

DECEMBER 2024 QUARTERLY ACTIVITIES REPORT

HIGHLIGHTS

Environmental, Social and Governance

- Total Recordable Injury Frequency Rate (TRIFR) of 0.00
- Field biological surveys completed for alternate access road in the Northern Territory

Feasibility Study

- Work has continued on the Feasibility Study for the Browns Range Heavy Rare Earths Project, including updates to capital and operational expenditure
- SRK completed interim Independent Technical Report of Browns Range technical and operational assumptions
- Updated Mineral Resource Estimate (MRE) for Browns Range flagship Wolverine Deposit was completed and released to the ASX¹ post-quarter end. The updated MRE increased confidence level and scale in Wolverine and is being incorporated in the Feasibility Study
- A project optimisation process has begun, with key initiatives identified for inclusion in the Feasibility Study
- Metallurgical test work completed to address variability queries raised by SRK

Exploration

- Regional target generation program was advanced with the completion of several priority work programs across the Browns Range exploration tenement portfolio located across Western Australia and Northern Territory
- Identified targets included those with potential for heavy rare earth elements and copper
- Priority was placed on geophysical data acquisition, processing and litho-structural interpretation as the fundamental dataset to inform targeting studies
- Commenced EIS co-funded exploration drilling program at Dazzler Deposit²

¹ ASX 16 January 2025 “2025 – Wolverine Mineral Resource Estimate”

² ASX 15 January 2025 “2025 – Exploration Update”

Corporate

- Successfully completed Share Purchase Plan announced on 16 September 2024³ to raise \$3.85 million (before costs)
- Received \$24.6 million of Tranche 2 (\$26.1 million) of the \$43 million (before costs) placement announced on 16 September 2024⁴ following shareholder approval in November 2024.

Australian heavy rare earths-focused company Northern Minerals Limited (**ASX: NTU**) (**Northern Minerals** or **Company**) is pleased to present its Quarterly Activities Report for the period to 31 December 2024 to accompany the Appendix 5B.

Northern Minerals' primary focus during the quarter was to advance its 100%-owned Browns Range Heavy Rare Earths Project (**Browns Range** or **Project**), in the East Kimberley region of Western Australia. Browns Range is globally significant because of its high grades of dysprosium and terbium.

Commenting on the December Quarter's activities, Northern Minerals Managing Director and CEO Shane Hartwig said:

"The December 2024 quarter has been a successful one for Northern Minerals as we continued to drive forward the development of Browns Range. During the quarter we completed several significant work streams including an update to the Mineral Resource Estimate for the Wolverine Deposit, which will provide the foundation volumes of dysprosium and terbium mineralisation for our proposed commercial-scale mining operation.

The new Wolverine Mineral Resource Estimate, alongside some of the important metallurgical test work carried out during the quarter, is being incorporated into the refreshed Feasibility Study for Browns Range's development. In parallel to advancing the Feasibility Study, our team has continued to work on financing options for Browns Range, which has all the necessary regulatory approvals in place to be developed.

We extend our sincere thanks to existing shareholders and new investors for their support during the capital raising, which was approved at our General Meeting in November. The Company is well funded to continue our work programs at Browns Range. With sustained momentum in all areas of our business, Northern Minerals remains committed to creating sustainable value for our shareholders through the establishment of a robust, Australian-based heavy rare earths supply chain."

³ ASX 16 September 2024 "Strong support for \$43M Placement".

⁴ ASX 16 September 2024 "Strong support for \$43M Placement".



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ENVIRONMENTAL, SOCIAL AND GOVERNANCE

Safety

Northern Minerals upheld its strong commitment to workforce health and safety, recording zero recordable injuries. This achievement maintains the Company's TRIFR at 0.00, a benchmark sustained since November 2022.

Environment

An eastern alternative access road connecting Browns Range to the Tanami Road is being considered by the Company to derisk the Project against potential inaccessibility created during the wet season in the East Kimberley.

Baseline biological field surveys of the Northern Territory portion of an alternative access road were completed in November. The initial findings were very positive, suggesting the alternate access road will have an insignificant impact on the environment.

A report with details of the findings and recommendations is expected to be issued to Northern Minerals in Q3 FY25.



Figure 1: Biological surveys being undertaken over a potential alternative access corridor

Local Engagement and Governance

Northern Minerals continued its program of local community engagement including supporting local events at Ringer Soak (Kundat Djaru), our closest Traditional Owner community located ~50km's from our Browns Range site. Community members were able to meet new staff members and pass on knowledge about the community and local cultural practices.



Figure 2: NTU hosting lunch at the end of school year event at Ringer Soak (Kundat Djaru)

FEASIBILITY STUDY

Independent Technical Review

Independent consultancy SRK completed Phase 1 of its independent technical expert review of the Project and provided an interim Independent Technical Report (ITR). This review encompassed a detailed assessment of the Project's technical and operational assumptions, providing several recommendations that will be addressed in the Feasibility Study and further detailed engineering for the Project. SRK will complete its final ITR upon the completion of the updated Mining Engineering and Geology chapters and completion of the final Feasibility Study.

Mineral Resource Estimate

The Mineral Resource Estimate (MRE) for Wolverine, the flagship heavy rare earths deposit at Browns Range, was increased by 13% in terms of tonnes to 7.3 Mt @ 0.96% Total Rare Earth Oxides (TREO) for a 15% increase in contained metal volumes to 70,500t when compared to the 2022 MRE. Importantly, the Measured and Indicated Resources component of the MRE now stands at 5.0 Mt @ 1.13% TREO for 55,400t of contained metal, which when compared with the 2022 MRE represents a 47% increase in the tonnes, a 20% increase in the TREO grade and a 75% increase in the contained metal tonnes.

This updated MRE, which was completed during the quarter and announced to the ASX in January 2025, incorporated results of more than 23,000m of drilling from the 58-hole infill diamond programs carried out in late 2022 and 2023-24. The updated MRE marked a significant step in the development of Browns Range and will form the basis of the revised Mining Engineering component of the Feasibility Study.

Table 1: Mineral Resource estimate for the Wolverine Deposit as at 15 January 2025 reported above a 0.15 % TREO cut-off grade.

Classification	Tonnage Mt	TREO %	Dy ₂ O ₃ kg/t	Y ₂ O ₃ kg/t	Tb ₄ O ₇ kg/t	HREO / TREO %	TREO t
Wolverine Open Pit Mineral Resource estimate							
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 Mineral Resource estimate							
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 Mineral Resource estimate							
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 – 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
- 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



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Process Test Work

The variability test work program undertaken at Bureau Veritas Minerals (BV) on the Wolverine deposit was completed during the quarter. The results provided confidence that the metallurgical performance of ore from the Wolverine deposit will be consistent and robust for the selected process flowsheet with variation in grade, lithology and spatial location at depth and along strike.

Initial scoping metallurgical test work was conducted on two core samples from the Banshee deposit. Banshee and other deposits have the potential to extend the mine life of the Project.

CAPEX and OPEX Update

During the quarter, the capital expenditure (CAPEX) and operating expenditure (OPEX) updates for the Feasibility Study advanced as a result of an updated contracting strategy and subsequent market pricing which was received on several key packages:

- Process Plant – Engineering Procurement and Construction
- Bulk Earthworks – Construct only
- Underground and Open Pit Mining – Services Contract
- Power Supply – Build Own Operate
- Water Supply – Design and Construct
- Modular Building Supply – Design and Construct
- Village and NPI Buildings - Design and Construction
- Flights – Services Contract
- Accommodation Village Catering and Cleaning Services – Services Contract
- Fuel Supply Services – Services Contract
- Water Treatment Supply – Design and Construct
- Mobile Equipment – Supply Only
- Workshop – Design and Construct
- Survey Services – Supply Only

A project optimisation process commenced, focusing on CAPEX and OPEX reductions including across the following areas:

- Capital and operational expenditure inputs from current market-tested rates
- Project resource levels
- Mining infrastructure
- Process plant equipment including different options from overseas suppliers
- Infrastructure including Earthworks pads and Non-Process Infrastructure, Tailings Storage Facility (TSF), airstrip, roads and service corridors

- Contract strategy including appropriate novation of risk
- Logistics
- Project schedule
- Correct proportion of CAPEX and OPEX expenditure including deferral of facilities and equipment

During this process, numerous optimisation initiatives were identified that will be included either in the Feasibility Study or finalised during the detailed engineering stage of the Project.

Schedule and Cost

The drilling program in 2023-24 and subsequent update to the Wolverine MRE⁵ were critical items to be completed to enable the finalisation of the Feasibility Study. The updated MRE is a key input in determining the optimal Mine Plan and Production Schedule (Mining Engineering). The Mining Engineering program is progressing and will provide key inputs to project economics and ultimately the finalisation of the Feasibility Study when completed.

Finalisation of the updated Wolverine MRE has taken longer than anticipated to complete. This has impacted the schedule for completing the Mining Engineering program, which will result in the completion of the Feasibility Study being pushed into Q4 FY25. This will impact the timing of determining conditional funding arrangements with potential debt providers and therefore will impact Project FID timelines beyond the current published target of Q4 FY25.

Expenditure on Feasibility Study activities during the quarter was approximately \$1.9 million, with an additional \$1.5 million incurred in site costs.

EXPLORATION

The regional target generation program, initiated in the September 2024 Quarter, advanced in this quarter with the completion of priority work programs across the exploration tenement portfolio located in Western Australia and the Northern Territory. Priority was placed on geophysical data acquisition, processing and litho-structural interpretation as the fundamental dataset to inform targeting studies. Independent technical experts from Southern Geoscience Consultants (SGC) were engaged to expedite work programs.

⁵ ASX 16 January 2025 "2025 – Wolverine Mineral Resource Estimate"

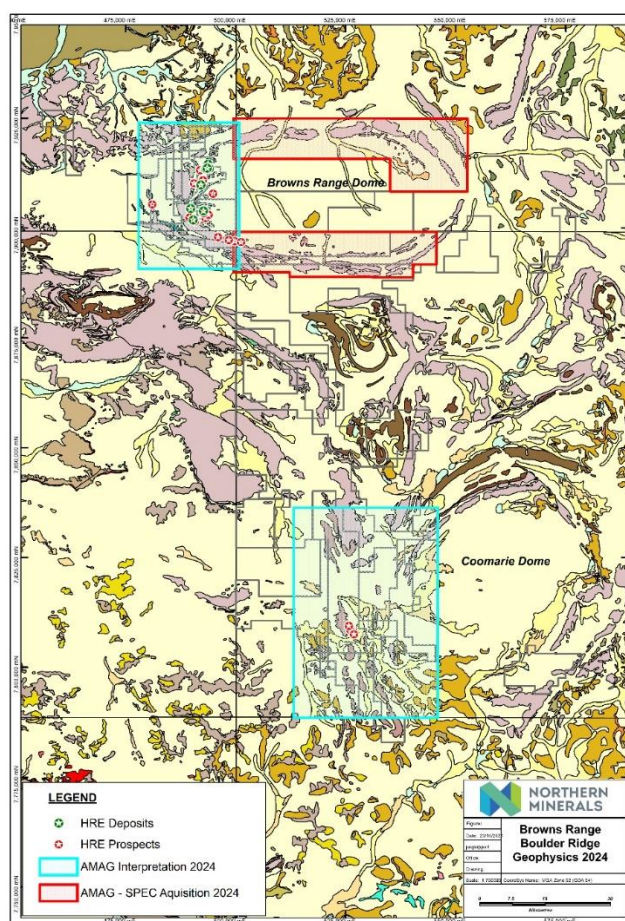


Figure 3: Geophysical data processing and litho-structural interpretation areas (blue polygons) and new airborne geophysical data acquisition (red polygons)

Priority Work programs for the quarter included:

Browns Range Dome – Western Australia (BRD-WA)

Geophysical image processing has been completed, incorporating Northern Minerals’ December 2023 airborne data acquisition and all available open-source data. A detailed litho-structural interpretation was subsequently completed at a scale of 1:25000 by SGC.

Following the completion of the ground-based radiometric survey, field work continued at the Longshot structural target. A reconnaissance survey was carried out in the southern areas of the Longshot Prospect to ground-truth radiometric anomalies, follow up on previously identified breccias and enhance geological familiarisation. Several breccia outcrops were identified and warrant detailed mapping to further ascertain structural relationships and potential for mineralisation. A number of rock-chip samples were collected and submitted for geochemical analysis with results pending.

Dazzler Exploration Drilling Program

Northern Minerals was awarded a Co-funded Exploration Drilling Program under the Western Australian State Government's Exploration Incentive Scheme (EIS)⁶. The EIS-backed exploration drill program was designed by Northern Minerals' exploration team referencing the updated BRD – WA litho-structural interpretation, with support from SGC. The new drill program, which commenced in January 2025, will include five holes, each of between 200m and 250m depth, for an overall total of 1,150m of diamond drilling.

Detailed assessment of geophysical data was carried out to target interpreted regional structures below the geological unconformity between the overlying Gardiner sedimentary units and the underlying Browns Range metamorphics as potential structural conduits for hydrothermal mineralising systems.



Figure 4: Drilling underway at Dazzler Deposit in January 2025

⁶ ASX 15 January 2025 "Exploration Update"

Browns Range Dome – Northern Territory (BRD-NT)

An airborne geophysical survey data acquisition (1,070km²) – flown by MAGSPEC Airborne Surveys Pty Ltd (Magspec) – was completed during the quarter. This new airborne geophysical survey covers the northern and southern contact boundaries of BRD-NT, providing a comprehensive geophysical dataset adjoining the BRD-WA.

Following completion of the airborne data acquisition, geophysical image processing was completed by SGC. Geophysical image data is under assessment for exploration potential, with priority areas to be defined for initial detailed litho-structural interpretation and targeting.



Figure 5: Airborne geophysical survey data acquisition completed over BRD-NT

Coomarie Dome Northern Territory (CD-NT)

The CD-NT incorporates exploration tenements from the Gardiner-Tanami and Boulder Ridge areas of the Northern Territory. A geophysical image processing update was completed, incorporating all available open-source data, to replace the 2019 dataset. Following this a detailed litho-structural interpretation was completed at a scale of 1:25000 by SGC.

John Galt Copper Prospect

The John Galt Project comprises granted tenements E80/4298, E80/4967, E80/5070 and E80/5230, all held 100% by Northern Minerals, which cover a combined area of 78km². John Galt is also situated in the East Kimberley, approximately 150km north of Browns Range.

During the quarter, field-based work programs were conducted at John Galt over the anomalous copper mineralisation at surface and to meet tenement expenditure requirements.

An orientation sampling survey was conducted with a focus on the copper prospectivity. Samples were submitted for geochemical analysis with results pending.

The survey was designed to assess the effectiveness of finer fractions of soils against existing bulk methods, testing specific areas of Cu anomalism (co-incident with elevated Bi) where copper sulphides have previously been identified in outcrop.

Four stream sediment samples were collected during the orientation sampling program. Although this is very limited dataset, the location of these is proximal to known HREE and Cu occurrences. Analysis will be performed to assess the effectiveness of finer fraction soils against existing bulk methods for potential use in more regional sampling programs.



Figure 6: Field reconnaissance work at the John Galt copper prospect

Induced Polarisation (IP) Survey.

GAP Geophysics was contracted to undertake an IP Survey across the copper prospect at John Galt. The designed IP survey comprised of six lines for a total of 4,400m, of which three lines were completed for 2,300m. The aim was to test the prospect for chargeability anomalies potentially representing sub-surface copper mineralisation. Quality control, processing and interpretation of the completed IP survey was undertaken by SGC, with results due in Q3FY25.



Figure 7: Field work John Galt during the IP survey

Expenditure on exploration and evaluation activities during the quarter was approximately \$2.0 million.

CORPORATE

Share Purchase Plan Completion

During the quarter, Northern Minerals announced it had successfully completed its Share Purchase Plan (SPP). The total number of securities issued via the SPP was 202,870,964 million ordinary fully paid shares for a total amount of \$3.85 million (before costs). The new shares were issued at A\$0.019 per Share.

Tranche 2 Placement

Following shareholder approval obtained at Northern Minerals' General Meeting held on 6 November 2024, the Company issued a further 1,297,546,210 new fully paid ordinary shares for a total amount of \$24.7 million (before costs).

The New Shares were issued as part of the two-tranche placement to institutional and sophisticated investors to raise up to \$43 million (before costs) announced to the ASX on 16 September 2024. The New Shares were issued at an offer price of \$0.019 per New Share.

Iluka Convertible Note

In October 2002, the Company issued to Iluka WA Investments Pty Ltd (Iluka) a Convertible Note with a face value of A\$15 million, a coupon of 7% per annum, a Conversion Price of \$0.048 (subject to adjustments) and a maturity date of 31 December 2024 (Iluka Convertible Note). As outlined in the Company's most recent Investor Presentation⁷, Northern Minerals is in discussions with Iluka on options to amend the terms of the Iluka Convertible Note, including a potential extension to the maturity date. These discussions are ongoing and the Company will update the market once these discussions are finalised.

Project Funding

During the quarter, Northern Minerals provided updates to the Northern Australia Infrastructure Facility (NAIF) and Export Finance Australia (EFA) relevant to the potential provision by these groups of debt funding for Browns Range's development.

Payments to Related Parties of the Entity and their Associates

Payments made during the quarter and included in 6.1 and 6.2 of Appendix 5B – Mining exploration entity quarterly cash flow report are detailed below:

Aggregate amount of payments to related parties and their associates included in cash flows from operating activities totalled \$0.392 million.

⁷ Refer ASX announcement dated 16 September 2024 – "Equity Raising Presentation – September 2024"

This comprised payments to Executive and Non-Executive Directors' remuneration from services and fees.

There were no payments to related parties and their associates included in cash flows from investing activities.

Authorised by the Board of Directors of Northern Minerals Limited

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Future Performance and Forward-Looking Statements

This Report contains certain “forward-looking statements”. The words “expect”, “anticipate”, “estimate”, “intend”, “believe”, “guidance”, “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 Report 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 including any further impacts of COVID-19 on Northern Minerals' continued trading and operations. 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 caused by external factors.

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 Report. The forward-looking statements are based on information available to Northern Minerals as at the date of this Report. 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.



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About Northern Minerals

Northern Minerals Limited (**ASX: NTU**) (**Northern Minerals** or **Company**) owns 100% of the Browns Range Heavy Rare Earth (HRE) Project in northern Western Australia, comprising tenements 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, defence and high-technology solutions. Dysprosium and terbium are prized because their unique properties improve the durability of magnets by increasing their resistance to demagnetisation.

Browns Range's flagship deposit is Wolverine, which is thought to be the highest-grade dysprosium and terbium orebody 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.

To further its strategic objective, Northern Minerals is undertaking a Definitive Feasibility Study for a commercial-scale mining and processing operation at Browns Range to process Wolverine ore.

Apart from Wolverine, Northern Minerals has several additional deposits and prospects within the Browns Range Project that contain dysprosium and other heavy rare earth elements, hosted in xenotime mineralisation.

For more information, please visit northernminerals.com.au

Tenement Report

Details of mining tenements as at the quarter ended 31 December 2024 (ASX Listing Rule 5.3.3).

Project	Tenement ID	State	Status	Holder	Interest
Browns Range WA	E80/4479	WA	Granted	Northern Minerals	100%
	E80/4782	WA	Granted	Northern Minerals	100%
	E80/5040	WA	Granted	Northern Minerals	100%
	E80/5041	WA	Granted	Northern Minerals	100%
	M80/627	WA	Granted	Northern Minerals	100%
	M80/649	WA	Application	Northern Minerals	100%
	M80/650	WA	Application	Northern Minerals	100%
	L80/76	WA	Granted	Northern Minerals	100%
	L80/77	WA	Granted	Northern Minerals	100%
	L80/78	WA	Granted	Northern Minerals	100%
	L80/79	WA	Granted	Northern Minerals	100%
	L80/107	WA	Application	Northern Minerals	100%
	L80/0109	WA	Application	Northern Minerals	100%
	L80/0110	WA	Application	Northern Minerals	100%
	L80/0111	WA	Application	Northern Minerals	100%
	L80/0113	WA	Application	Northern Minerals	100%
	L80/0120	WA	Granted	Northern Minerals	100%
	E80/5260	WA	Granted	Northern Minerals	100%
	E80/5261	WA	Granted	Northern Minerals	100%
	E80/5367	WA	Granted	Northern Minerals	100%
	E80/5368	WA	Granted	Northern Minerals	100%
	E80/5369	WA	Granted	Northern Minerals	100%
	E80/5370	WA	Granted	Northern Minerals	100%
	E80/5418	WA	Granted	Northern Minerals	100%



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Project	Tenement ID	State	Status	Holder	Interest
Browns Range NT	EL24193	NT	Granted	Northern Minerals	100%
	EL24174	NT	Granted	Northern Star Resources	REE ¹
	EL26270	NT	Granted	Northern Minerals	100%
	EL26286	NT	Granted	Northern Minerals	100%
	ELA32161	NT	Application	Northern Minerals	100%
	ELA32162	NT	Application	Northern Minerals	100%
John Galt	E80/4298	WA	Granted	Northern Minerals	100%
	E80/4967	WA	Granted	Northern Minerals	100%
	E80/5230	WA	Granted	Northern Minerals	100%
	E80/6079	WA	Application	Northern Minerals	100%
Boulder Ridge	EL29594	NT	Granted	Northern Minerals	100%
	ELA24849	NT	Application	Northern Minerals	100% ²
	ELA24935	NT	Application	Northern Minerals	100% ²
	EL24177	NT	Granted	Northern Minerals	100%
	EL25171	NT	Granted	Northern Star Resources	REE ¹
	ELA28868	NT	Application	Northern Star Resources	REE ¹
	EL27590	NT	Granted	Northern Star Resources	REE ¹
Gardiner-Tanami	EL23932	NT	Granted	Northern Star Resources	REE ¹
	EL25009	NT	Granted	Northern Star Resources	REE ¹
	EL26498	NT	Granted	Northern Minerals	100%
	EL26541	NT	Granted	Northern Minerals	100%
	EL27367	NT	Granted	Northern Minerals	100%
	EL29592	NT	Granted	Northern Star Resources	REE ¹
	EL29593	NT	Granted	Northern Star Resources	REE ¹
	EL29595	NT	Granted	Northern Minerals	100%



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Project	Tenement ID	State	Status	Holder	Interest
	ELA29619	NT	Application	Northern Star Resources	REE ¹
	EL26635	NT	Granted	Northern Star Resources	REE ¹
	ELA32163	NT	Application	Northern Star Resources	REE ¹
	ELA32164	NT	Application	Northern Star Resources	REE ¹
Rabbit Flats	ELA25159	NT	Application	Northern Star Resources	REE ¹
	ELA25160	NT	Application	Northern Star Resources	REE ¹

Notes:

¹ Rare Earth Element rights only

² Excludes gold rights

The Company was granted Miscellaneous Licence L80/0120 during the quarter. During the quarter an application for Mining Lease M80/650 was submitted. No farm-in or farm-out agreements were entered into during the quarter.