

## HIGHLIGHTS

### RARE EARTHS

#### Browns Range Heavy Rare Earths Project

- Outstanding Diamond Drilling results confirm and extend total rare earth oxide (TREO) mineralisation at Wolverine, with intersections up to 28m @ 1.77% TREO and 47m @ 0.82% TREO
- Metallurgical testing confirms simple and low cost processing to produce high grade yttrium and dysprosium-rich xenotime concentrates
- High recoveries of yttrium (>80%) using magnetic separation as the primary beneficiation technique followed by simple flotation
- Prices for yttrium increase up to 45% driven by demand for phosphors
- Initial operating costs studies complete, confirming robust project economics
- Regional geochemical testing identifies two new high grade HREE (Heavy Rare Earth Elements) targets, confirming prospectivity of the region and further growth potential

### CORPORATE

- Raised \$10 million to drive exploration and development of Browns Range project
- \$1.97m received from the conversion of NTUOB options which expired on 31 March 2012
- Expansion of exploration capability with appointment of additional geologists and recruitment of Project Manager well advanced
- Reached a formal Joint Venture with Toro Energy for mineral rights other than uranium in Toro's Browns Range tenements

### ASX CODE: NTU

**Northern Minerals Limited**  
ABN 61 119 966 353

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George Bauk *Managing Director / CEO*  
Dudley Kingsnorth *Non-exec Director*  
Adrian Griffin *Non-exec Director*  
Colin McCavana *Non-exec Director*

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Simon Storm *Company Secretary*  
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#### Shares on Issue as at 27/04/12:

211,457,318

#### Market Capitalisation as at 27/04/12:

\$83,525,000

#### 12 month Share Range:

\$0.36 - \$1.07



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## EXECUTIVE SUMMARY

The March quarter featured a number of significant operational and corporate milestones in the development of the Browns Range Heavy Rare Earth Element (HREE) project. Successful diamond drilling and metallurgical results have significantly boosted confidence in the Wolverine prospect. Further drilling is set to commence immediately, with the target being the delineation of an initial JORC resource in the second half of 2012. Regional exploration also identified new targets at Browns Range, confirming the prospectivity of the region and the potential to build a significant mineral inventory in the region. Preliminary operating and capital cost studies have also confirmed robust economics for the project, which remains on track for commencement of HREE production in 2015.

The Company successfully raised \$10 million through a share placement in March. The funds will be primarily directed into exploration at Browns Range to take it to the next phase of development. Northern Minerals has also bolstered its exploration team on the ground to support the increase in activity. As part of its strategy to build its HREE presence in the region, Northern Minerals has also reached a Joint Venture with Toro Energy to acquire mineral rights (excluding uranium) in the Browns Range region.

## PATHWAY TO PRODUCTION

Northern Minerals vision is to become the global benchmark in the production of heavy rare earth elements, and to produce and deliver contained HREO in concentrate in 2015 via the following pathway to production.

Browns Range Project	2011	2012	2013	2014	2015
Stakeholder Engagement	✓				
Exploration	✓				
JORC Resource Drilling		✓			
Scoping Study (incl. desktop capex study)		✓			
Metallurgy Testwork	✓				
Environmental Studies and EIS		✓			
Strategic Alliance Partner Engagement	✓				
Pre Feasibility Study					
Sales Contracts					
Metallurgy Pilot Plant					
Feasibility Study					
Project Funding and Approvals					
Concentrator Design and Construction					
Establish Mining Operation					
Project Commissioning					
Production					



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## RARE EARTH ELEMENTS

### BROWNS RANGE PROJECT

Browns Range Project	2011	2012	2013	2014	2015
Stakeholder Engagement	✓				

A meeting was held with the traditional owners in early April to present the overall plans for Browns Range in 2012. The key activities of the plan include the exploration program, establishment of an exploration camp on site, provision for a bulk sample for customer requirements. The heritage impact assessment is expected to be carried out in May.

During the quarter a meeting was held with KRED (Kimberley Regional Economic Development) to continue discussions regarding the status of the project, the pathway to production to 2015 and the opportunities that may exist for KRED to participate in these business / employment opportunities.

One of two cultural awareness workshops was completed during April through Ochre who are also in discussion with the company for coordinating aboriginal employment at Browns Range and John Galt. Current indications are that up to 6 aboriginals will be employed during the 2012 exploration program at Browns Range, up from 3 in 2011.

The Board and Management of Northern Minerals is appreciative of the very positive and constructive manner in which the traditional owners, the KLC (Kimberley Land Council) and KRED have approached the discussions which are aimed at improving the feasibility and potential of the Browns Range Project for the benefit of all stakeholders.

Browns Range Project	2011	2012	2013	2014	2015
Exploration	✓				

Northern Minerals regional exploration program delivered further success during the quarter, and continues to identify a pipeline of exciting new HREE exploration opportunities across the region. Results from geochemical soil sampling conducted in late 2011 defined two new HREE drill targets - Banshee and Mystique - as well as significantly extending existing targets at the Gambit and Area 5 prospects (*see figure below*). The program included a total of 1,445 soil samples collected from two areas at Browns Range.

The results expand the potential of Browns Range, and provide further evidence of the under-explored and highly prospective nature of the Browns Range Dome area. To date through its soil sampling program Northern Minerals has covered less than 20% of the approximate 190km<sup>2</sup> area of prospectivity on the WA side of the Browns Range Dome area. The results also support the view that the Browns Range Dome region has the potential to be a globally significant source of HREE. The Company has planned a significant drill program at Banshee and Mystique in 2012, to follow up the encouraging geochemical results.

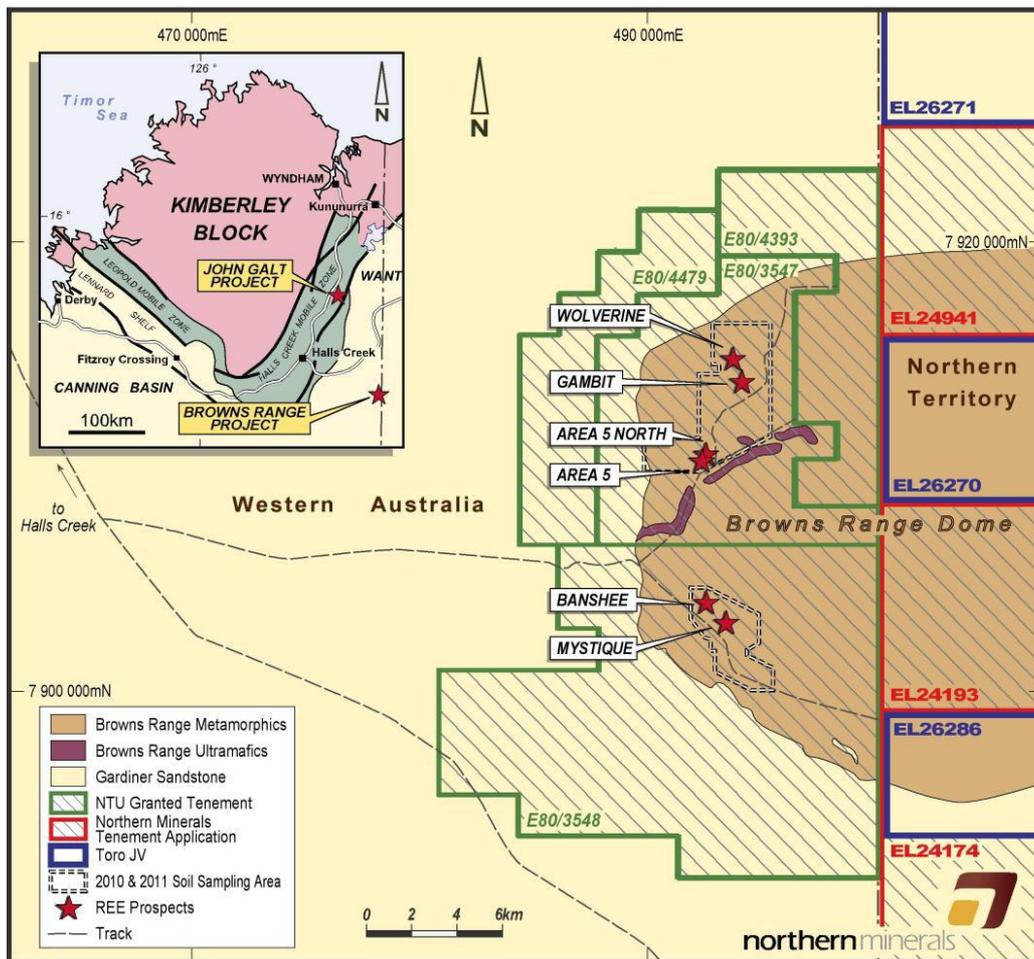


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**Browns Range South**

Two significant geochemical soil anomalies have been identified, one centered on the Banshee prospect and the other at Mystique. Soil sampling was conducted on a 200m x 100m grid over an area of approximately 9km<sup>2</sup>. At Banshee, a >150ppm TREO geochemical soil anomaly extends approximately 1.4km in strike length in a northwest-southeast orientation. Rock chip sampling has been conducted over Banshee with results up to 14.7% TREO and 6 of the 10 rock chip samples from the prospect returning assays greater than 1% TREO (see Table 1 below). At the Mystique prospect a >150ppm TREO geochemical soil anomaly has been defined extending 1km in length in an approximate east-west direction. Further rock chip sampling has been completed at Mystique with assays up to 2.52% TREO (see Table 1 below). Approximately 4,000m of drilling is proposed for Banshee and Mystique in 2012.

**Browns Range Project - Prospect and soil sampling locations**



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## Browns Range North

Soil sampling was conducted on 100m x 50m or 100m x 100m centres in the immediate area around the Gambit, Wolverine, Area 5 and Area 5 North prospects, and 200m x 100m spaced centres away from these prospects. The 150ppm TREO soil anomaly at Wolverine is discontinuous over a strike length of 500m and the western end of the anomaly terminates at the edge of outcrop. Several > 150ppm TREO anomalies have also been defined to the north and east of Wolverine. Further on-ground checking of these anomalies is required prior to drill testing.

At the Gambit prospect, the geochemical results from the soil sampling have defined a >150ppm TREO anomaly extending for 2km by 150m width in an approximate east-west orientation. The Gambit prospect drilling in 2011 has tested two zones, approximately 350m and 150m in strike extent. The >150ppm TREO anomaly also extends discontinuously to the east of the drilling for an additional 600m, with several soil samples greater than 200ppm TREO in this area.

### Summary of rock chip sample results (>0.5% TREO)

Prospect	Sample Id	Northing	Easting	TREO(%)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	Y <sub>2</sub> O <sub>3</sub> (ppm)
Mystique	BRRK082	493309	7903052	2.52	2,448	15,231
Mystique	BRRK086	493409	7903048	0.53	452	3,026
Mystique	BRRK087	493427	7903071	0.86	814	5,223
Banshee	BRRK090	492767	7904120	5.93	5,161	39,786
Banshee	BRRK091	492686	7904139	14.74	12,952	98,619
Banshee	BRRK093	492636	7904085	3.25	2,904	21,242
Banshee	BRRK094	492630	7904118	12.8	11,373	84,964
Banshee	BRRK098	492284	7904168	2.11	819	6,132
Banshee	BRRK099	492527	7904258	1.66	220	1,596

NB – TREO: Total Rare Earth Elements – Total of La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>



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Browns Range Project	2011	2012	2013	2014	2015
JORC Resource Drilling		✓			

A highlight of the quarter was the outstanding results from diamond drilling at the Wolverine prospect, which significantly extended the mineralised zone along strike and at depth. The results are better than expected, and continue de-risk this project, and confirm its potential to be a globally significant source of HREE.

Assays from the 11 hole 1,357m program included high-grade intersections of HREE xenotime mineralisations over significant widths (*see table of significant intersections below*). The drill holes confirm that xenotime mineralisation extends below 120 meters, and open in a number of areas. The completed drilling programs have now confirmed a zone of high grade HREE (xenotime) mineralisation over a strike length of 200m, with true widths of between 2m and 25m - and have significantly boosted confidence in Wolverine as a significant HREE prospect. The results will be used to help define an initial JORC resource at Wolverine in the second half of this year, following a further round of drilling which is planned to commence in May.

**Wolverine Prospect – significant intersections**

Hole Number	From(m)	To(m)	TREO result
NMBRDD001	64.26	111.5	<b>47.24m @ 0.82% TREO (737ppm Dy<sub>2</sub>O<sub>3</sub>)</b>
	Inc. 76.22	81	4.78m @ 1.25% TREO
	82.5	85	2.5m @ 5.9% TREO
	101.8	104	2.2m @ 2.78% TREO
NMBRDD002	109.65	146	36.5m @ 0.69% TREO (597ppm Dy <sub>2</sub> O <sub>3</sub> )
	Inc. 118.8	124.9	6.1m @ 1.90% TREO
NMBRDD003	114	142.1	<b>28.1m @ 1.77% TREO (1,619ppm Dy<sub>2</sub>O<sub>3</sub>)</b>
	Inc. 131.9	136.5	4.6m @ 2.81% TREO
	139.1	142.1	3m @ 4.64% TREO
NMBRDD004	108.2	133	<b>24.8m @ 1.43% TREO (1,260ppm Dy<sub>2</sub>O<sub>3</sub>)</b>
	Inc.108.2	111.7	3.45m @ 2.24% TREO
	124.5	127	2.5m @ 8.19% TREO
NMBRDD005	109	123	<b>14m @ 0.97% TREO (854ppm Dy<sub>2</sub>O<sub>3</sub>)</b>
	135	145	10m @ 1.66% TREO (1,538ppm Dy <sub>2</sub> O <sub>3</sub> )
	148	153.5	5.5m @ 1.55% TREO (1,391ppm Dy <sub>2</sub> O <sub>3</sub> )
NMBRRD159	115.4	120.4	5m @ 0.41% TREO (360ppm Dy <sub>2</sub> O <sub>3</sub> )
	133	144.4	11.4m @ 0.73% TREO (651ppm Dy <sub>2</sub> O <sub>3</sub> )
NMBRRD156	89	94	5m @ 2.08% TREO (2,020ppm Dy <sub>2</sub> O <sub>3</sub> )
	133.8	137	3.2m @ 0.97% TREO (882ppm Dy <sub>2</sub> O <sub>3</sub> )
NMBRRD160	119.8	122	2.2m @ 1.27% TREO (1,211ppm Dy <sub>2</sub> O <sub>3</sub> )
	125.8	130	4.25m @ 0.74% TREO(644ppm)
NMBRRD161	119.4	124.5	5.1m @ 2.70% TREO (2,470ppm Dy <sub>2</sub> O <sub>3</sub> )
NMBRRD163	104.4	124	<b>19.65m @ 1% TREO (819ppm Dy<sub>2</sub>O<sub>3</sub>)</b>

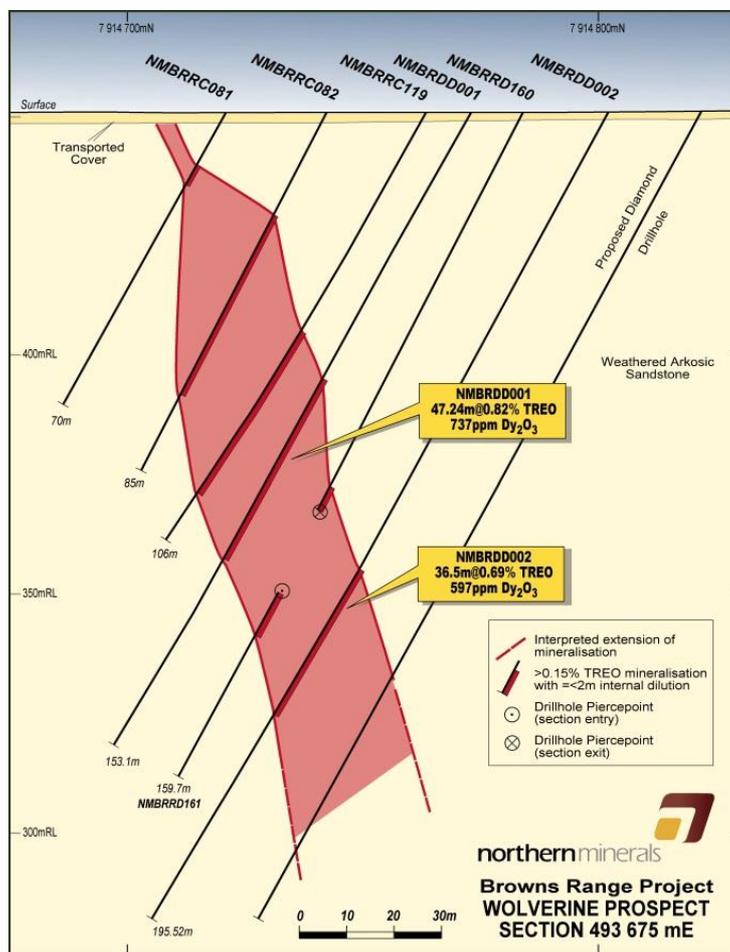
NB – Intersections calculated using a 0.15% TREO cut-off and a maximum of 2m internal dilution. TREO: Total Rare Earth Oxides – Total of La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>



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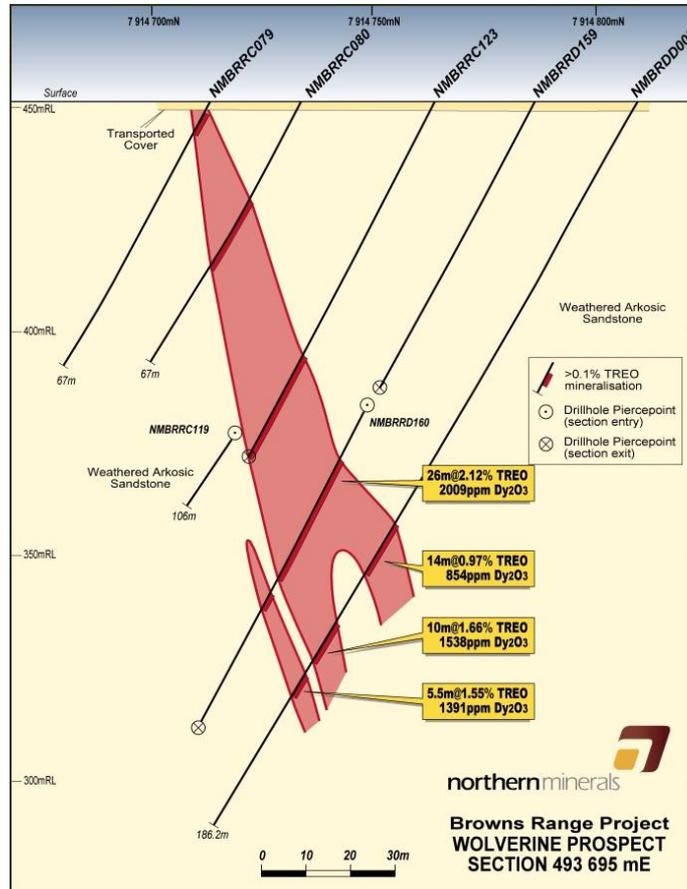
From the 11 holes, six holes were cored from surface and five holes were diamond core tails to pre-existing Reverse Circulation (RC) drill. Diamond drill holes have tested a zone approximately 175m in strike length, and focused on a zone of 75m strike length. All holes have intersected zones of variably altered (silica, sericite and hematite alteration) and quartz veined arkose, within which are discrete breccia zones. Downhole deviation surveys completed on the diamond drill hole tails have shown some of the existing RC drill holes have deviated significantly towards the east. Most of the RC holes have now been re-surveyed downhole and this new data has been used in a re-interpretation of the outline of the mineralised zone.

**Wolverine Prospect – Drill section 493675E**



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**Wolverine Prospect – Drill section 493695E**



Browns Range Project	2011	2012	2013	2014	2015
Scoping Study (incl. desktop capex study)	✓				

Northern Minerals has completed a preliminary (order of magnitude) mill operating cost estimate on potential production at Browns Range as part of its scoping studies. The company engaged Bateman Engineering to undertake the work, testing three potential production scenarios based on a nominal yield of 3,000 tonnes of contained TREO in xenotime concentrate per annum, at three different feed grades. Detailed mining costs will not be completed until a JORC resource estimate has been produced.

The high level results summarised in the table below, with Milling Operating Costs only  $\pm 35\%$ :

Production target	\$/t of ore	\$/t concentrate (33% TREO)
1,500,000 tpa @ 0.25%TREO	25	12,000
750,000 tpa @ 0.5%TREO	32	8,000
375,000 tpa @ 1%TREO	50	6,000



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The study included indicative costs for labour, electrical power, process consumables, maintenance and site infrastructure. While only early stage operating cost, the results to date indicate positive economics for the Browns Range project, in particular at the higher feed grades. Due to the simple processing model and relatively low capital expenditure required to get the processing plant established, the Company is targeting production by 2015.

During the previous quarter, Northern Minerals released a desktop capital study estimate (undertaken by Bateman Engineering) based on the metallurgical flow sheet prepared by Nagrom and assuming a 750,000 tonnes per year production rate. The capital cost was prepared in accordance with a Bateman Class 4 study with a confidence level of +/- 35%. This class of estimate is based on priced equipment and factored commodities.

#### **Capital Study Estimate**

Process Plant	AUD \$51M
Infrastructure	AUD \$12M
EPCM	AUD \$10M
Contingency	AUD \$13M
Working Capital	AUD \$3M
<b>Total</b>	<b>AUD \$89M</b>

*NOTE :The desktop capital study and operating cost study was conducted by Bateman Engineering and the metallurgical test work and development of beneficiation flow sheets conducted by Nagrom following ongoing JORC resource drilling and metallurgical studies, to produce a conceptual flowsheet. At this stage the company has not yet estimated a JORC resource. Accordingly inferences to production should not be used as a basis for investment decisions about shares in the company.*

Browns Range Project	2011	2012	2013	2014	2015
Metallurgy Testwork	✓				

Results from metallurgical testing released during the quarter have continued to build confidence in the Browns Range project as it moves through scoping and feasibility studies. It has confirmed the Browns Range xenotime mineralisation can be processed using a relatively simple, low cost flow sheet to produce high grade concentrates of 33% Total Rare Earth Oxides (TREO). Mineralogical examination (SEM/XRD) of the concentrate confirmed that xenotime is the main rare earth mineral. The xenotime occurs as liberated single crystals or as composites with quartz. The metallurgical work was completed by Perth-based testing company Nagrom, processing composited Reverse Circulation (RC) drill samples from the Wolverine, Gambit and Area 5 North prospects

The studies indicate Northern Minerals can produce a high grade mineral concentrate using magnetic separation as the primary beneficiation technique followed by simple flotation. These techniques are well understood in the Australian mining industry. It was also able to achieve successful results across a broad range of feed grades from each prospect comprising ~0.25%, ~0.5% and ~1% TREO.



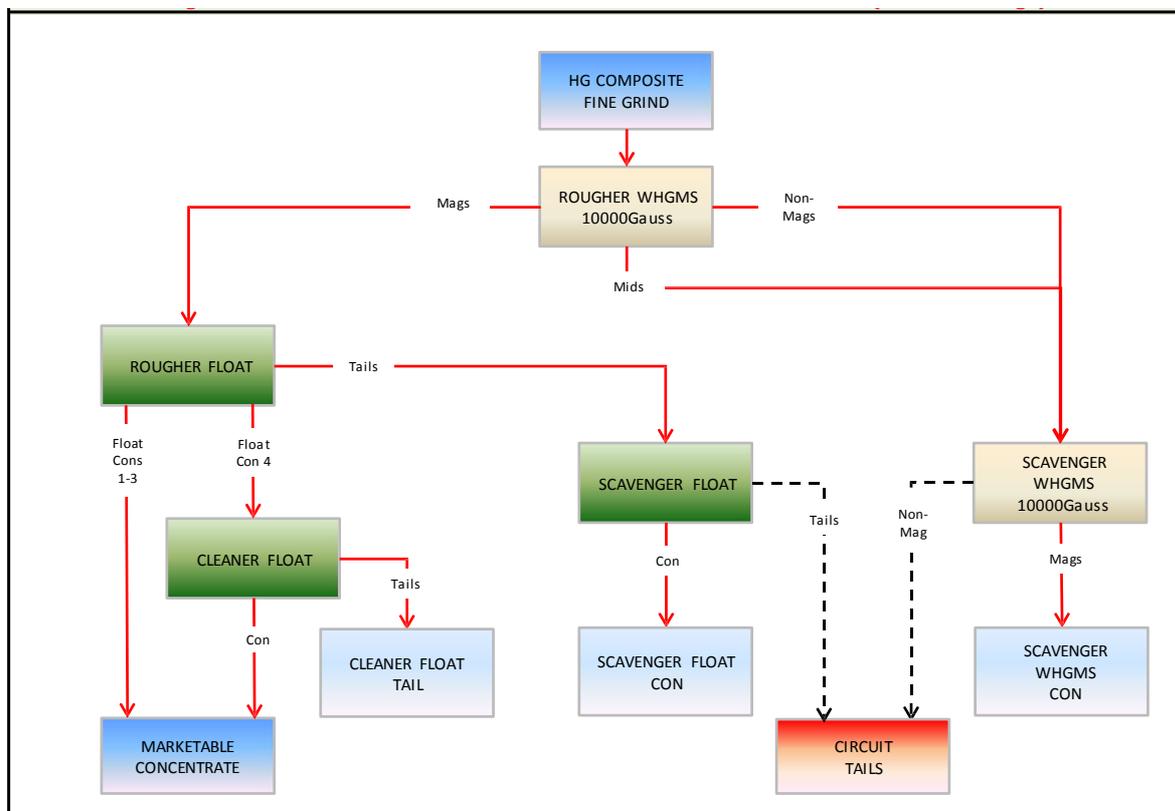
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Northern Minerals has also produced a 10 kg sample of concentrate which it will provide to potential off-take partners as part of its ongoing sales and marketing discussions. The sample was produced using a relatively un-optimised magnetic and flotation flowsheet, to produce a concentrate with 33% TREO. A block flow diagram of the HG circuit is included below. Key findings from the Nagrom summary report are provided below:

- The characterisation magnetic response tested -212 +106  $\mu\text{m}$  fractions with head grades ranging from 0.1% to 1.1%  $\text{Y}_2\text{O}_3$ . The test delivered concentrates from 0.4% to 7.8%  $\text{Y}_2\text{O}_3$  with the recovery of  $\text{Y}_2\text{O}_3$  ranging from 77% to 97%.
- Flow sheet elements of magnetic and flotation beneficiation were tested on feeds ranging from 0.1% to 1.8%  $\text{Y}_2\text{O}_3$ . The tests delivered concentrates from 6.1% to 31.1%  $\text{Y}_2\text{O}_3$  with the recovery of  $\text{Y}_2\text{O}_3$  ranging from 48% to 74%.
- The composite feed derived from these test samples delivered a primary circuit REO concentrate with the a TREO grade of 33.8%

The next phase of the metallurgical program will focus on optimisation and preliminary investigations on down-stream processing.

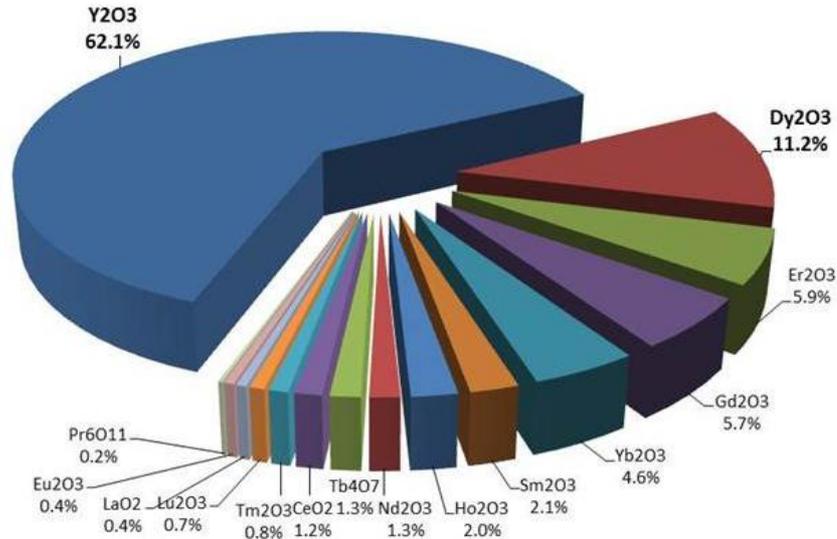
**Nagrom HG Circuit – Mineral Concentrate – Northern Minerals (Browns Range)**



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The metallurgical testwork confirmed a REO distribution typical of xenotime mineralisation, as shown in the chart below.

**Mineral Concentrate TREO Distribution**



Source: Nagrom Testwork Synopsis

**NOTE :** The metallurgical test work synopsis was developed from beneficiation flow sheets conducted by Nagrom following ongoing JORC resource drilling and metallurgical studies, to produce a conceptual flowsheet. At this stage the company has not yet estimated a JORC resource. Accordingly inferences to production should not be used as a basis for investment decisions about shares in the company.

The WHGMS unit used in this program is a 500mm carousel single pulsed magnet (SLon type) run at the following settings

WHGMS500 Settings	
Feed % Solids	20%
Matrix	1mm
Field Strength	10000G
Carousel Speed	1.7rpm
Jig Pulse	300
Feed Rate L/min	2.86
Feed Time	80-30min

Source: Nagrom Testwork Synopsis



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Browns Range Project	2011	2012	2013	2014	2015
<b>Environmental Studies and EIS</b>	✓				

Environmental baselines surveys have commenced in the Browns Range Project area, including trapping for short range endemic invertebrate fauna and subterranean fauna. Further surveys planned for April 2012 include a Level 2 vertebrate fauna assessment, the first phase of a Level 2 flora and vegetation assessment, and further sampling for stygofauna (aquatic subterranean fauna). Reporting is underway and results of these surveys will be available in Q3 of 2012. A hydrogeological and surface water supply review and strategy was completed in April, which detailed water-related planning, assessments and approvals requirements.

Planning of baseline assessments and environmental approvals continued in January through April. Planning for closure and rehabilitation commenced, including meetings with soils, waste rock geochemistry and closure planning professionals. The sampling requirements for tailings and waste rock were laid out and proposals for waste rock geochemistry and soil assessments were received. Mine closure plans are now required to be submitted with mining approvals to the Department of Mines and Petroleum and a mine closure planning proposal will be forthcoming in late April.

Browns Range Project	2011	2012	2013	2014	2015
<b>Strategic Alliance Partner Engagement</b>	✓				

Northern Minerals has identified and continued discussions with a number of large, international REE end users interested in potential off-take arrangements. Engagement with the shortlist of potential alliance partners has advanced during the quarter. Discussions were held with potential customers in Australia and overseas to determine compatibility with the Northern Minerals business model and product specifications.

The next step will be assessment of the Northern Minerals heavy rare earths mineral concentrate sample and the customer product specification. Significant global customers have taken a strong interest in the Northern Minerals sample and discussions will continue into Quarter 2. A 10kg mineral concentrate sample is to be distributed amongst potential strategic offtake partners for downstream evaluation.



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## JOHN GALT PROJECT

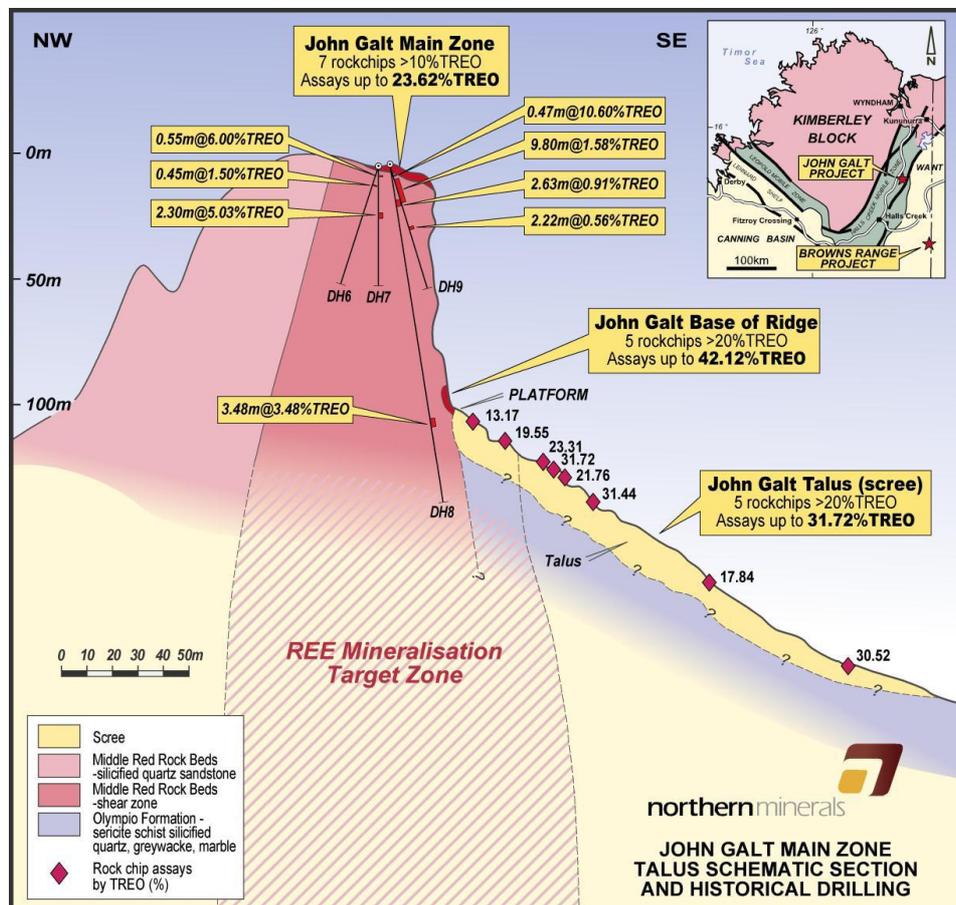
In January 2012, Northern Minerals announced results from a rock chip sampling program undertaken at the John Galt project (*reported in previous December quarterly report*). Results included exceptional grades of up to 42% TREO including 36,791ppm (3.68%) dysprosium ( $Dy_2O_3$ ), with the majority of samples returning high grades above 1% TREO.

The TREO distribution is dominated by high value Heavy Rare Earth Oxides (HREO), with approximately 95% of REO's being HREO. Petrological studies of rock chip samples also confirmed the similarity of the mineralisation style with that of the Browns Range project, with xenotime identified in quartz veins and quartz-arenite breccias.

Following further interpretation of rock chip and historical drilling results, the Company has identified a significant mineralisation target zone (see figure below). This will be tested with further drilling in 2012.

The program also included sampling of the loose talus or scree material at the base of the John Galt ridge, which returned assays up to 31% TREO. The results from the talus sampling confirm this material to be a new HREE target, and Northern Minerals has commenced work to determine the extent and volume of mineralised talus material.

**John Galt Main Zone - Talus Schematic Section**



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## The REE Market

During the period there were a number of important developments in the international rare earth's market and industry which are relevant to Northern Minerals. This includes a number of developments in China (the world's largest producer and user of REE) which are likely to have the effect of tightening global supplies of HREE in particular.

The Chinese Ministry of Commerce (CMC) introduced the anticipated 2-tiered export quota system, establishing the ratio between light and heavy rare earths as 85:15. This appears to be an increased effort by China to preserve their limited heavy rare earth supply and is likely to exert pressure on supply and subsequently pricing. Following the publishing of the China Rare Earth export quotas, the CMC has added that further distinctions will be made between companies that comply with environmental regulations and those that don't, and also between light and heavy rare earths, where supply and demand fundamentals are more stretched. This could lead to higher prices for the scarcer heavy rare earths, but more exports and lower prices for cerium and lanthanum. These actions are in part responsible for the action taken against China through the World Trade Organisation by several countries including the USA.

The USA is not the only western country attempting to secure heavy rare earths supply outside of China. In early March 2012 Germany signed a \$4 billion pact with Kazakhstan for better access to rare earths supplies. In January Daimler and electronics giant Bosch, as well as another ten German companies, formed an alliance to protect and source raw materials as part of Germany's own critical materials strategy.

A significant industry development during the quarter was the announcement by Molycorp to acquire Neo Materials. Neo Materials' strengths are in the ownership of intellectual property relating to rare earths magnet manufacturing complemented with access to heavy rare earths feed from Southern China. Molycorp appears to be continuing this drive by focussing on the identification and development of potential sources of heavy rare earths, essential to the US manufacturing base.

### Rare Earths Pricing Update

After a quiet trading period during the Chinese New Year holiday, rare earths trading has picked up during the quarter. Prices for light REE (specifically Ce, La and Nd) weakened during the period. This stimulated greater demand for product, which indicates the price sensitivity for the LREE's. The price decreases appear to have been triggered by Baotou Steel Rare Earth (the single largest LREE producer) that lowered their Pr/Nd listed prices, depressing the prices across other producers.

Demand in Europe has been strong this year with traders reporting a shortage for HREE's, and anticipating the shortage is likely to be exacerbated by the new China invoicing system to be introduced in the coming quarter.



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Dysprosium prices dropped slightly during the period due to lower China domestic demand. However, prices are expected to be supported once strong Rest of World (ROW) demand - mainly from Europe and Japan - filters through later in the year.

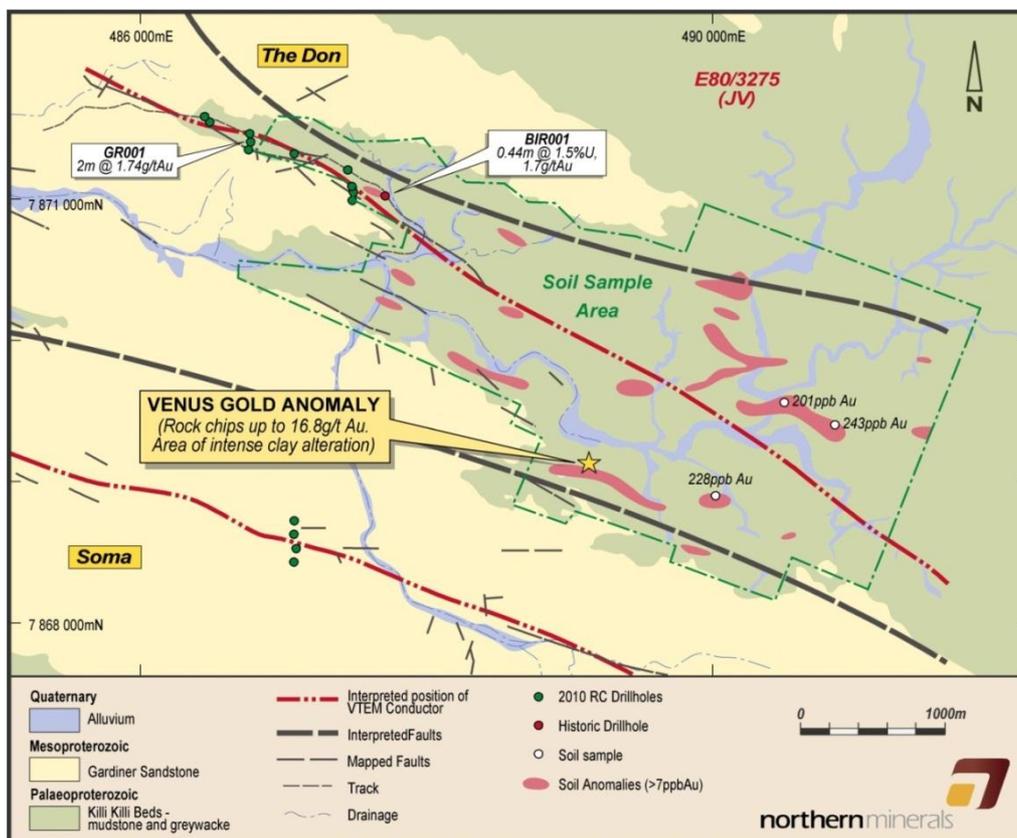
A feature of the market though has been the substantial increase in demand for phosphors. This has instigated significant interest in Northern Minerals from global lighting producers requiring heavy rare earths for their phosphor production predominantly used in lighting applications. This has coincided with a 40% increase in pricing for yttrium oxide when all other rare earth prices have either decreased or remained stable. This is particularly relevant for Northern Minerals, given that yttrium accounts for approximately 60% of its TREO mix.

## GOLD

### Gardiner-Tanami/Gardiner Range JV

While the focus has been on advancing the HREE projects during the past quarter, interpretation work has also continued on the Company's gold projects in the region. Further on-ground work will commence later in 2012, with a RAB or RC drilling program planned to target the gold geochemical soil anomalies identified in the Don-Venus prospect area in late 2011 (see figure below).

**Don-Venus Prospect Area – Soil geochemical Au anomalies**



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## CORPORATE

### \$10 million capital Raising

In March the Company announced a share placement to raise A\$10 million (before costs) to fund exploration and the further development of its HREE projects. The Placement included up to 22.727 million fully paid ordinary shares at an issue price of \$0.44 per share to professional and sophisticated investors.

This was a significant milestone for the company, and supports the increased work plan. Funds will be used to continue work at the Browns Range and John Galt HREE Projects, as well as for working capital. This includes the diamond drilling program for targets at the Wolverine and Gambit prospects in May.

The funds have also been used to expand Northern Minerals exploration team to manage the increasing scope of work. The new additions include the appointment of two geologists and a supervisor. The Company is also in the advanced stage of recruiting for the position of Project Manager, who will be focused on taking the Browns Range Project into production

The placement was made in accordance with the Company's available 15% capacity pursuant to ASX Listing Rule 7.1. Bell Potter Securities Limited was the lead Manager to the Placement. The new shares ranked equally with existing Northern Minerals ordinary shares quoted on the ASX. Given the rapid pace of development of the various projects and increased work plans, it is expected the Company will seek shareholder approval to refresh its placement capacity during the June quarter.

The Company's cash position was also strengthened during the quarter with the conversion of 11.3 million options (NTUOB), which had an exercise price of \$0.15 totalling \$1.97m.

The agreement will allow the Company to focus on taking Browns Range toward production, while providing opportunities to grow the REE inventory at Epenarra and Amadeus Basin in the future.

### Joint Venture with Toro Energy for REE rights at Browns Range

In April, Northern Minerals announced it was proceeding to a formal Joint Venture (JV) agreement with Toro Energy to earn up to 80% interest in all mineral rights (other than uranium) within Toro's Browns Range Northern Territory tenements. The JV follows completion of due diligence by the two parties, which signed an initial Heads of Agreement (HOA) in December last year. It includes seven tenements comprising 1,403km<sup>2</sup>, adjacent to Northern Minerals Browns Range Project, Western Australia where the Company is aiming to be producing high grade Heavy Rare Earth Elements by 2015.

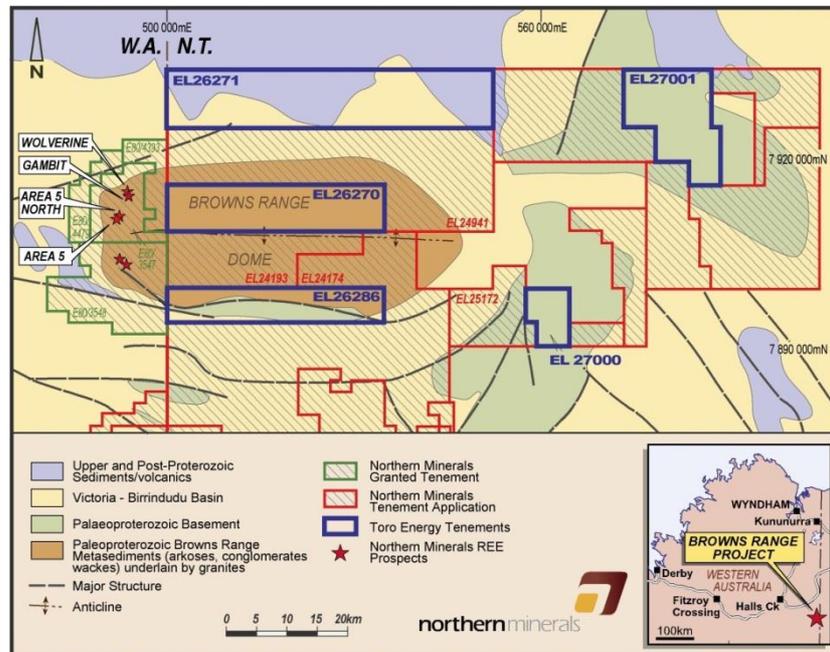


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The agreement will expand Northern Minerals landholding in the Browns Range Dome area, and will form part of the Company's broader HREE exploration and development program in 2012. Given the success in the regional sampling program at Northern Mineral's contiguous Browns Range project, the transaction with Toro represents an exciting opportunity to grow the Company's HREE footprint in the region.

Under the terms of the Joint Venture, Northern Minerals will spend \$4 million on exploration over a three year period to earn a 51% interest. Northern Minerals has the option to increase its interest to 70%, by spending an additional \$2 million on exploration over a further two year period. Northern Minerals can elect to complete a bankable or definitive feasibility study to increase its equity to 80%. Toro will retain all uranium rights on the tenements. The transaction remains subject to the parties obtaining all necessary approvals.

**Brown Range Project - Tenement Location Map**



## Competent Persons Declaration

The information in this report accurately reflects information prepared by competent persons (as defined by the Australasian Code for Reporting of Mineral Resources and Ore Reserves). It is compiled by Mr R Wilson, an employee of the Company who is a Member of The Australasian Institute of Mining and Metallurgy with the requisite experience in the field of activity in which he is reporting. Mr Wilson has sufficient experience which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



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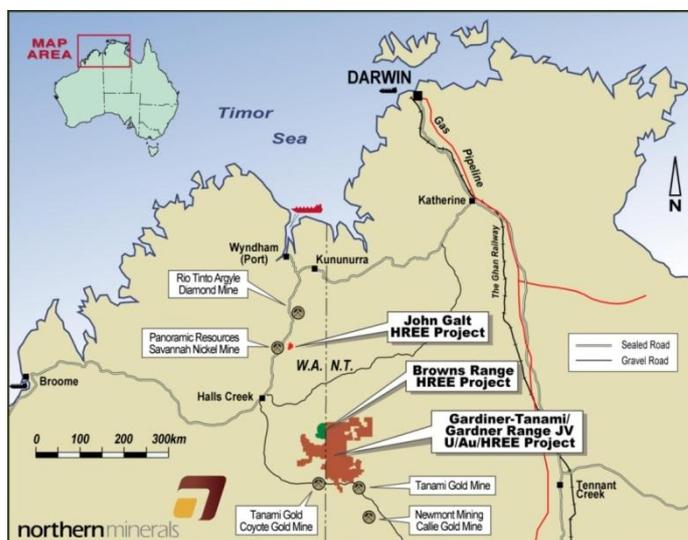
**About Northern Minerals**

Northern Minerals Limited (ASX: NTU) is focussed on development of rare earth elements (REE), with a large and prospective landholding in Western Australia and the Northern Territory.

The Company's flagship project is Browns Range, where it has a number of prospects with high value, heavy rare earth elements (HREE), in xenotime mineralisation. In particular, the mineralisation includes high levels of dysprosium and yttrium, which are in short supply globally. Following outstanding results from its drilling program, the Company is focussed on advancing Browns Range toward production, using a relatively simple and low cost processing flow sheet to produce a high grade concentrate. The Company is aiming to produce and deliver HREO in concentrate by 2015. Northern Minerals also has a HREE exploration program underway at the geologically similar John Galt project.

Northern Mineral's uranium and gold program is focused on the Gardiner-Tanami project and Gardner Range JV, which comprise 10,500km<sup>2</sup> on the WA-NT border. The projects are located within the world-class Tanami-Arunta gold region. Uranium exploration is focused on high grade unconformity-related uranium targets.

For more information, visit [www.northernminerals.com.au](http://www.northernminerals.com.au)



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