



# Quarterly Activities Report September 2011

## EXECUTIVE SUMMARY

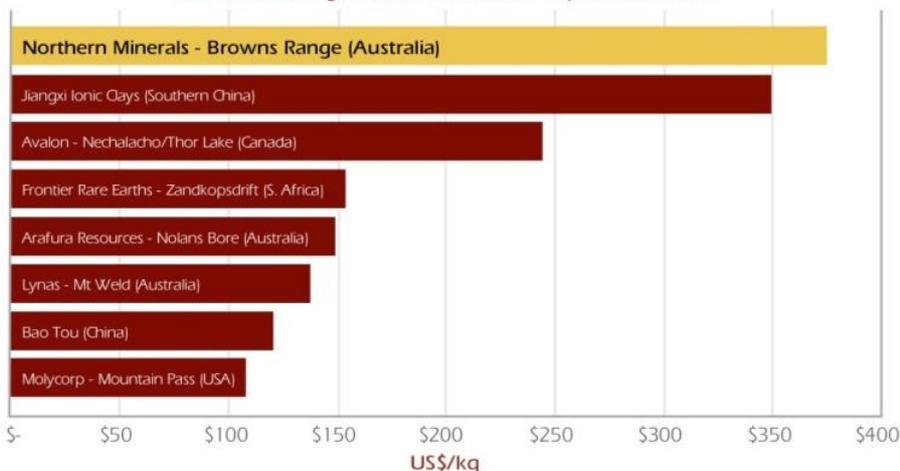
The past quarter has been a defining period in the development of the Brown's Range Rare Earth Elements (REE) Project in northern Australia. During the period, Northern Minerals undertook a 12,000m drilling program at Browns Range. Assays received to date have included exceptional Heavy Rare Earth Elements (HREE) intersections and confirmed REE mineralisation at the four prospects tested. The results have confirmed Browns Range as a significant new HREE discovery, with a strong suite of high value heavy rare earths (particularly dysprosium and yttrium) in xenotime mineralisation.

Despite a downturn in prices for Light Rare Earth Elements (LREE), the HREE market has remained strong with prices supported by concerns of security and sustainability of supply outside of China. Dysprosium oxide in particular maintained the high prices reached in the quarter; namely \$2,290/kg.

This sustainability of high prices for HREE, in particular dysprosium and yttrium, and the Company's success in the discovery of high dysprosium and yttrium values in Browns Range mineralisation, differentiate Northern Minerals in the rare earths sector. The results have fuelled confidence in the project, and allowed the Company to move forward to the next stage of development, which will include follow up drilling, resources estimation and commencement of feasibility studies.

While the focus has been on advancing the REE projects, the Company has also continued to progress the uranium and gold potential across its large asset base. It commenced a drilling program for uranium at Gardiner-Tanami, and received positive gold results from a soil sampling program. These gold anomalies will be the target of follow up drilling in the December quarter.

Global REE Projects, In-situ Value - September 2011



*This chart has been produced with in-situ values only and does not imply full recovery. Its purpose is primarily for comparison purposes between rare earth projects.*

### Company Information

Northern Minerals Limited  
ABN 61 119 966 353

#### COMPANY DIRECTORS:

- Kevin Schultz Non-executive Chairman
- George Bauk Managing Director / CEO
- Dudley Kingsnorth Non-executive Director
- Adrian Griffin Non-executive Director
- Colin McCavana Non-executive Director

- Robin Wilson Exploration Manager
- Simon Storm Company Secretary
- Robert Sills Commercial Manager

#### REGISTERED & PRINCIPAL OFFICE:

Unit 10, Level 2, 12-14 Thelma Street  
West Perth WA 6005  
AUSTRALIA

PO Box 669  
West Perth WA 6872  
AUSTRALIA

Telephone: +61 8 9481 2344

Facsimile: +61 8 9481 5929

Email: [info@northernminerals.com.au](mailto:info@northernminerals.com.au)

#### STOCK EXCHANGE LISTING

Australian Stock Exchange Limited

ASX CODE: NTU

Home Branch: Perth

2 The Esplanade,

Perth WA 6000

Shares on Issue 163,749,686

Market Capitalisation \$79 million

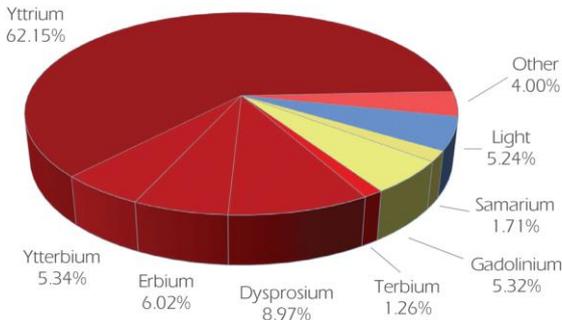
12 month Share Range \$0.28 - \$1.07

# Northern Minerals - High Value Heavy Rare Earths

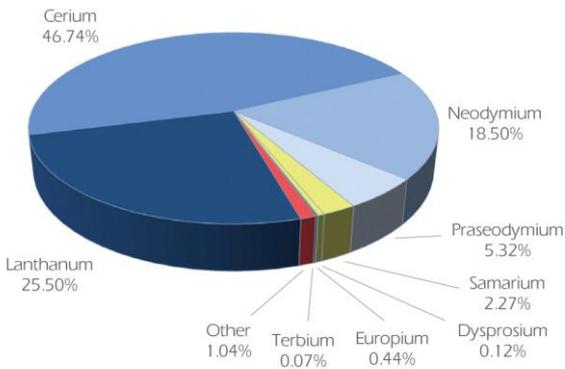
## POINT OF DIFFERENCE IS THE MIX – “HEAVIES”

### Browns Range by Volume

Light Medium Heavy



### Mt Weld\* rare earths



\*Mt Weld REO composition data above sourced from the Lynas Corporation website

## OUTSTANDING DRILL RESULTS

### Wolverine:

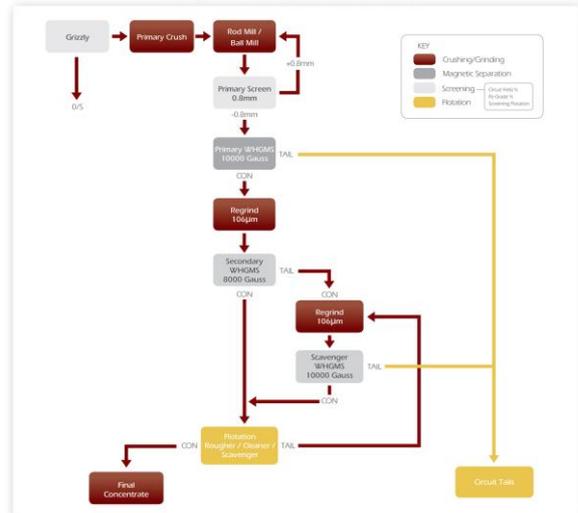
33m @ 1.53% TREO (1,470ppm Dy<sub>2</sub>O<sub>3</sub>) from 54m  
 11m @ 1.89% TREO (1,806ppm Dy<sub>2</sub>O<sub>3</sub>) from 50m  
 41m @ 1.01% TREO (881ppm Dy<sub>2</sub>O<sub>3</sub>) from 24m

### Gambit:

11m @ 2.07% TREO (1,943ppm Dy<sub>2</sub>O<sub>3</sub>) from 35m

## COUPLED WITH A LOW CAPITAL/OPERATING COST CONCEPTUAL FLOWSHEET

### Nagrom Conceptual Flowsheet



## DEMONSTRATING A CONCENTRATE OF >40%



## Highlights – September Quarter

### RARE EARTHS

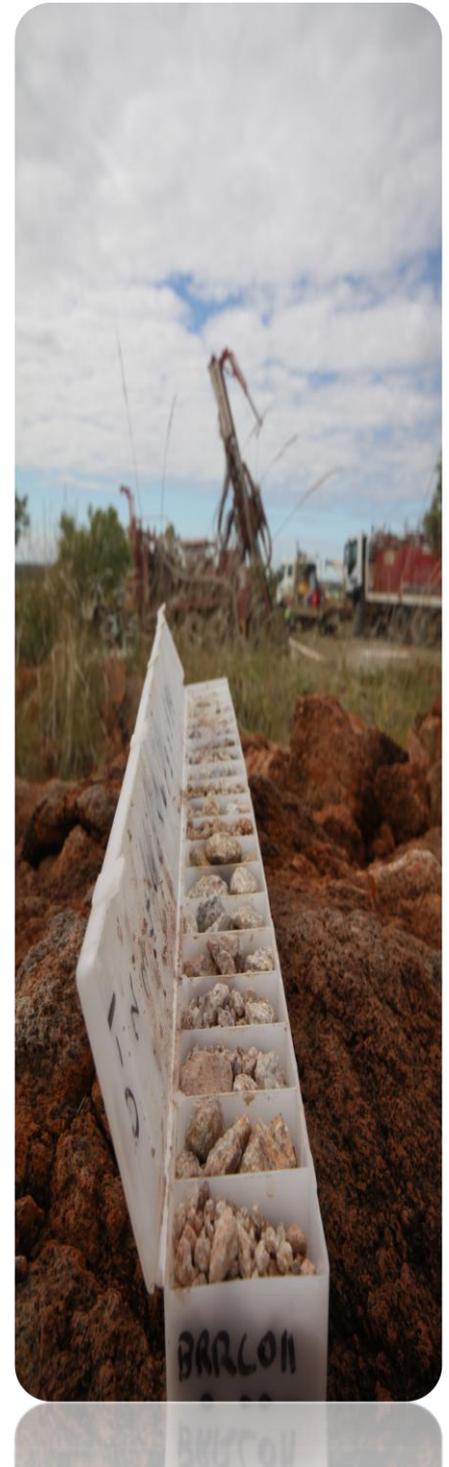
- 12,000m HREE drilling program with exceptional results, confirming Browns Range as a significant HREE project
- Heavy REE prices increase and remain near highs (despite declines in light REE) reinforcing the short global supply of HREE
- Xenotime hosted HREE mineralisation intersected at four prospects at Browns Range Project
- High grade intercepts with significant widths, including:
  - Wolverine: 33m @ 1.53% TREO (1,470ppm Dy<sub>2</sub>O<sub>3</sub>) from 54m*
  - 11m @ 1.89% TREO (1,806ppm Dy<sub>2</sub>O<sub>3</sub>) from 50m*
  - 41m @ 1.01% TREO (881ppm Dy<sub>2</sub>O<sub>3</sub>) from 24m*
  - 9m @ 1.16% TREO (1,093ppm Dy<sub>2</sub>O<sub>3</sub>) from 2m*
  - Gambit: 11m @ 2.07% TREO (1,943ppm Dy<sub>2</sub>O<sub>3</sub>) from 35m*
  - 18m @ 1.19% TREO (1,130ppm Dy<sub>2</sub>O<sub>3</sub>) from 51m*
  - 10m @ 1.08% TREO (1,011ppm Dy<sub>2</sub>O<sub>3</sub>) from 0m*
  - Area 5 North: 5m @ 3.49% TREO (3,205ppm Dy<sub>2</sub>O<sub>3</sub>) from 11m*
- HREE average 83% of TREO, featuring high levels of dysprosium and low level of uranium and thorium
- Preliminary metallurgical test work confirming simple and relative low cost flowsheet for concentrate production

### URANIUM AND GOLD

- Uranium drilling program completed on high grade targets at Gardiner-Tanami project
- Soil sampling at Don-Venus prospect confirms gold targets – results up to 228ppb Au - drill testing planned for Q4 2011

### CORPORATE

- Expanded management team with appointment of Robert Sills as Commercial Manager



## RARE EARTH ELEMENTS

### Browns Range

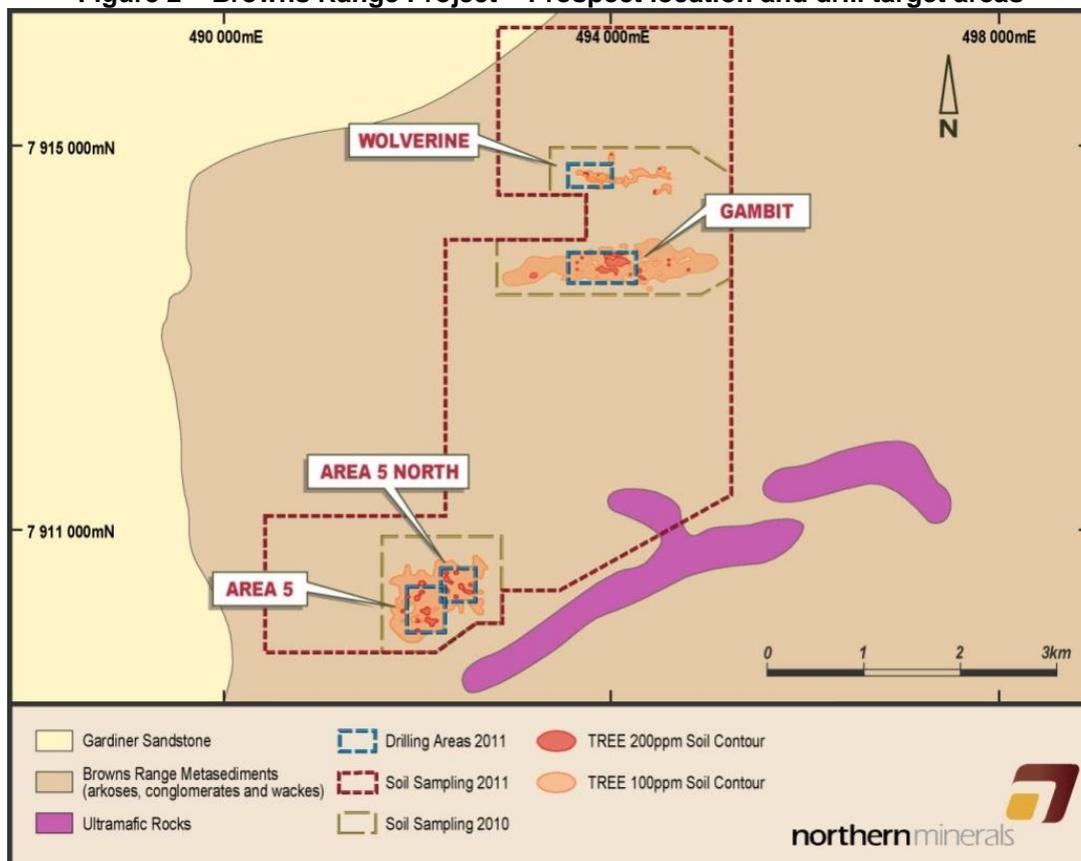
During the quarter Northern Minerals received and announced some outstanding assays results from its 12,000m RC drilling program. Assays from 123 holes of the 166 hole program have been received. Assays from the remaining holes are expected to be received and announced during the December quarter.

The assay results have confirmed mineralisation at three prospects – Wolverine, Gambit and Area 5 North whilst portable XRF measurements at the Area 5 prospect indicate significant mineralisation and the results have supported the early indications that the mineralisation is dominated by Heavy Rare Earths. Equally encouraging have been the metallurgical results completed during the quarter, which indicate the project could produce a high value concentrate with a relatively simple and low cost processing system.

The high grades and the widths of the intersections – particularly at Wolverine and Gambit – have provided significant confidence in the project. Another feature of the results has been the low levels of uranium and thorium. Metallurgical test work indicates that thorium is not directly associated with the xenotime mineralisation, and therefore could be removed by standard beneficiating techniques.

The high levels of HREE, and the fact that the majority of other new and developing REE projects are dominated by light REE, make the Browns Range Project unique.

**Figure 2 – Browns Range Project – Prospect location and drill target areas**



## Wolverine Prospect

Results announced for Wolverine during the quarter (and after the reporting period on 19 October 2011) included some of the best intersections received to date. The widths and depths of these intersections suggest a significant mineralised zone. A number of the recent holes drilled at Wolverine have also ended in mineralisation, and the Company is planning some deeper diamond drilling as part of the next phase of its program to further test the extent of this project.

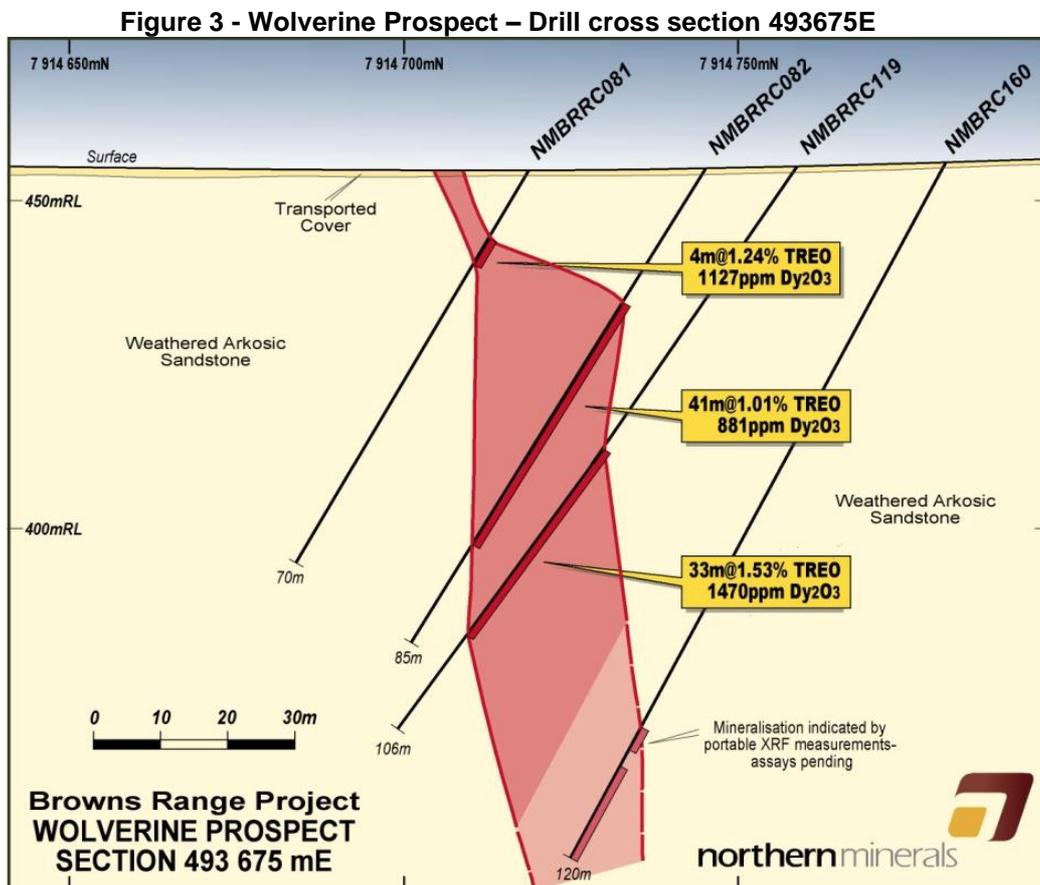
Best intersections from the results to date include:

**NMBRRC119 - 33m @ 1.53% TREO (1,470ppm Dy<sub>2</sub>O<sub>3</sub>) from 54m**  
**NMBRRC120 - 11m @ 1.89% TREO (1,806ppm Dy<sub>2</sub>O<sub>3</sub>) from 50m**  
**NMBRRC121 - 8m @ 1.88% TREO (1,620ppm Dy<sub>2</sub>O<sub>3</sub>) from 55m**  
**NMBRRC111 – 5m @ 2.78% TREO (2,561ppm Dy<sub>2</sub>O<sub>3</sub>) from 17m**  
**NMBRRC082 – 41m @ 1.01% TREO (881ppm Dy<sub>2</sub>O<sub>3</sub>) from 24m**  
**NMBRRC073 – 9m @ 1.16% TREO (1,093ppm Dy<sub>2</sub>O<sub>3</sub>) from 2m**

For full table of results, see ASX announcements dated 19 September 2011 and 19 October 2011.

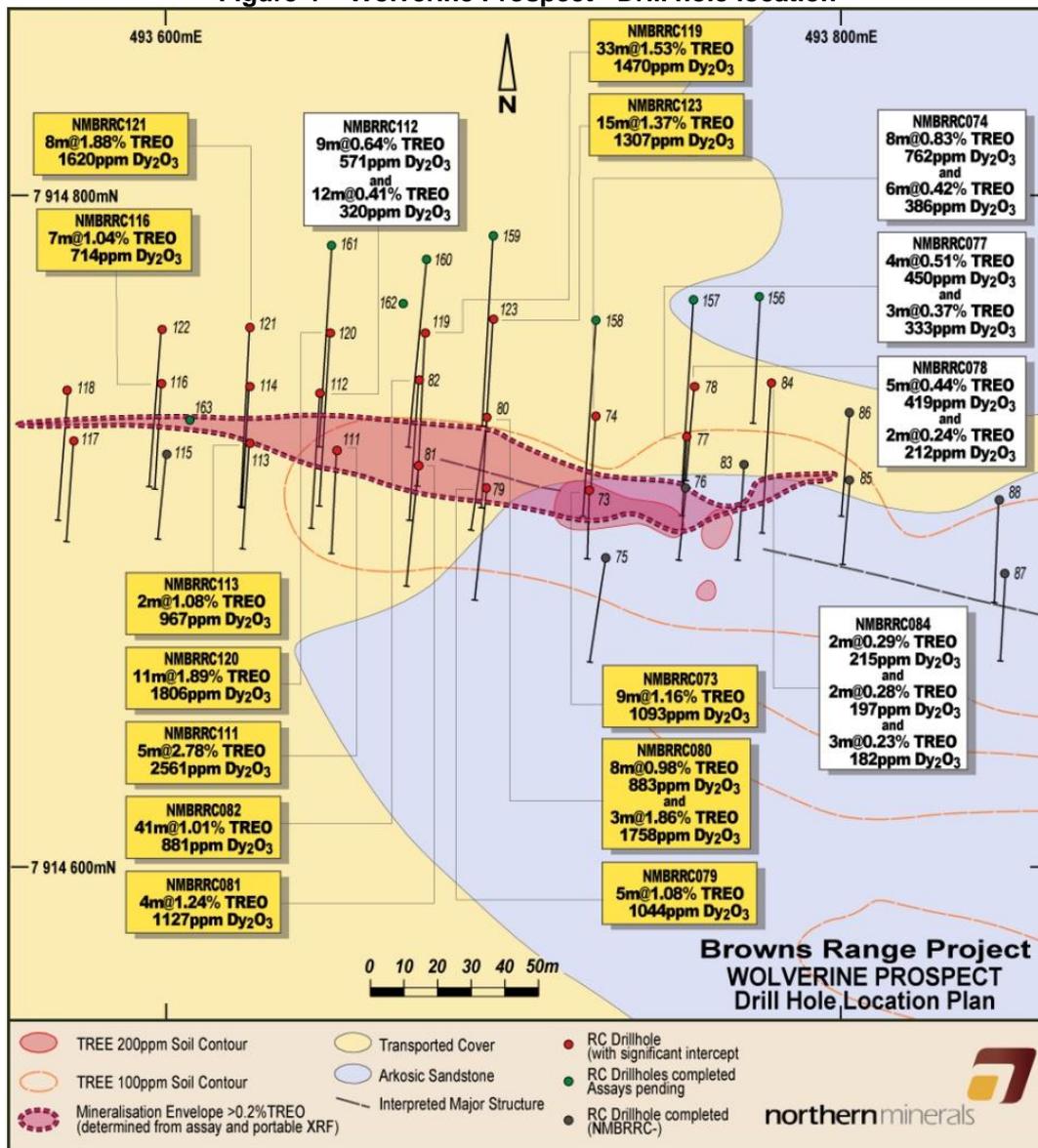
NB – TREO: Total Rare Earth Oxides – Total of La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2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

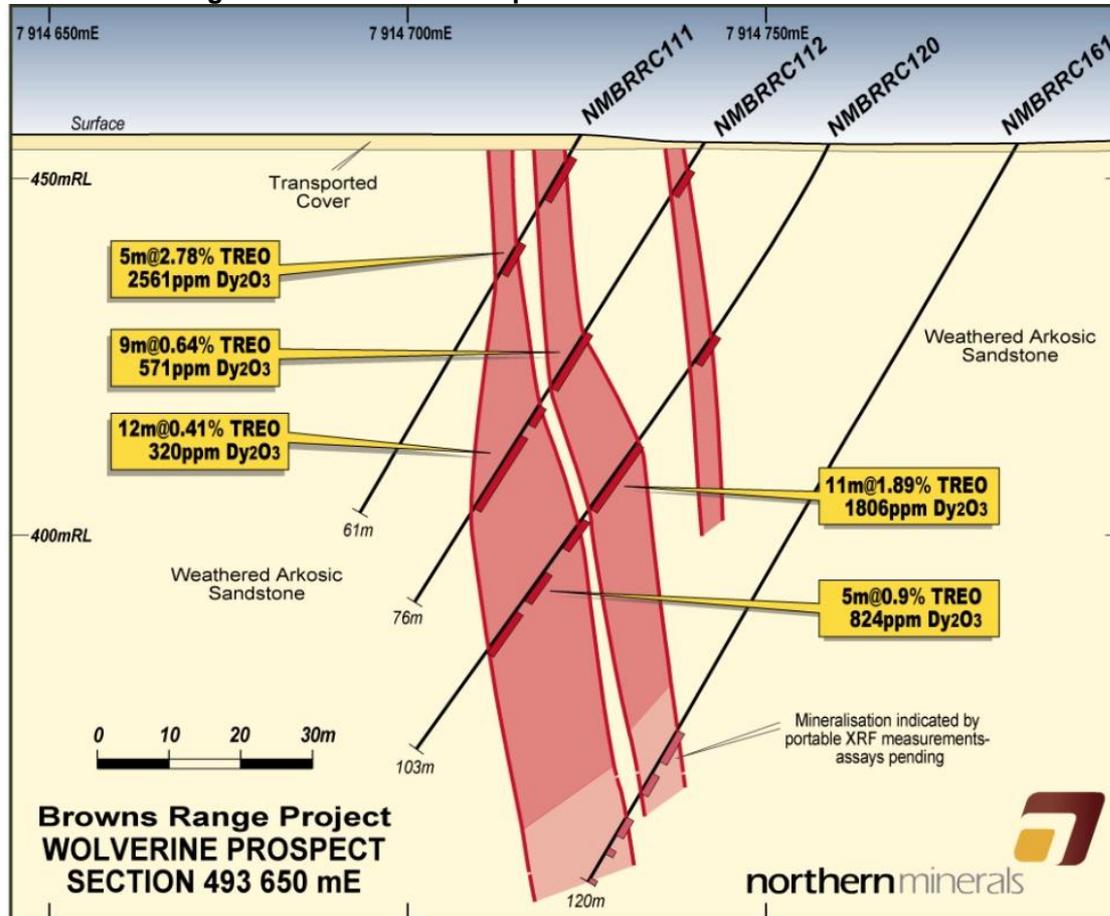
The Wolverine assays, feature xenotime mineralisation dominated by HREE, and in particular, dysprosium. They also feature relatively low levels of thorium and uranium. The results include the best intersection yet recorded from Browns Range, and they confirm the project's status as a significant new greenfields HREE discovery.



A total of 39 holes (NMBRRC073 – 092, NMBRRC111 – 123, NMBRRC156 – 161) have been drilled at the Wolverine prospect. Assays have now been received for the first 33 holes, with mineralisation being traced over a zone of up to 200m in strike length and open at depth. The mineralised zone strikes approximately east-west, dips steeply towards the north and is up to 20m true width. Portable XRF measurements from hole NMBRRC160 indicates mineralisation continues to a depth of 100m vertical on drill section 493675E. Diamond drilling is planned for the current quarter to test the depth extent of mineralisation and obtain data on the structural controls on mineralisation.

Figure 4 – Wolverine Prospect - Drill hole location



**Figure 5 – Wolverine Prospect – Drill cross section 493650E**


## Gambit Prospect

At the Gambit Prospect, a total of 57 holes (NMBRRC034 – 072 & NMBRRC093 – 110) have been completed to date, with all assays now received. Results have included some outstanding, high grade intersections, with several significant intersections with TREO in excess of 1%. Best results received to date include:

- NMBRRC055 - 11m @ 2.07% TREO (1,943ppm Dy<sub>2</sub>O<sub>3</sub>) from 35m
- NMBRRC057 - 18m @ 1.19% TREO (1,130ppm Dy<sub>2</sub>O<sub>3</sub>) from 51m
- NMBRRC045 - 9m @ 1.68% TREO (1,462ppm Dy<sub>2</sub>O<sub>3</sub>) from 86m
- NMBRRC046 – 11m @ 1.07% TREO (967ppm Dy<sub>2</sub>O<sub>3</sub>) from 48m
- NMBRRC094 – 10m @ 1.08% TREO (1,011ppmDy<sub>2</sub>O<sub>3</sub>) from 0m
- NMBRRC097 – 8m @ 1.4% TREO (1,308ppmDy<sub>2</sub>O<sub>3</sub>) from 41m

For full table of results, see ASX announcement dated 7 September 2011

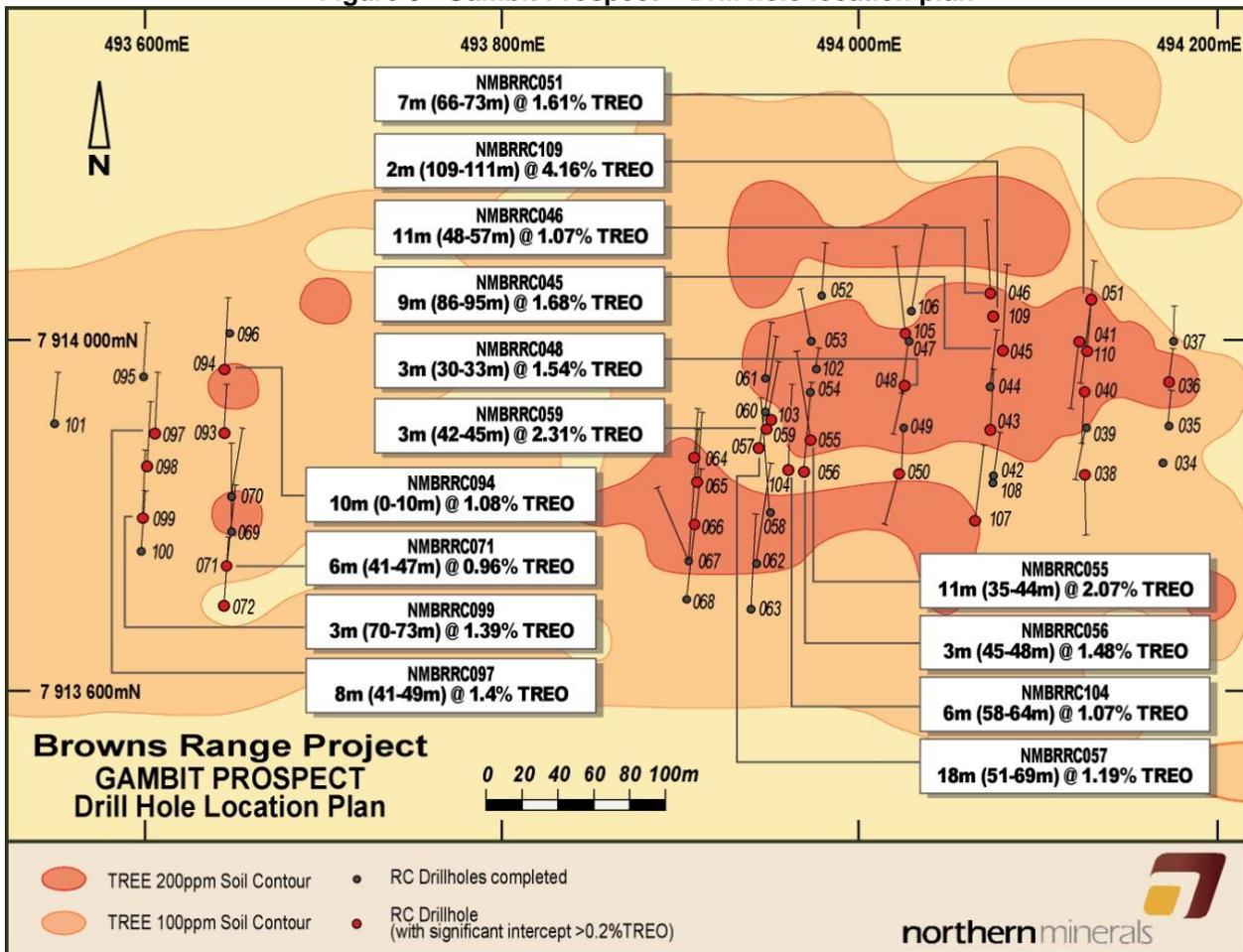
NB – TREO: Total Rare Earth Oxides – Total of La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2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

Like Wolverine, Gambit features xenotime hosted REE mineralisation, with a dominance of high value HREE. Heavy Rare Earth Oxides (HREO) account for an average 83% of the TREO from Gambit, with high levels of dysprosium a highlight. Table 1 below shows a summary of some of the key points from the analysis of the assay results (above a cut-off of 0.2% TREO).

**Table 1 – Gambit Prospect: Analysis of geochemical assay results from drill holes NMBRRC034 – 072**

TREO % cut-off	HREO/TREO %	Dy <sub>2</sub> O <sub>3</sub> /TREO %	Dy <sub>2</sub> O <sub>3</sub> average (ppm)	Y <sub>2</sub> O <sub>3</sub> /TREO %	Y <sub>2</sub> O <sub>3</sub> average (ppm)	U <sub>3</sub> O <sub>8</sub> average (ppm)
0.2	83	8.5	829	59	5,740	30
0.5	87.5	9	1,426	62	9,890	49
1.0	89	9.1	2,157	65	14,957	70

Holes were drilled 20-25m apart on north-south trending sections every 50m. Drillhole fences were directed alternately north and south to intersect an interpreted dominant east-west trending sub-vertical fault structure. The program was targeted at the peak of an east-west trending soil geochemical anomaly which extends over 2km. The drilling completed to date has tested an area approximately 600m in extent, with most of the drilling focused on an area 300m long. Significant REE mineralisation (>0.2% TREO) has been intersected on all drill traverses across the 600m wide zone. Recent assay results returned significant results (10m @ 1.08% TREO and 8m @ 1.4% TREO) on the westernmost drill lines indicating mineralisation is open to the west. Mineralisation is hosted by quartz-veined, silicified and/or hematiticarkosic sandstone, and appears to be controlled by one or more east-west trending fault structures, and north-west trending cross-cutting structures. The geometries of the mineralised zones are currently being assessed, with several possible interpretations for the orientations. One interpretation is that mineralisation is broadly sub-vertical, with higher-grade zones at fault intersections which create pipe-like plunging shoots.

**Figure 5 - Gambit Prospect – Drill hole location plan**


## Area 5 North Prospect

Northern Minerals has also intersected mineralisation at the Area 5 North prospect, with HREO intersections up to 10m wide. A total of 37 holes (NMBRRC001 – 033, NMBRRC124 – 127) have now been completed at the Area 5 North prospect. All assay results have been received for the first 33 holes, and results for the remaining four holes are expected in the current quarter. Results from the first batch of samples (holes NMBRRC001-011) were reported in July 2011, which included assay results of 12m @ 1.73% TREO (inc. 5m @ 3.49% TREO) from hole NMBRRC011. Results for holes NMBRRC012 – 033 have been received with several significant intercepts of low-grade mineralisation, including:

- **NMBRRC014 – 5m @ 0.45% TREO (including 285ppm Dy<sub>2</sub>O<sub>3</sub>) from 34m**
- **NMBRRC013 – 2m @ 0.51% TREO (including 297ppm Dy<sub>2</sub>O<sub>3</sub>) from 38m**
- **NMBRRC019 – 3m @ 0.36% TREO (including 223ppm Dy<sub>2</sub>O<sub>3</sub>) from 7m**

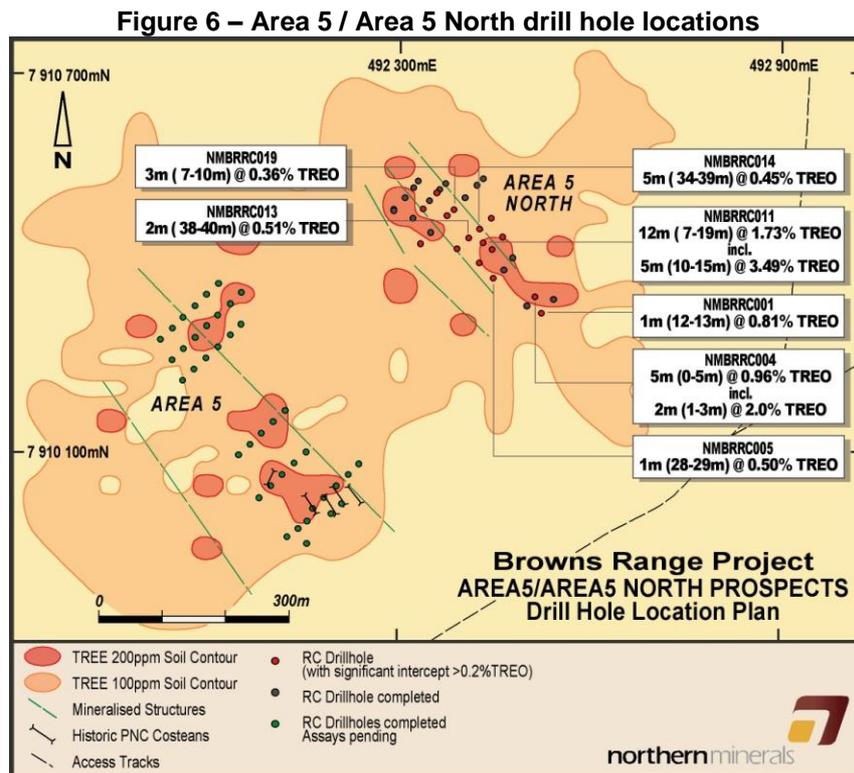
For full table of results, see ASX announcements dated 7 September 2011 and 28 July 2011.

NB – 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>

Four holes have recently been completed to test a re-interpretation of the geometry of the high-grade mineralisation encountered in hole NMBRRC011, which has to date not been intersected in any other holes at Area 5 North. These four drill holes were designed to test for possible northwest or northerly-plunging high grade shoots of mineralisation. Portable XRF measurements of samples from these drill holes suggest that the high-grade REE mineralisation has not been intersected.

## Area 5 Prospect

At the Area 5 prospect, which is located 800m south-west of Area 5 North, 28 drill holes (NMBRRC128 – 155) have been completed to date. Significant mineralisation (as indicated by portable XRF Yttrium measurements) was intersected in several holes over widths of 5-10m. First assay results are expected from Area 5 in December quarter.



## Browns Range – Diamond drilling

Northern Minerals is planning a diamond drilling program in the December quarter, and has booked a drill rig to undertake a 1,500m program. This will help determine the orientations of mineralised geological structures, facilitating the definition of mineralised zones and their geometries. It will also include a number of deeper holes to test the depth extent of mineralisation which is currently open at depth in a number of areas at Gambit and Wolverine.

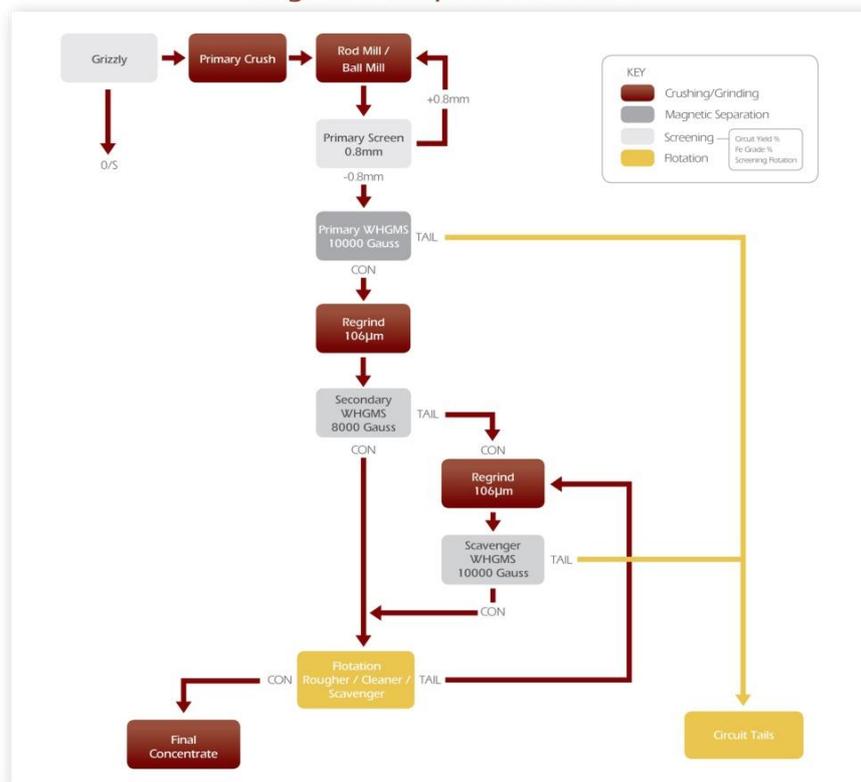
The diamond drill program will also include sampling of mineralised zones to be used for metallurgical test work. Previous metallurgical testing has indicated the mineralisation will be relatively easy to process, and is capable of producing a low cost, high grade concentrate.

## Browns Range - Metallurgical Testing

A key focus for Northern Minerals exploration and development program will be ongoing metallurgical testing on drill core samples from Browns Range. In October, the Company will commence a bulk sampling program, involving the collection of approximately four tonnes of RC drilling samples from three prospects, targeting three different grades. Further metallurgical test work will be completed on additional samples from diamond drill holes planned for the current quarter. This next phase of metallurgical testing will help confirm the flowsheet being developed (see diagram below), and provide data for a desktop study in the coming Quarter. The bulk samples will also produce sufficient concentrate to share with potential off-take partners, and advance the Company's initial discussions with these parties.

Previous testing has confirmed the dominance of xenotime mineralisation at Browns Range, and preliminary results from test work on samples from the Gambit and Wolverine prospects indicate the ability to produce concentrate grades of greater than 40%. This reinforces the early indications that the ore is amenable to a relatively simple flowsheet, incorporating crushing, grinding, magnetic separation and flotation.

Nagrom Conceptual Flowsheet



## John Galt

While the majority of work during the current quarter was focused on the Browns Range Project, Northern Minerals has an exploration program in place for the exciting early stage HREE targets at the John Galt Project, which lies to the north west of Browns Range. In mid 2011, the Company released collated historical drilling results which confirmed high concentrations of HREE in xenotime mineralisation – and in particular, yttrium and dysprosium. The historical exploration has provided important insights into the potential for HREE mineralisation within the John Galt Project area. However, much of the area remains essentially untested. The drilling results are from only one of three mineralised zones, and the next step is to undertake further exploration to define the extent of mineralisation at all three known zones.

During the quarter, the Company continued to liaise with local communities as part of the Aboriginal heritage survey process, and following completion of these surveys will commence on-ground exploration work. For the current December quarter, the Company is planning a program that will include geological mapping, ground radiometric surveys as well as soil and rock ship samples. This will help identify and prioritise targets for a drilling program at John Galt, which is planned for the first half of 2012.

## The REE Market

During the majority of the past quarter, the REE market, and the HREE market in particular, continued to increase in price driven by concerns of security and sustainability of supply outside of China. Following the significant price increases during the past twelve months, global prices for REE have eased during October, particularly prices for light rare earths.

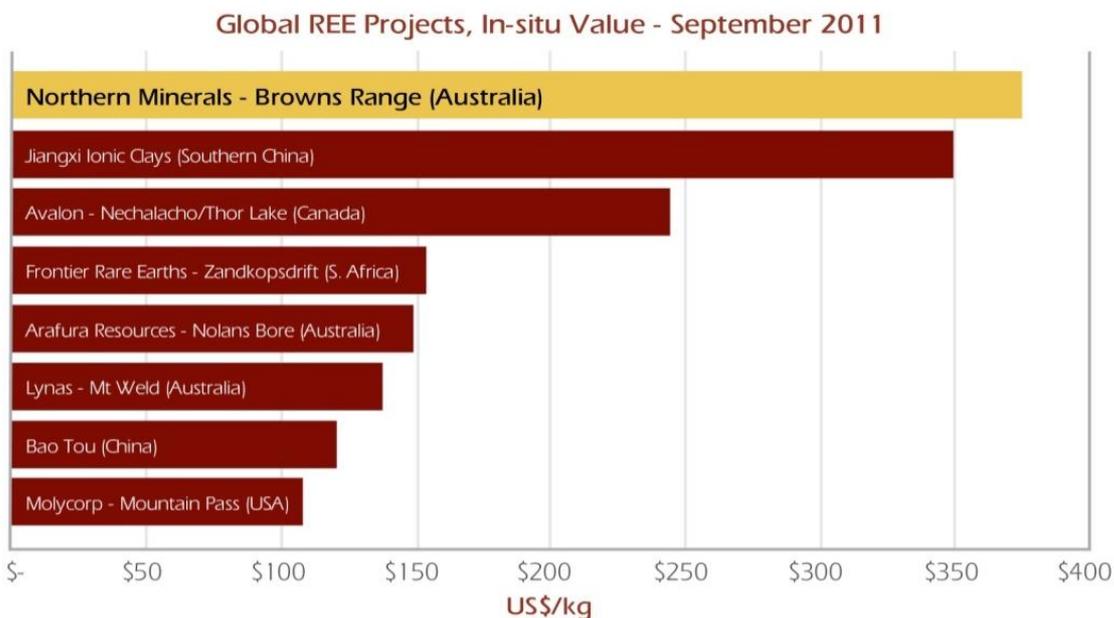
However, with limited new potential sources of supply for HREE, prices for “heavies” have remained relatively firm – particularly for dysprosium. The REE suite at Northern Minerals Browns Range Project is dominated by HREE (particularly dysprosium and yttrium) which is reflected in the continuing high in-situ value of the project (see table below).

(Notes: 1. Source is metal pages@2. Prices have been rounded)

	Rare Earths Price US\$/kg FOB China <sup>1,2</sup>							
Rare Earth Products	2008	2009	3Q2010	4Q2010	1Q2011	2Q2011	3Q2011	30/09/11
Lanthanum Oxide	\$7.75	\$5.90	\$27	\$52	\$76	\$138	\$116	\$79
Cerium Oxide	\$4.35	\$4.20	\$25	\$52	\$78	\$138	\$112	\$71
Praseodymium Oxide	\$27	\$14.75	\$48	\$79	\$120	\$215	\$237	\$218
Neodymium Oxide	\$27	\$14.85	\$51	\$81	\$130	\$253	\$306	\$262
Samarium Oxide	\$4.50	\$4.50	\$22	\$37	\$73	\$120	\$1122	\$108
Europium Oxide	\$475	\$465	\$580	\$612	\$719	<b>\$1867</b>	<b>\$4,786</b>	<b>\$3,790</b>
Gadolinium Oxide	\$9.75	\$6.50	\$30	\$47	\$65	\$167	\$188	\$162
<b>Dysprosium Oxide</b>	<b>\$110</b>	<b>\$105</b>	<b>\$287</b>	<b>\$288</b>	<b>\$413</b>	<b>\$983</b>	<b>\$2,376</b>	<b>\$2,290</b>
Terbium Oxide	\$650	\$350	\$578	\$620	\$718	\$1767	\$3,840	\$3,210
<b>Yttrium Oxide</b>	<b>\$15.25</b>	<b>\$13.50</b>	<b>\$28</b>	<b>\$70</b>	<b>\$90</b>	<b>\$158</b>	<b>\$167</b>	<b>\$152</b>

Dysprosium is an important additive in neodymium-iron-boron magnets, which are increasingly used in clean energy applications. Demand for dysprosium is expected to increase significantly with only negligible forecast increases in ROW supply. Similarly yttrium, which is used to make phosphors for use in fluorescent lighting, television displays and computer monitors as well as in yttria stabilised zirconia, (an important wear resistant ceramic) is found in minimal quantities outside China.

The table below gives an indication of the effect on in-situ values since REO prices began to ease in October 2011.



*This chart has been produced with in-situ values only and does not imply full recovery. Its purpose is primarily for comparison purposes between rare earth projects.*

## URANIUM and GOLD

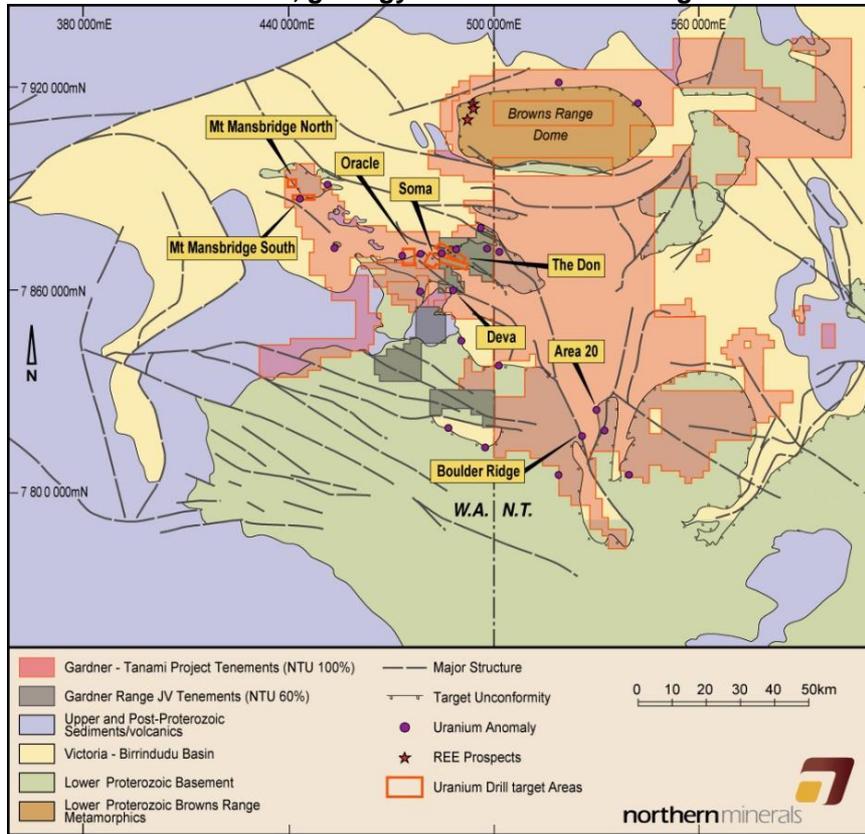
### Uranium

During the quarter, Northern Minerals commenced an RC uranium drilling program at its Gardiner-Tanami/Gardner Range JV project, as part of a regional exploration campaign targeting high priority uranium and gold targets.

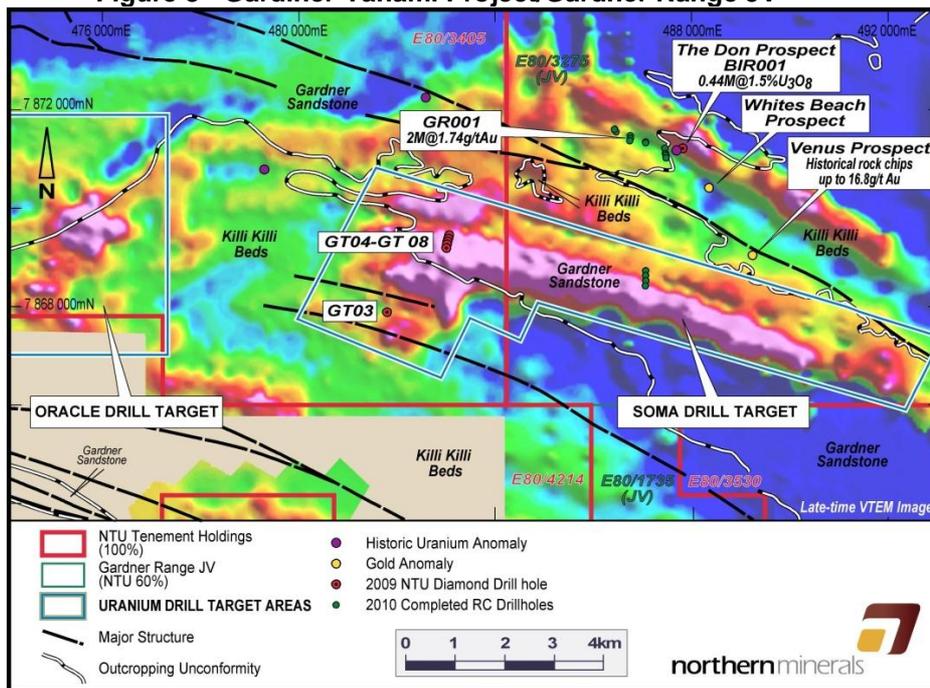
The drilling program was designed to follow up 2010 drilling at the Soma prospect, which confirmed a large target for high grade unconformity-related uranium mineralisation. The identified VTEM conductor target is over 8km in strike length and has only been lightly tested to date with two drill traverses across its entire extent.

A total of 9 holes for 1,407m was completed at the Soma prospect during the quarter with six of the drill holes intersecting the targeted Gardiner Sandstone/Killi Killi Beds unconformity. Down hole gamma logging did not return any significant results. Further drilling at the Mt Mansbridge South, Oracle and Deva prospects has been deferred.

**Figure 7 – Gardiner-Tanami Project/Gardner Range JV Tenements, geology and uranium drill targets**



**Figure 8 - Gardiner-Tanami Project/Gardner Range JV**



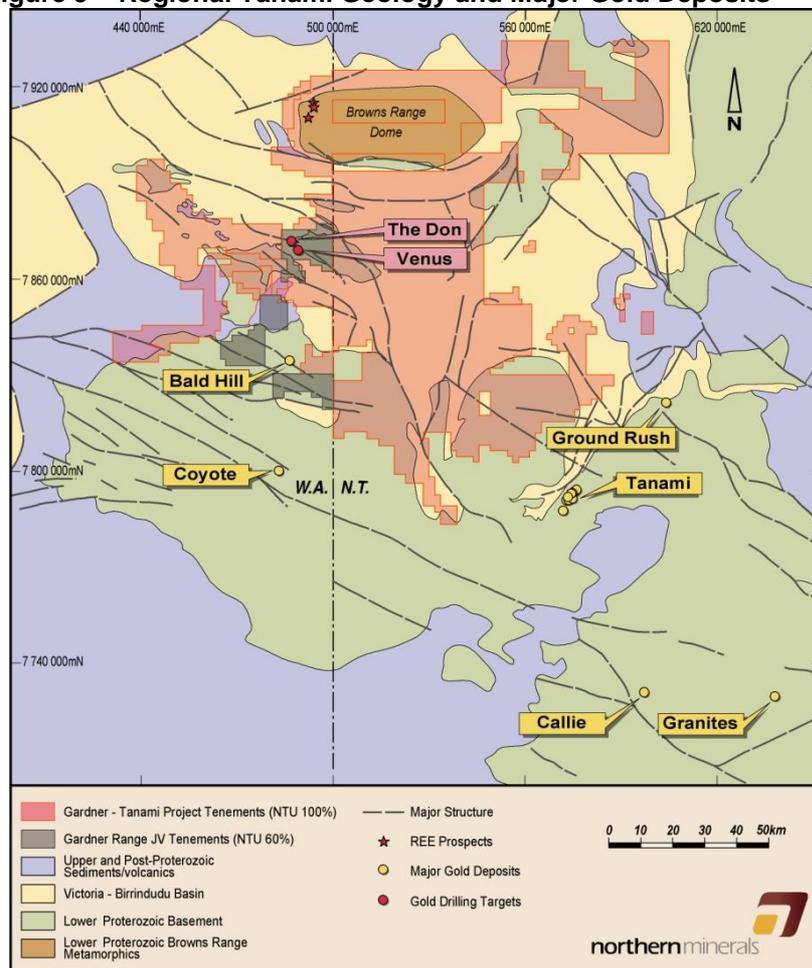
## Gold

Positive gold geochemical assay results have been received from soil samples taken on the Gardner Range JV. The soil samples include results up to 228ppb Au, and have identified two significant gold anomalies for follow up drilling.

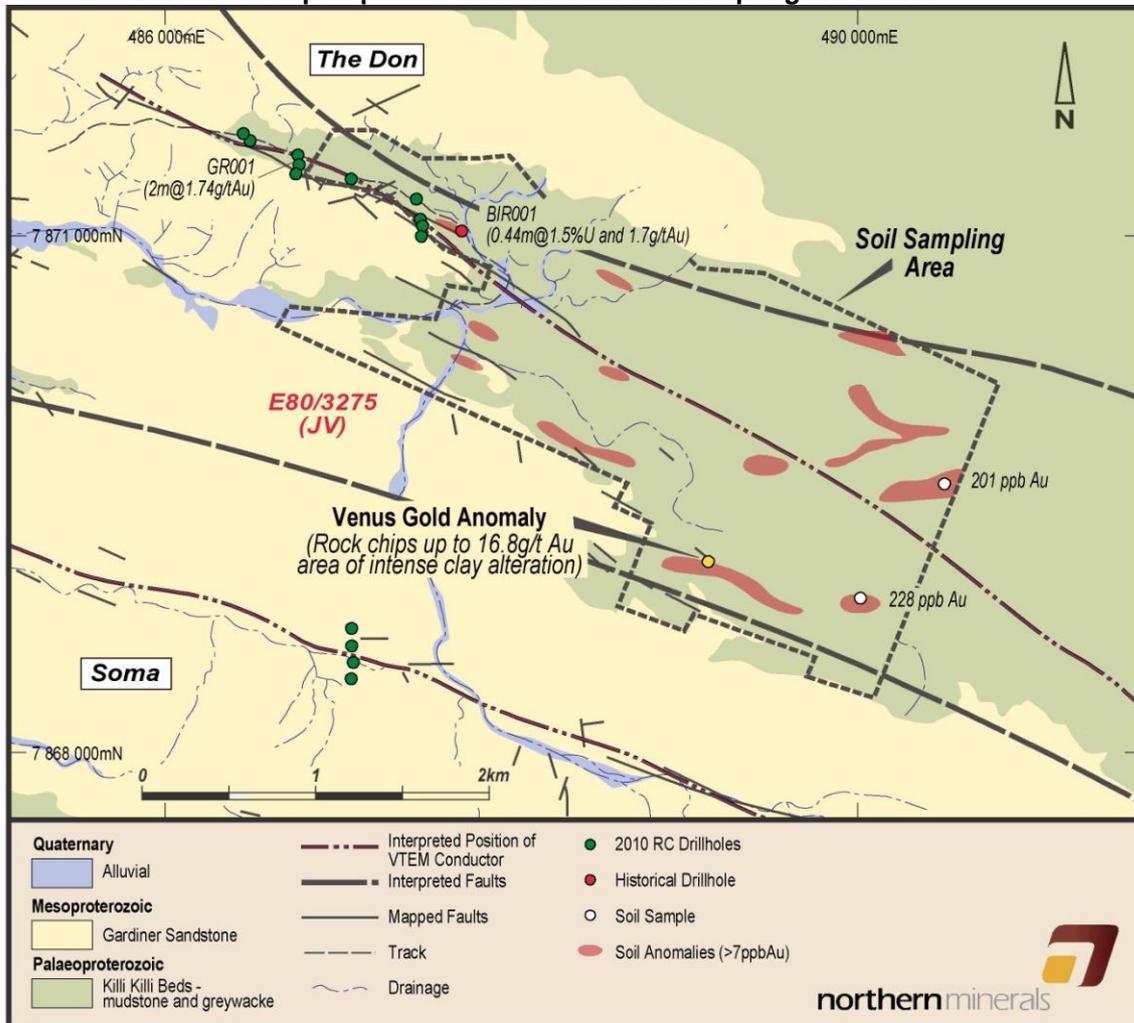
Soil geochemical results from samples taken near The Don-Venus prospects at the Gardner Range JV have returned encouraging results. An area of approximately 4km by 1.3km, to the southeast of the Don prospect, was soil sampled on a 200m x 50m grid. The results indicate two areas of gold anomalism with samples up to 228ppb Au. One anomaly lies immediately to the east of the historic Venus prospect, and extends semi-continuously for 1.2km in an east-west orientation. The other anomalous area lies approximately 1.2km to the northeast of Venus, and extends discontinuously over 1.3km in an approximate east-west orientation. One area may be drill tested as part of a proposed 2,500m program in the fourth quarter of 2011.

This soil sampling program followed positive gold results from 2010 drilling near The Don. The most encouraging was an intersection of 2m (36-38m) @ 1.74g/t Au within an anomalous zone of 4m (36-40m) @ 0.95g/t Au. Historical exploration conducted by BHP in the 1980s discovered the “Venus” gold anomaly, which is 2-3 km to the south-east of The Don where an intense clay alteration occurs within Killi Killi Beds). Historical reports indicate rock chips from the Venus prospect assayed up to 16.8g/t Au. These results indicate The Don, and the area to the east of it, to be very prospective for gold mineralisation. The project area is located within the Tanami-Arunta region which is a world-class gold province, with several plus million ounce deposits (Callie, Granites, Tanami), and is considered by many to be one of the most under-explored major gold terrains in Australia.

**Figure 9 – Regional Tanami Geology and Major Gold Deposits**



**Figure 10 – Gardner Range JV  
Don – Venus prospects - Geochemical soil sampling anomalies**



## CORPORATE

### Robert Sills appointment

In September, Northern Minerals announced the appointment of Robert Sills to the new position of Commercial Manager. The appointment extends the depth of the management team, and brings highly relevant experience in the planning and development of REE projects and international market development.

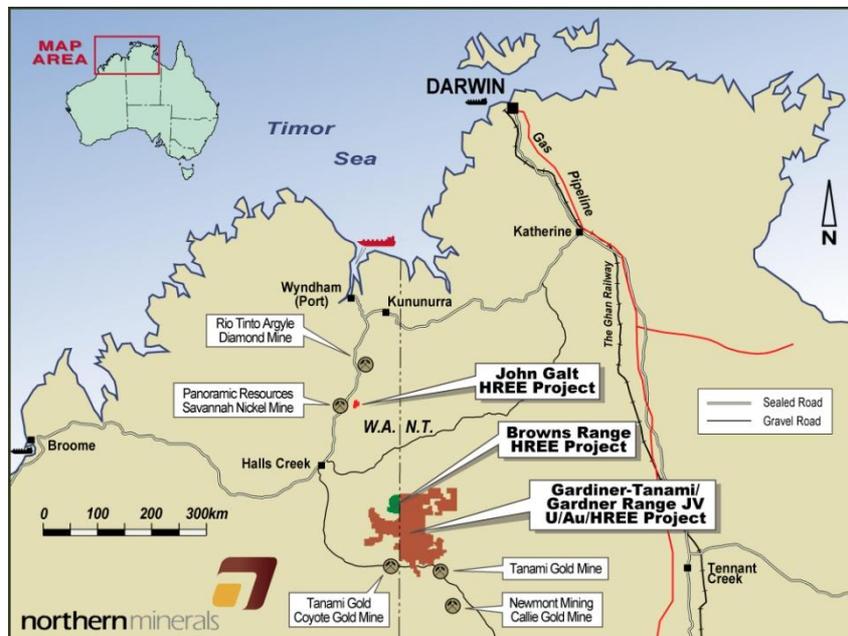
Mr Sills has considerable experience in identifying and negotiating global business opportunities in Australia, Asia and Europe, specifically within the REE industry. Through this he has a particularly strong commercial understanding and business network in some of the key REE Asian markets. He also has experience in the financial and commercial analysis of the global commodity financial trends, supply chain dynamics and market drivers.

### About Northern Minerals

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

The Company has identified high value, heavy rare earth elements (HREE) at its Browns Range Project. The discovery is particularly significant due to the nature of the mineralisation (xenotime), and the strong global demand and price for the HREE it contains. Northern Minerals currently has fully funded HREE exploration programs underway at the Browns Range Project and the geologically similar John Galt Project.

Northern Mineral's uranium and gold program is focussed 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 Tanami-Arunta region which is a world-class gold province, with several plus million ounce gold deposits. Uranium exploration is focused on high grade unconformity-related uranium targets. The area is compared favourably to the Alligator Rivers region in the NT which hosts the Ranger mine (Australia's largest operating uranium mine), and the Athabasca Basin in Canada, host to the world's highest-grade unconformity-related uranium deposits.



#### For more information:

Name	Company	Contact
George Bauk	Managing Director/CEO Northern Minerals	+61 8 9481 2344
Ryan McKinlay Karen Oswald	Purple Communications	+61 8 6314 6300

#### Competent Person 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.