

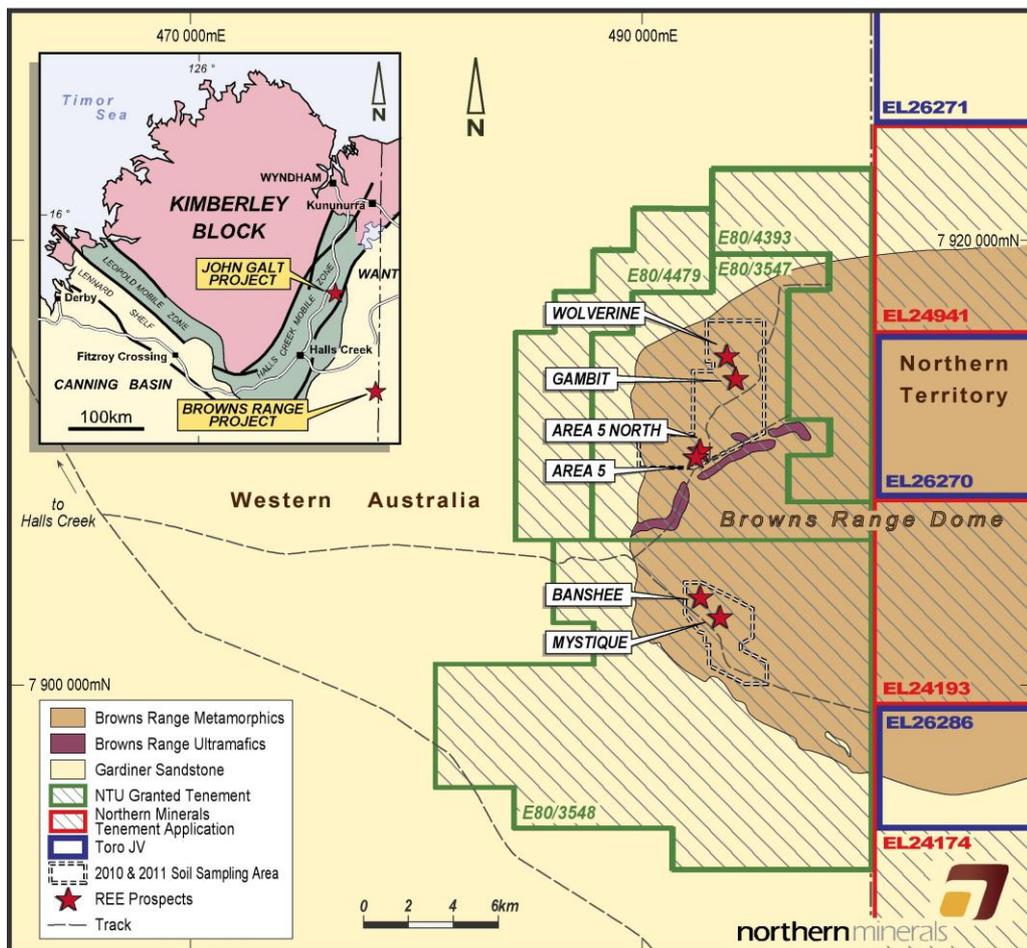
ASX ANNOUNCEMENT
27 March 2012

Exciting New HREE drill targets expand Browns Range potential

Highlights:

- Geochemical soil sampling and rock chip sampling at Browns Range confirms two new Heavy Rare Earth drilling targets (Banshee and Mystique prospects)
- Rock chip sampling at Banshee and Mystique prospects have returned results up to **14.7% TREO**
- Significant extensions to drill targets at current prospects Gambit and Area 5
- Additional sampling anomalies (> 150ppm TREO) at Browns Range require further follow-up
- Confirms high HREO prospectivity across large unexplored areas of Browns Range Dome.

Figure 1 – Browns Range Project - Prospect and soil sampling locations



Northern Minerals (ASX: NTU) is pleased to provide an update on regional sampling activities at its Browns Range Heavy Rare Earth (HREE) project in northern Western Australia (WA), identifying a pipeline of exciting new HREE exploration opportunities across the region.

Results from geochemical soil sampling in late 2011 have defined new HREE drill targets and significantly extended existing targets.

The program included a total of 1,445 soil samples collected from two areas at Browns Range (see Figure 1 above). All results have been received and the initial compilation and interpretation of results have been completed.

Northern Minerals Managing Director George Bauk said “the regional soil sampling provided further evidence of the under-explored and highly prospective nature of the Browns Range Dome area.”

“To date through our soil sampling program we have covered less than 20% of the approximate 190km² area of prospectivity on the WA side of the Browns Range Dome area,” Mr Bauk said.

“We now have two exciting new drill targets, as well as significant extensions to our target areas at the Gambit and Area 5 prospect areas,” he said.

“These latest results have indicated we have a pipeline of potential prospects across the area, and supports the view that the Browns Range Dome region has potential to be a globally significant source of HREE,” Mr Bauk said.

Northern Minerals is currently working on delineation of a maiden JORC resource from previously drilled prospects, and is undertaking scoping and pre-feasibility studies for the commencement of HREE production at Browns Range in 2015.

“At the same time we are continuing to undertake regional sampling programs across the area to test the region and to build a significant mineral inventory at the Browns Range project in the future,” Mr Bauk said.

Figure 2 - Banshee prospect (looking north)



Geochemical soil sampling and rock chip sampling results

Browns Range South

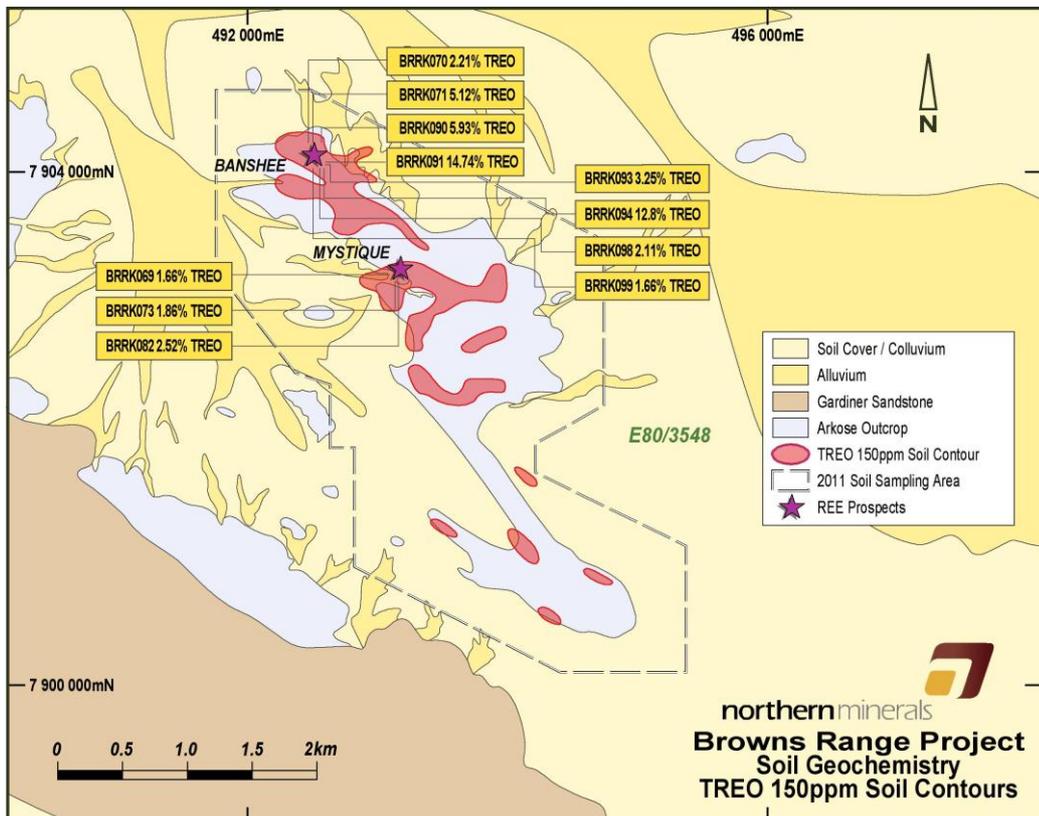
An extensive soil sampling program was completed in 2011 which focused on two main areas. The southern area of soil sampling is located approximately 6km south of the Area 5 prospect (see Figure 3 below - Browns Range South), and was first identified as a uranium radiometric anomaly by Northern Minerals in 2010. Rock chip sampling in early 2011 returned assays up to 5.1% TREO at the Banshee prospect and 1.86% at the Mystique prospect. Soil sampling was conducted on a 200m x 100m grid over an area of approximately 9km². Two significant geochemical soil anomalies have been identified, one centered on the Banshee prospect and the other at Mystique.

At Banshee, a >150ppm TREO geochemical soil anomaly extends approximately 1.4km in strike length in a northwest-southeast orientation (see Figure 3 below). Detailed geological mapping in the area has indicated cross-cutting northeast-southwest orientated structures may be significant in terms of controlling mineralisation. 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). Outcropping lithologies in the area are dominantly arkosic sandstones with laminated and mineralised quartz veins and breccias.

At the Mystique prospect a >150ppm TREO geochemical soil anomaly has been defined extending 1km in length in an approximate east-west direction. Again, arkosic sandstone is the dominant rock type outcropping in the area, with some evidence of brecciation. Further rock chip sampling has been completed at Mystique with assays up to 2.52% TREO (see Table 1 below). Petrological studies of rock chips from Mystique have identified xenotime, the same HREE mineral as at the Wolverine and Gambit prospects.

Approximately 4,000m of drilling is proposed for Banshee and Mystique in 2012.

Figure 3 – Browns Range South – Soil sampling anomalies (>150ppm TREO) and rock chip sampling



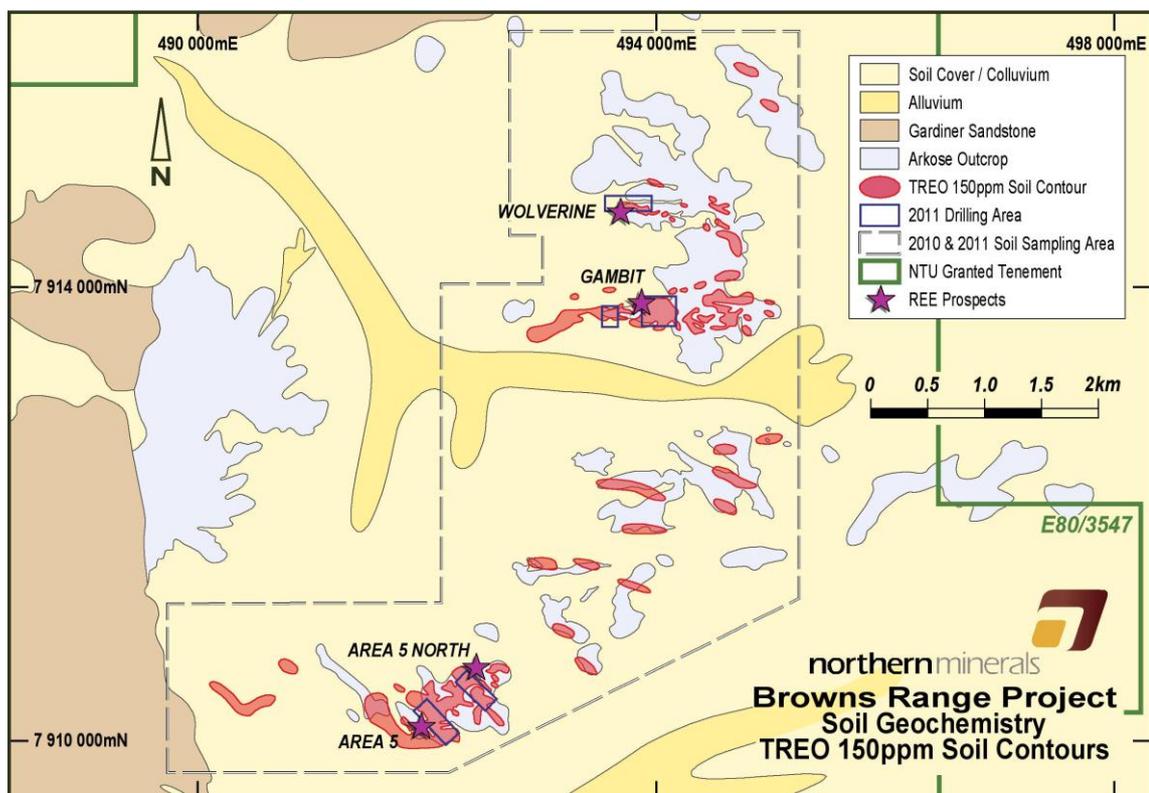
Browns Range North

The soil sampling program also focused on an area between the Area 5 prospect in the south up to the north of the Wolverine prospect. This area is approximately 20km² in extent (see Figure 4 below – Browns Range North) and also covers the Gambit prospect. 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. Most of the mineralisation identified at Wolverine is located under transported soil cover, where the soil geochemical anomaly is of lower tenor. 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 recent sampling extends anomalism for 650m to the west of low hills containing outcropping xenotime – and where the drilling at Gambit has been focused to date. The Gambit prospect drilling has tested two zones, approximately 350m and 150m in strike extent, where fault breccia structures and xenotime mineralisation outcrops within arkosic sandstones. The orientation of these fault breccia structures is east-west, although there is also evidence of northwest-southeast trending structures controlling mineralisation. 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

Figure 4 – Browns Range North – Soil sampling anomalies (>150ppm TREO)



At Area 5, the >150ppm TREO soil anomaly now covers an area 1.1km by 800m extending known anomalism to the west. These soil sampling results have enhanced the Area 5 drill target. A new zone trending northwest-southeast has been delineated which is 700m in strike length. Drilling to date at Area 5 and Area 5 North has been focused on an area of 600m x 400m where arkosic sandstone and xenotime mineralisation outcrop.



Several new >150ppm TREO soil anomalies were also defined between the Area 5 and Gambit prospects. These anomalies are generally oriented east-west. Although most anomalism is coincident with arkosic sandstone outcrops, there are several areas where the anomalies extend into soil covered areas. Further on-ground checking of these anomalies is required prior to drilling.

Table 1 – Summary of rock chip sample results (>0.5% TREO)

Prospect	Sample Id	Northing	Easting	TREO(%)	Dy ₂ O ₃ (ppm)	Y ₂ O ₃ (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 La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃, Y₂O₃

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.

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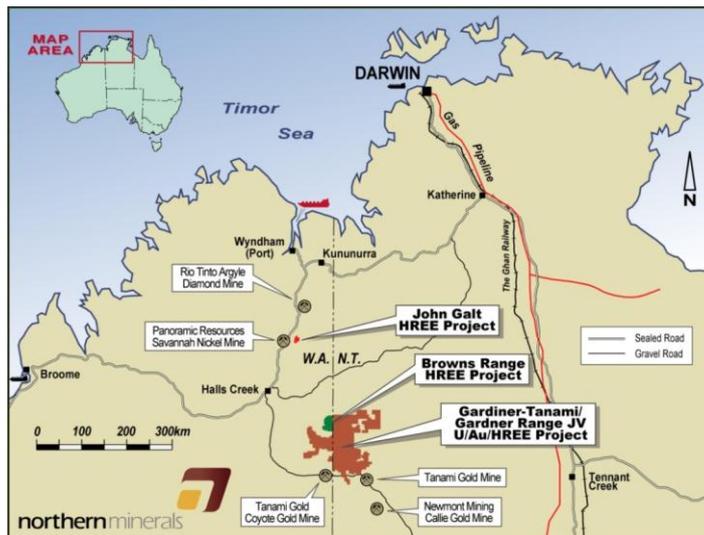
About Northern Minerals

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.

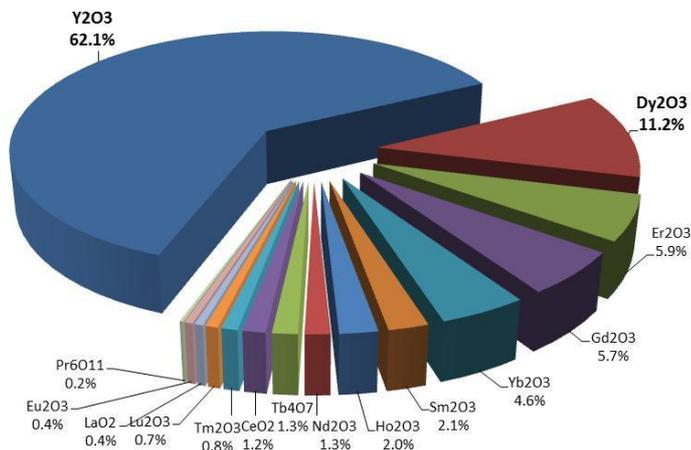
The Company's flagship project is Browns Range, where it has a number of prospects with high value, heavy rare earth elements (HREE), in xenotime mineralisation. In particular, the mineralisation includes high levels of dysprosium and yttrium, which are in short supply globally. Following outstanding drill results in 2011, 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 10,500km² 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 favorably 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, visit www.northernminerals.com.au



Marketable Concentrate TREO Distribution



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