for both a fixed price component and a market driven price sharing component payable on the rare earth oxides contained in the rare earth concentrate. The financial assessment has assumed that the Iluka Supply Agreement and pricing structure remains in place after the total contracted quantity of 30,500 t contained TREO has been delivered to Iluka under the terms of the agreement. It has also been assumed that any annual production volumes in excess of the 5,500 tpa maximum annual quantity are subject to Iluka exercising its right of first refusal and purchasing the excess volumes as per the agreement pricing structure.
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	REO basket pricing was adopted for the Definitive Feasibility Study based on forecast long-term REO price curve provided by external market forecaster CRU. REO basket pricing forecasts are based on the current and future expected supply and demand for REO's and the associated costs to bring REO's to market. The pricing mechanism used to determine the payable price for each REO is based on the Iluka Supply Agreement. The product from Browns Range will be sold as a rare earths concentrate at a grade of approximately 25% TREO.

Criteria	JORC Code explanation	Commentary
Market assessment	*The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*	The key value drivers of the Project are considered to be dysprosium and terbium. Market analysis commissioned by NTU suggests growing demand for these elements into the future, predominantly centred around the global push for decarbonisation. There are significant geopolitical and strategic factors presenting supply risks for dysprosium and terbium. These include restrictions on import and export from China (the largest producer and processor of rare earth products), import tariffs being applied from the US, as well as ongoing supply uncertainty of REO's from Myanmar due to political instability and environmental destruction from rare earth mining.
	A customer and competitor analysis along with the identification of likely market windows for the product.	A review of publicly released information from potential competitors suggests the Project to be extremely competitive in provision of dysprosium and terbium with Browns Range currently having one of the largest known deposits of Heavy Rare Earth Elements globally outside of China. Key factors supporting the medium to long-term outlook for Dy/Tb include: • Surging demand for NdFeB permanent magnets driven by global push for decarbonisation and accelerating growth in EV and wind turbine applications as well as the emerging robotics sector. • Limited new sources of supply both within and outside China. • China's continued enforcement of strict rare earth mining quotas and export restrictions. • Strategic and geopolitical factors driving governments to strengthen supply chains for REEs, particularly HREs. • Emerging development of rare earth refining projects and expansions, driving further demand for rare earth concentrate and feedstock.
	Price and volume forecasts and the basis for these forecasts.	Based on the Ore Reserve estimate and design plant capacity, NTU forecasts a total supply of circa 40,000 t of TREO contained in the rare earth concentrate. The independent commodity price forecast incorporates global supply and demand estimates.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	The Iluka Supply Agreement is in place post metallurgical testing by both NTU and Iluka. The Iluka Supply Agreement deals with impurities and product that is out of specification and has been allowed for in the mine modelling and production scheduling.

Criteria	JORC Code explanation	Commentary
Economic	*The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.*	For the purpose of evaluating an Ore Reserve, an NPV was estimated at a discount rate of 8%, based on a detailed financial model. The confidence in the inputs to the financial model is consistent with a Probable classification of the entire Ore Reserve. The Ore Reserve has a positive NPV.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Sensitivity analysis has been undertaken within the detailed financial model on key economic assumptions. The Ore Reserve generates positive NPV within a range of +10/-5 % for key assumptions. NPV is most sensitive to variations in REO pricing, feed grade, and processing recovery.

Criteria	JORC Code explanation	Commentary
Social	*The status of agreements with key stakeholders and matters leading to social licence to operate.*	NTU has native title agreements in place with the Jaru and Tjurabalan Peoples who hold determined native title over the Project area. NTU meets regularly with these groups. NTU engages regularly with the local and regional community and participates in events, workshops, and information sessions; especially with the nearby communities of Kundat Djaru (Ringer Soak) and Halls Creek. NTU engages regularly with the Kimberley business community, primarily through the East Kimberley Chamber of Commerce and Industry and the Broome Chamber of Commerce and Industry. Local businesses are used whenever possible. On 8 December 2023, the Browns Range Heavy Rare Earths (HRE) Project Australian Industry Participation (AIP) Plan was approved by the Australian Industry Participation Authority. The plan outlines how NTU will ensure Australian entities will have full, fair, and reasonable opportunity to bid for the supply of key goods and services ($1 Million and above) for the Project. NTU has set up a Browns Range Heavy Rare Earths Project gateway on the Industry Capability Network (ICN) W.A. This gateway allows all interested parties to register their interest in Project opportunities and will be used to advertise Project work packages. NTU have and will continue to undertake comprehensive archaeological heritage and ethnographic surveys for the Project development footprint. All Project infrastructure and associated disturbances have taken any findings from these surveys into account and ensured that an agreed action to manage these locations with the associated groups is undertaken. Some of these agreed actions may be protection and education of sites, choosing alternate location for proposed disturbance and relocation of artifacts or items of interest.

Criteria	JORC Code explanation	Commentary
Other	*To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*	Intentionally left blank
	Any identified material naturally occurring risks.	A risk assessment has been used to capture any current or identified risk and their associated mitigations. The process to assess and mitigate naturally occurring risks is ongoing and will form part of ongoing studies and eventually implementation of the Project. NTU are of the opinion that currently, all naturally occurring risks have adequate prospects for control and mitigation.
	The status of material legal agreements and marketing arrangements.	A signed rare earths concentrate sale and purchase agreement exists with Iluka. Details of the agreement are available in previously released ASX announcement (26 October 2022, "NTU – Strategic Partnership with Iluka Resources").
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Definitive Feasibility Study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	NTU is the legal holder of 100% interest in all Project critical tenements. All tenements required for development of the Project are granted. All regulatory work programs, rental payments, and reporting obligations have been and continue to be met, and the tenements are all in good standing. The Ore Reserve and proposed mining operation are located on M80/627. All key primary regulatory approvals for the Project are in place. NTU considers that outstanding secondary approvals and licences to operate are on track according to the Project schedule and in line with expected process timelines in Western Australia
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.*	The Ore Reserve has been classified in accordance with the JORC Code 2012. The Probable Ore Reserve is based on that portion of the Measured and Indicated Mineral Resource within the mine designs that may be economically extracted and includes an allowance for dilution and ore loss. There are no Proved Ore Reserves.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The result appropriately reflects the Competent Persons view of the deposit.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	2% of the Probable Ore Reserves have been derived from Measured Mineral Resource.

Criteria	JORC Code explanation	Commentary
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates*	No independent audits or reviews of the Ore Reserve estimate have been undertaken. Internal technical and commercial reviews have been conducted by NTU during the Definitive Feasibility Study process.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Ore Reserve estimate is supported by the outcomes of a concurrent Definitive Feasibility Study conducted to +/-15% level of accuracy. The Ore Reserve is a global estimate. This Ore Reserve is attributed a confidence classification of "Probable" Ore Reserve in its entirety. A degree of uncertainty is associated with the Mineral Resource estimate and the modifying factors. Financial modelling of the Browns Range Project based on the Ore Reserve estimate demonstrates a positive economic outcome. Analysis indicates the key material modifying factors which may have an impact on the accuracy of this assessment are REO pricing, processing recovery, and US$ exchange rate. There is a degree of uncertainty associated with the commodity pricing however the Competent Person is satisfied that the commodity pricing assumptions used to determine the economic viability of the Ore Reserve are based on reasonable current data.

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