



NORTHERN MINERALS

Powering Technology.



Quarterly Activities Report

MARCH 2016

Following the release of the new business plan, Northern Minerals has been focussed on securing offtake and finance for stage one, along with the delivery of an Exploration Target demonstrating significant potential to extend the 100% owned Browns Range Heavy Rare Earth Project's mine life.



Northern Minerals (ASX: NTU) is focussed on the delivery of the heavy rare earth element, dysprosium. NTU has a large landholding in WA and the NT that is highly prospective for this element.

Through the development of the Browns Range Project, NTU aims to be the first significant world producer of dysprosium outside of China. Dysprosium is an essential ingredient in powering clean energy technology applications such as hybrid cars and wind turbines. A key feature of the Project is its xenotime mineralisation which facilitates a relatively simple and cost effective processing flowsheet to produce a dysprosium rich mixed RE carbonate.

Corporate Overview

HIGHLIGHTS

NEW BUSINESS PLAN

three staged approach to develop Browns Range Project – first stage pilot plant, second develop to BFS and then build to full scale.

OFFTAKE & FUNDING

advanced state of offtake negotiations now places Northern Minerals in prime position to evaluate funding options.

EXPLORATION TARGET

demonstrates the potential for very significant increases in Mineral Resource and extension of mine life at the Browns Range Project.

STRATEGIC TENEMENTS SECURED

100% ownership acquired of key tenements around Browns Range and Boulder Ridge.

Browns Range Project

NEW BUSINESS PLAN

A major highlight of the quarter was the announcement of Northern Minerals Limited (ASX: NTU; Northern Minerals or the Company) new business plan to support the Browns Range Project's (the Project) pathway to production.

The new business plan, which separates the Project's development into three stages, is in response to the challenges in the rare earth market and is key to de-risking the full scale operation. This staged approach allows Northern Minerals to test the Project and rare earth market, develop the Project to bankable feasibility study (BFS) level and then build the full scale operation.



Stage 1

The first stage (shown in figure 1) involves the construction of a 60,000tpa pilot plant at Browns Range to test aspects of the Project such as mining and processing, and deliver a product to market (figure 2 illustrates the full scale operation with the pilot plant operations overlay). The three year operation will consist of both a beneficiation and hydrometallurgical process to produce 49,000kg dysprosium in 590,000kg TREO contained in a mixed rare earth carbonate (REC) per annum.

The testwork undertaken in the pilot plant is important for de-risking the development of the full scale operation by providing Northern Minerals the ability to test a number of process flowsheet variables that cannot be replicated in a laboratory. Stage one will also provide improved knowledge of grade control and the geology of each deposit through the commencement of open pit mining.

Figure 1: Stage one operations



The mining operation will consist of an open pit mining campaign over five months from relatively shallow pits at the Wolverine, Gambit West, Gambit Central and Gambit East deposits.

A total 172,080t of mineralised material @ 1.19% TREO, containing 2,047,000kg TREO will be mined and stockpiled ready to be fed into the pilot plant. A 1.19% TREO grade is achieved as a result of higher grade ore near surface of the deposits to be mined and will have minimal impact on the ore grade for the full scale operation.

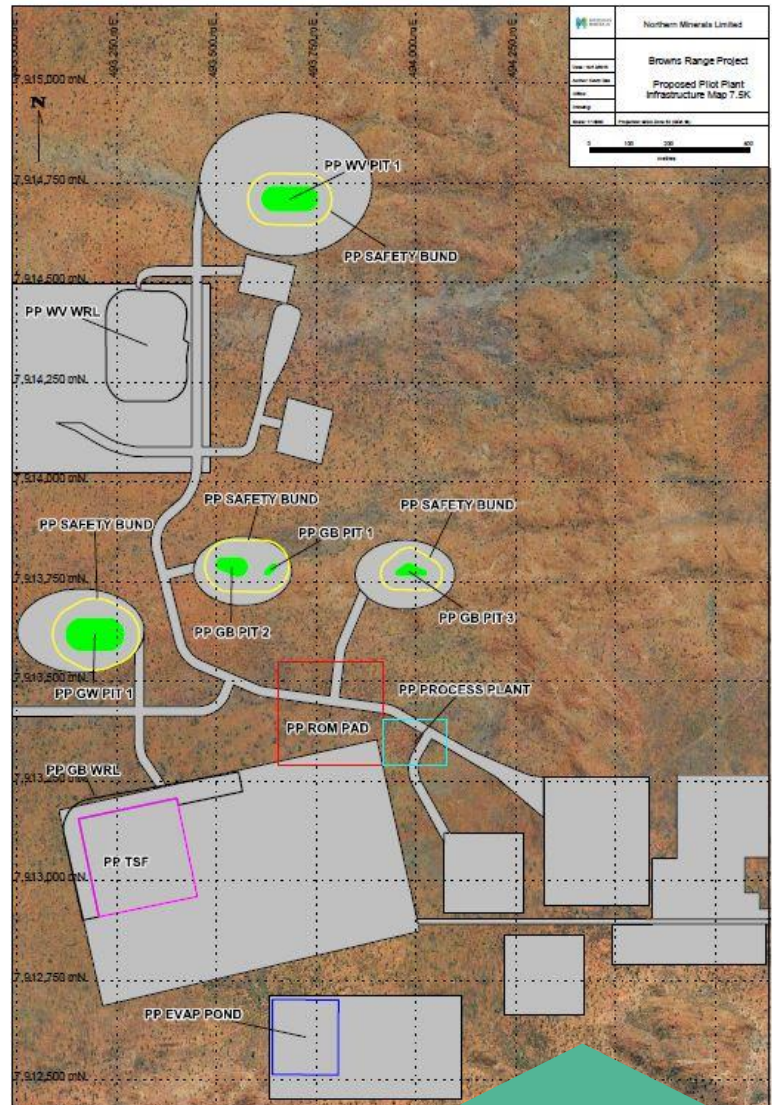
It is estimated that of the 2,047,000kg TREO to be mined and processed through the pilot plant, 75% will be from within the Probable Ore Reserve and 25% will be from Inferred Mineral Resources, which is material that will be carried with the ore within the mine designs.

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 will be realised.

In April, Northern Minerals engaged DRA Global to undertake the detailed engineering design of the pilot plant and deliver a lump sum turnkey contract price for the supply and construction of the beneficiation and hydrometallurgical process pilot plants, and associated services. The delivery time for the work is eight weeks and Northern Minerals expects it to be complete by the end of June.

Construction of stage one is estimated to take nine months once funding is in place.

Figure 2: Full scale operation with pilot plant operations overlay



**Construction
9 months
from funding**

Stage 2

Stage two (shown in figure 3) involves developing the Project to BFS level with the inclusion of the results from the studies aimed at reducing mining costs, boosting production, production of a premium product and increasing the Ore Reserve previously announced (ASX announcement 27 August 2015).

The results of testwork undertaken during the operation of the pilot plant will also be key contributors to the completion of the BFS during stage two.

Figure 3: Stage two project development studies



Stage 3

Following, the stage one pilot plant and completion of subsequent study work and Project BFS as detailed in stage two, Northern Minerals intends to build the full scale Project based on the successful outcomes of these stages, and the Definitive Feasibility Study (DFS) completed in February 2015.

The Project's current Mineral Resource supports an 11 year mine life at full scale production, and with significant scope to expand this through exploration, the Project's future is promising. The full scale operation will use a combination of open pit and underground mining methods to extract 585,000t @ 0.66% TREO per annum, which will be treated through a beneficiation and hydrometallurgical plant.

The beneficiation plant will have the capacity to treat up to 585,000t of ore to produce approximately 16,700t of mineral concentrate at a grade of 20% TREO per annum¹. The hydrometallurgical process will then further treat the 16,700tpa of mineral concentrate to produce 279,000kg of dysprosium, contained within 3,098,000kg TREO per annum¹, prior to yttrium rejection.

Once the Project reaches full production it is envisioned the pilot plant, that will be modularised and containerised, be transported and utilised to evaluate other exploration projects such as John Galt (WA).

¹ This public report cross-references the initial public report (the DFS announcement of 2 March 2015) made in accordance with 5.16 and/or 5.17. The entity confirms in this public report that all the material assumptions underpinning the production target, or the forecast financial information derived from a production target, in the initial public report referred to in rule 5.16 or rule 5.17 (as the case may be) continue to apply and have not materially changed.

OFFTAKE AND MARKETING

With the new business plan in place, Northern Minerals' focus this quarter was on securing offtake for the stage one pilot plant. Since the release of the business plan in February 2016 the gravity of interest in offtake from the pilot plant has considerably increased.

During the quarter significant efforts were undertaken in this area, including several trips to Asia which considerably advanced offtake negotiations. These trips included detailed negotiations of offtake agreements and has provided the Company a base to shift its focus to securing funding for the pilot plant.

Whilst the rare earth market, and in particular the dysprosium market, remains at very low pricing levels, demand is strengthening and more importantly suppliers are reluctant to sell at these prices. The Chinese Government has announced plans to stockpile 2,500t of dysprosium and 50t of lutetium in 2016 which poses a challenge at these low price levels. Many rare earth industry participants believe the current prices are at the bottom and recovery is on the horizon. With the Browns Range Project at least 12 months away from production, time to recover is on our side.

From mid-December 2015, the dysprosium price declined from about US\$210/kg to a low of US\$185/kg in mid-April 2016, however has since increased 2.5% to the current price of approximately US\$190/kg.

The Argus Rare Earths March Monthly Outlook report (Metal Pages) published in March forecasts dysprosium prices to double in the next 12 months to US\$400/kg with a similar trend forecast for other key elements.

The strengthening demand outlook has seen Northern Minerals' new business plan received very positively in the market, from both a timing perspective and volume of annual production.

Technology metals such as rare earths have a strong and bright future despite what is reported in the media. There is real demand and real untapped potential.

FUNDING

The significant progress made in regards to offtake has resulted in Northern Minerals shifting the focus towards securing the required capital to build the pilot plant. The advanced state of offtake negotiations now places Northern Minerals in prime position to evaluate the various options for project financing and the potential to enter into a funding agreement for stage one shortly.

In collaboration with financial advisers, Argonaut, Northern Minerals has been working on obtaining and evaluating term sheets from several potential funding sources to secure the best possible funding solution for the Company and its shareholders. To facilitate this, a data room is being established to streamline the financial evaluation process.

LICENCING

Northern Minerals is continuing to engage with government regulators to utilise existing approvals for stage one.

EXPLORATION

Northern Minerals completed an Exploration Target estimate for the Project during the quarter which demonstrates the potential for very significant increases in Total Mineral Resource at Browns Range (see announcement dated 23 March 2016, Exploration targets identified to increase Browns Range Project's mine life). The Exploration Target estimate indicates that the mine life of the proposed full-scale operation of 3,000t TREO per annum could extend well beyond the current 11 years.

The Exploration Target estimate is in addition to the current Total Mineral Resource estimate for the Project which currently stands at 56,663,000kg contained Total Rare Earth Oxides (TREO).

An Exploration Target estimate of 4.2 - 8.8Mt at a grade range of 0.25 - 0.52% TREO for a total of 10,580,000kg to 45,725,000kg contained TREO, has been estimated and reported in accordance with reporting criteria of the 2012 JORC Code (see table 1).

Table 1: Exploration Target summary (in addition to current Mineral Resource)

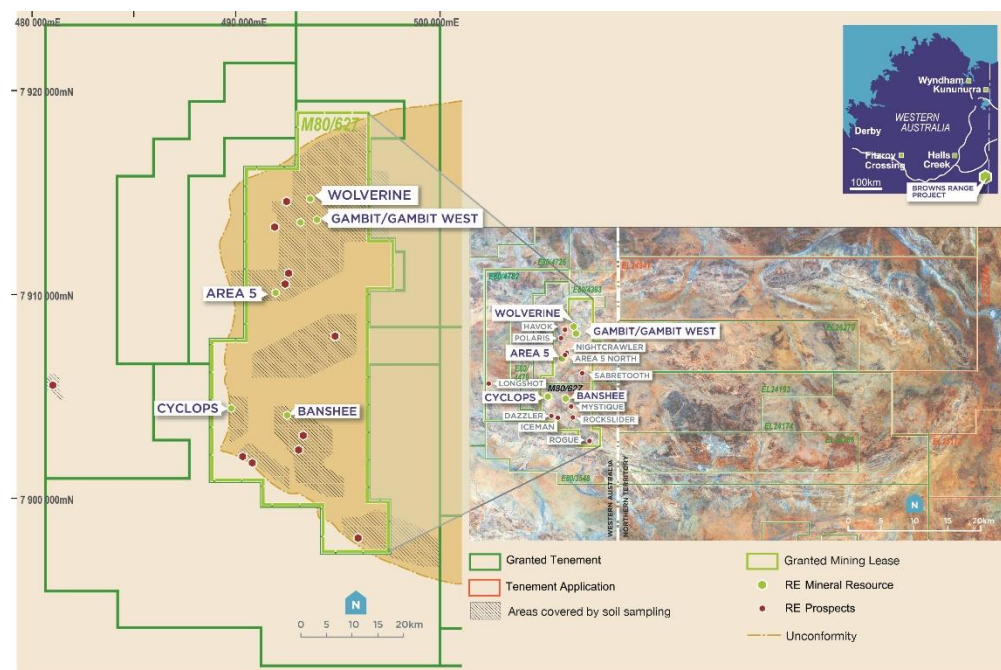
Prospect/deposit area	Exploration Target		
	Tonnage range (Mt)	Grade range (%)	Contained TREO range (000s kg)
Wolverine	1.8 - 2.25	0.34 - 1.19	6,300 - 26,800
Gambit West	0.03 - 0.05	0.5 - 1.25	180 - 690
Area 5	0.1 - 0.25	0.1 - 0.4	100 - 1000
Cyclops	0.09 - 0.17	0.2 - 0.4	180 - 690
Banshee	1.38 - 1.74	0.2 - 0.3	2,770 - 5,220
Prospect	Tonnage range (Mt)	Grade range (%)	Contained TREO range (000s kg)
Area 5 North	0.15 - 0.3	0.2 - 0.5	300 - 1,500
Area 5 Repeat	0.35 - 0.75	0.1 - 0.4	350 - 3,000
Mystique	0.25 - 2.5	0.1 - 0.15	250 - 3,750
Nightcrawler	0.05 - 0.11	0.2 - 0.4	100 - 450
Polaris	0.01 - 0.38	0.2 - 0.4	25 - 1,500
Banshee South	0.01 - 0.28	0.2 - 0.4	25 - 1,125
Total	4.22 - 8.78	0.25 - 0.52	10,580 - 45,725

The potential quantity and grade of the Exploration Target estimate is conceptual in nature. There has been insufficient exploration completed in the areas of the Exploration Target and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target estimate is predominantly based on extending the current Mineral Resources at the Wolverine, Gambit West, Area 5, Cyclops and Banshee deposits either at depth or along strike. The extensions to the resources are limited to zones where mineralisation remains open, and the geological and resource model appears to continue beyond the current limit of drilling.

The Exploration Target does not take into account the wider exploration potential of the Browns Range Dome across the Western Australian border into the Northern Territory, and with Northern Minerals' massive landholding the future exploration potential is outstanding.

Figure 4: Browns Range Project – location of deposits and exploration targets



Finance

As announced in February, Northern Minerals entered into a funding agreement with Innovative Technology Funding Pty Ltd via a drawdown facility offset against its 2015/16 research and development (R&D) rebate. The \$1.1 million loan facility, which delivered \$0.8 million immediate capital, provides the Company access to short term working capital ahead of the rebate being finalised. This facility will be extinguished once the R&D rebate is received, which is expected to be before the end of 2016.

During the quarter, advice was received from Austrade that it had completed its assessment of Northern Minerals' Export Market Development Grant (EMDG) application and approved a total grant of \$105,475. So far, the Company has received an initial payment of \$40,000 with the balance expected to be received in June 2016. The EMDG scheme is a Commonwealth Government financial assistance program for current and future exporters.

A number of cost saving initiatives continued to be worked on to ensure Northern Minerals remains frugal during these challenging market times. This included rationalisation of non-core tenements, outside of the Browns Range, John Galt and Boulder Ridge HRE projects and re-negotiation of payment terms with several contractors and suppliers.

The understanding and support of contractors, through either delaying or staging payments and/or willingness to undertake pro bono work during these challenging times, has been welcomed. Northern Minerals is extremely grateful for their cooperation and would like to thank them for the support, such cooperation truly demonstrates the shared confidence in the Project's future development potential.

Furthermore, the Board of Northern Minerals agreed to extend the amended employment contracts (previously announced on 9 November 2015) for the Managing Director/CEO and Executives of the Company. All points, as previously announced, remain in place with the only amendment being the time period, which has been extended from six to twelve months, now ending 31 October 2016.

Stakeholder engagement

Northern Minerals was provided the opportunity to meet with the new WA Minister for Mining and Petroleum during the quarter. The meeting provided an opportunity to introduce and provide an overview of Northern Minerals and the Project. While mainly company and project focussed, discussions also centred around potential opportunities for government support in the current project development market.

Northern Minerals met with the Director General and Deputy Director General of the Department of State Development to provide an overview of the new business plan and continue discussions surrounding potential government road funding to support the Project's development. In addition to, the Shadow Minister for Mines and Petroleum and the Office of the Minister for Regional Development.

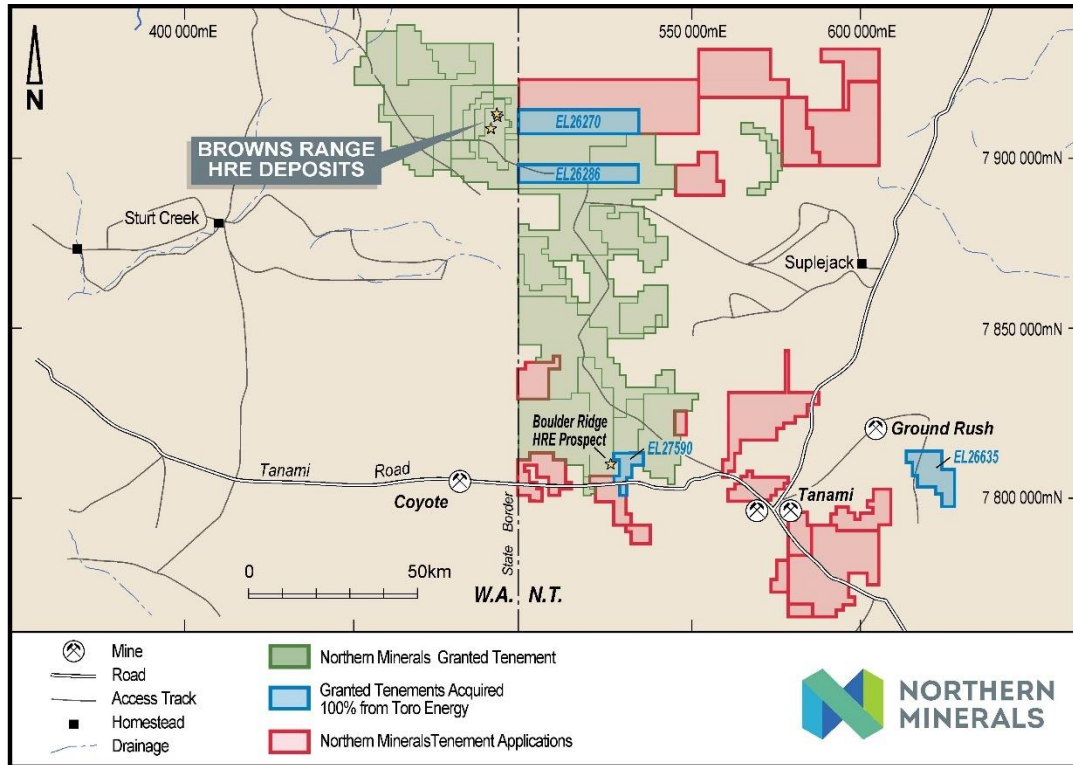
The Company participated in the Chamber of Minerals and Energy's (CME) Energy and Resources Export and Investment Seminar and chaired the CME's Kimberley Regional Council.

Exploration

During the quarter, Northern Minerals was pleased to announce that it had entered into an agreement to acquire ownership of tenements EL26270, EL26286, EL26635 and EL27590 from Toro Energy (ASX: TOE). The tenements, originally held under a joint venture arrangement between Northern Minerals and Toro Energy, will become 100% owned by Northern Minerals with the exception of the uranium minerals rights which will be retained by Toro Energy.

The ownership of these tenements will secure tenure over the entire area of the highly prospective Browns Range Dome and additional HRE-prospective ground adjacent to Boulder Ridge (see figure 5). This landholding, coupled with the addition to the Boulder Ridge prospective ground further south will be key to delivering on Northern Minerals' HRE growth strategy in the future.

Figure 5: Tenement map



INFORMATION REQUIRED BY LISTING RULE 5.3.3

Project	Location	Tenement ID	State	Change of status in quarter	Status	Holder Application	Interest
Browns Range WA	Browns Range	E80/3548	WA		Granted	Northern Minerals	100%
	Browns Range	E80/3547	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4393	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4479	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4725	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4726	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4806	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4883	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4782	WA		Granted	Northern Minerals	100%
	Browns Range	M80/627	WA		Granted	Northern Minerals	100%
	Browns Range	L80/76	WA		Granted	Northern Minerals	100%
	Browns Range	L80/77	WA		Granted	Northern Minerals	100%
	Browns Range	L80/78	WA		Granted	Northern Minerals	100%
	Browns Range	L80/79	WA		Granted	Northern Minerals	100%
Browns Range NT	Browns Range	EL24193	NT		Granted	Northern Minerals	100%
	Browns Range	EL24174	NT		Granted	Northern Minerals	100%
	Browns Range	EL24941	NT		Application	Northern Minerals	100%
John Galt	John Galt	E80/4298	WA		Granted	Northern Minerals	100%
	John Galt	E80/4671	WA		Granted	Northern Minerals	100%
	John Galt	E80/4779	WA		Granted	Northern Minerals	100%
	John Galt	E80/4967	WA		Application	Northern Minerals	100%
Gardiner-Tanami NT	Tanami	EL23932	NT		Granted	Northern Minerals	100%
	Boulder Ridge	EL24177	NT		Granted	Northern Minerals	100%
	Tanami	EL25009	NT		Granted	Northern Minerals	100%
	Boulder Ridge	EL25171	NT		Granted	Northern Minerals	100%
	Ware Range	EL26498	NT		Granted	Northern Minerals	100%
	Ware Range	EL26541	NT		Granted	Northern Minerals	100%
	Parguee	EL27367	NT		Granted	Northern Minerals	100%
	Tanami	EL29592	NT		Granted	Northern Minerals	100%
	Tanami	EL29593	NT		Granted	Northern Minerals	100%
	Boulder Ridge	EL29594	NT		Granted	Northern Minerals	100%
	Tanami	EL29595	NT		Granted	Northern Minerals	100%
	Tanami	EL23933	NT		Application	Northern Minerals	100%
	Ware Range	EL24179	NT		Application	Northern Minerals	100%
	Boulder Ridge	EL24849	NT		Application	Northern Minerals	100%
	Boulder Ridge	EL24935	NT		Application	Northern Minerals	100%
	Ware Range	EL24947	NT		Application	Northern Minerals	100%

QUARTERLY ACTIVITIES REPORT

March 2016



Project	Location	Tenement ID	State	Change of status in quarter	Status	Holder Application	Interest
	Ware Range	EL25003	NT		Application	Northern Minerals	100%
	Ware Range	EL25004	NT		Application	Northern Minerals	100%
	Tanami	EL25172	NT		Application	Northern Minerals	100%
	Boulder Ridge	EL28868	NT		Application	Northern Minerals	100%
	Tanami	EL29619	NT		Application	Northern Minerals	100%
	Tanami	EL29621	NT		Application	Northern Minerals	100%
	Tanami	EL29622	NT		Application	Northern Minerals	100%
	Boulder Ridge	EL30132	NT		Application	Northern Minerals	100%
Browns Range Toro JV	Browns Range	EL26270	NT	JV terminated	Granted	Toro Energy Limited	Purchasing 100%
	Browns Range	EL26271	NT	JV terminated	Granted	Toro Energy Limited	0%
	Browns Range	EL26286	NT	JV terminated	Granted	Toro Energy Limited	Purchasing 100%
	Tanami	EL26635	NT	JV terminated	Granted	Toro Energy Limited	Purchasing 100%
	Tanami	EL27000	NT	JV terminated	Granted	Toro Energy Limited	0%
	Tanami	EL27001	NT	JV terminated	Granted	Toro Energy Limited	0%
	Tanami	EL27590	NT	JV terminated	Granted	Toro Energy Limited	Purchasing 100%
Kurundi	Kurundi	EL29616	NT		Granted	Northern Minerals	100% REE rights only
Rabbit Flats	Rabbit Flats 1	EL25157	NT		Application	Northern Minerals	100%
	Rabbit Flats 2	EL25158	NT		Application	Northern Minerals	100%
	Rabbit Flats 3	EL25159	NT		Application	Northern Minerals	100%
	Rabbit Flats 4	EL25160	NT		Application	Northern Minerals	100%
	Rabbit Flats 5	EL23935	NT		Application	Northern Minerals	100%
Yarawindah	Yarawindah	E70/3080	WA	Surrendered	Granted	Northern Minerals	80%



NORTHERN MINERALS

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Yanchung Wang
Non-executive Director

Bin Cai
Alternate Director

Management

Robin Wilson
Exploration Manager

Robin Jones
Project Manager

Mark Tory
Chief Financial Officer/
Company Secretary

About Northern Minerals

Northern Minerals Limited (ASX: NTU) is a heavy rare earth (HRE) company focussed on the production of dysprosium and yttrium, elements which are in short supply globally.

With a relatively simple and low cost processing flowsheet, Northern Minerals can produce a high grade mixed rare earth oxide product which is highly sought after in international markets to power clean energy and high end technology applications.

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