ASX ANNOUNCEMENT
11 May 2023

Further Assays Extend Down Plunge Mineralisation at Wolverine Deeps

- Further assay results extend mineralisation down plunge below the current Mineral Resource wireframe, with mineralisation remaining open with depth.
- High grade results returned from BRWD0068 of 17.6m @ 1.96% TREO from 589m including 9.94m @ 3.27% TREO from 589m.
- High grade mineralisation now extended 80m below and 50m west of the current wireframe.
- The Company remains focused on updating the DFS on the path to production.

Heavy rare earths developer, Northern Minerals Limited **(ASX: NTU)** (**Northern Minerals**, or the **Company**) is pleased to advise it has received assay results from BRWD0068 and BRWD0068W1 from a recently completed seven (7) hole diamond drilling programme (**Table 1**), with the results extending mineralisation down plunge below the current Mineral Resource wireframe, and mineralisation remaining open with depth.

Table 1: Wolverine Deeps Drill Summary

Hole ID Actual	Collar East	Collar North	Collar RL	Dip	Azi	EOH Depth Actual
BRWD0067	493476	7915007	453	-73	194	532
BRWD0067W1	493476	7915007	453	-75	194	543
BRWD0068	493449	7915125	446	-67	182	601
BRWD0068W1	493449	7915125	446	-67	182	697
BRWD0069	493408	7915076	446	-59	180	582
BRWD0069W1	493408	7915076	446	-65	180	595
BRWD0069W2	493408	7915076	446	-72	180	718

Since March 2023, the Company has been exploring for continuations to mineralisation along strike and down dip at the Wolverine Deposit at Northern Minerals' Browns Range Project, to understand the plunge and grade of mineralisation at depth. In doing so, the Company is determining whether the Inferred Mineral Resource can be extended **down plunge below the current Mineral Resource wireframe, with mineralisation remaining open with depth** and the likely implications of this possible extension to the longevity of the project, currently being evaluated through a Definitive Feasibility Study due for completion in Q4 2023.

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Assay results have been received for **BRWD0068 and BRWD0068W1**. The first 2 assay batches from BRWD0067 and BRWD0067W1 were reported in the March 2023 Quarterly Activities Report (refer ASX Announcement - 28 April 2023).

Significant results are reported in **Table 2**.

Table 2: Significant Intercepts[1]

Hole Number	From (metres)	To (metres)	Interval (metres)	TREO[2] (%)	Dy2O3 (ppm)
BRWD0067	490	498	8	0.26	145
BRWD0067W1	515	530.8	15.8	0.51	454
	547	548.9	1.9	2.29	2,029
BRWD0068	589	606.6	17.57	1.96	1819
incl	589	598.9	9.94	3.27	3048
incl	591	596.5	5.54	5.57	5211
BRWD0068W1	621	631	10	0.19	130
and	635	653.2	18.2	0.62	575
BRWD0069	*Results Awaited*				
BRWD0069W1	*Results Awaited*				
BRWD0069W2	*Results Awaited*				

1. Significant intercepts (>=2m @ 0.15% TREO or equivalent, with a maximum of 2m continuous internal dilution. No top-cut has been applied all widths are downhole lengths.). For completeness, 17.57m @ 1.96% TREO is reported with >=5.2m continuous internal dilution.
2. (TREO – Total Rare Earth Oxides = Sum of La2O3, CeO2, Pr6O11, Nd2O3, Sm2O3, Eu2O3, Gd2O3, Tb4O7, Dy2O3, Ho2O3, Er2O3, Tm2O3, Yb2O3, Lu2O3, Y2O3)

Assays from holes BRWD0067 and BRWD0067W1 indicate that mineralisation is increasing as the central portion of the primary plunge is approached, with both holes appearing to have intersected the very western edge of the primary structure.

Assay and geological results from BRWD0068 and BRWD0068W1 indicate that the primary plunge has been intersected, and although the initial concept was that the primary plunge was stepping over to the west, results are indicating that the primary plunge is steeper than first thought.

A further three diamond holes have been completed along a 40m step out to the west (**Figure 1 and 2**). Geologically, the primary structure identified as a mosaic to chaotic quartz-haematite breccia is present in all holes BRWD0069, BRWD0069W1 and BRWD0069W2, however xenotime mineralisation is weak. This supports the interpretation that the primary plunge is to the east of this line of holes and is more steeply plunging at this depth.

Further deep drilling at Wolverine will be conducted during Q3 2023.

Figure 1: Wolverine Deeps Exploration Drilling- Longitudinal Section Looking North

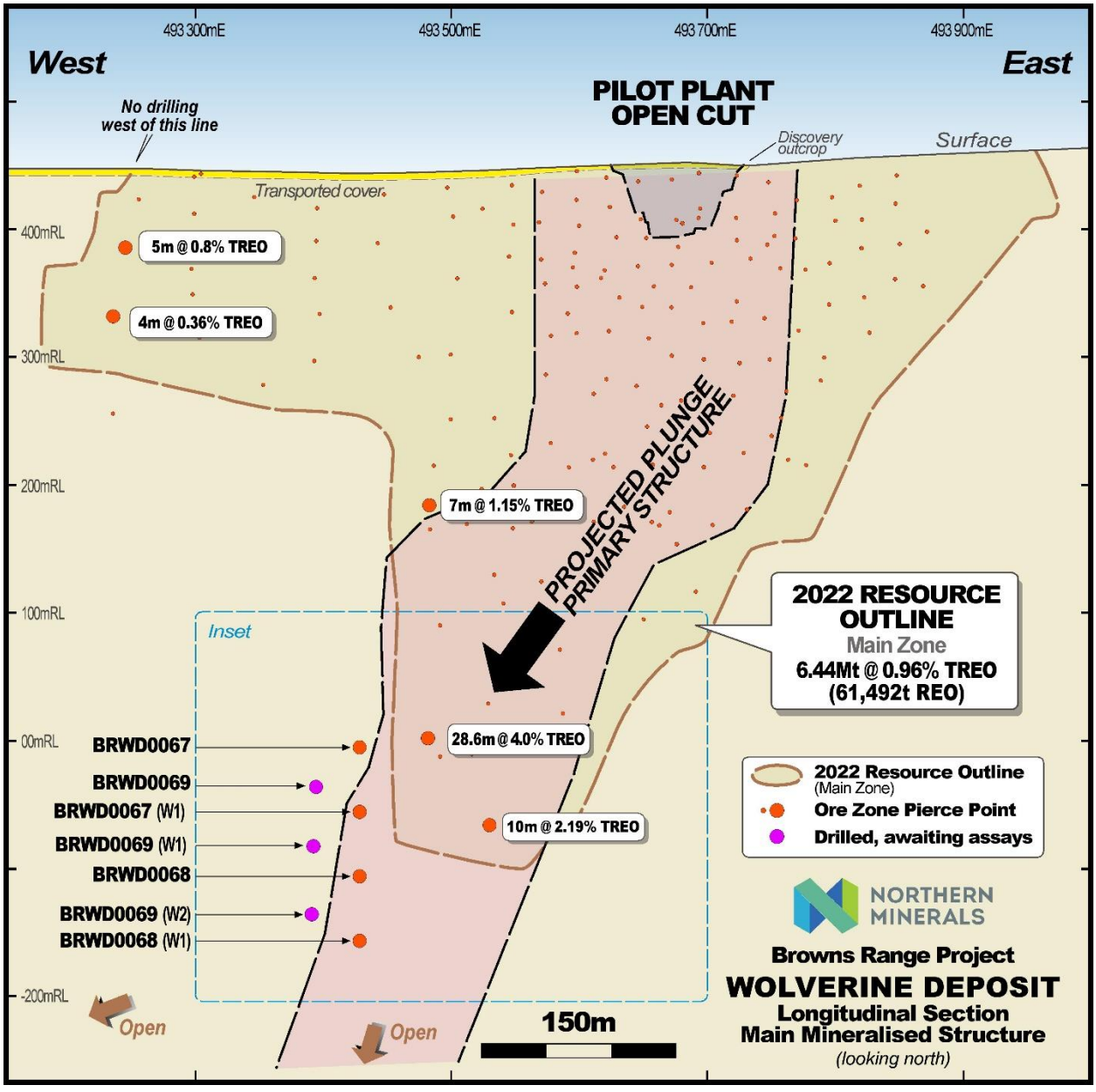
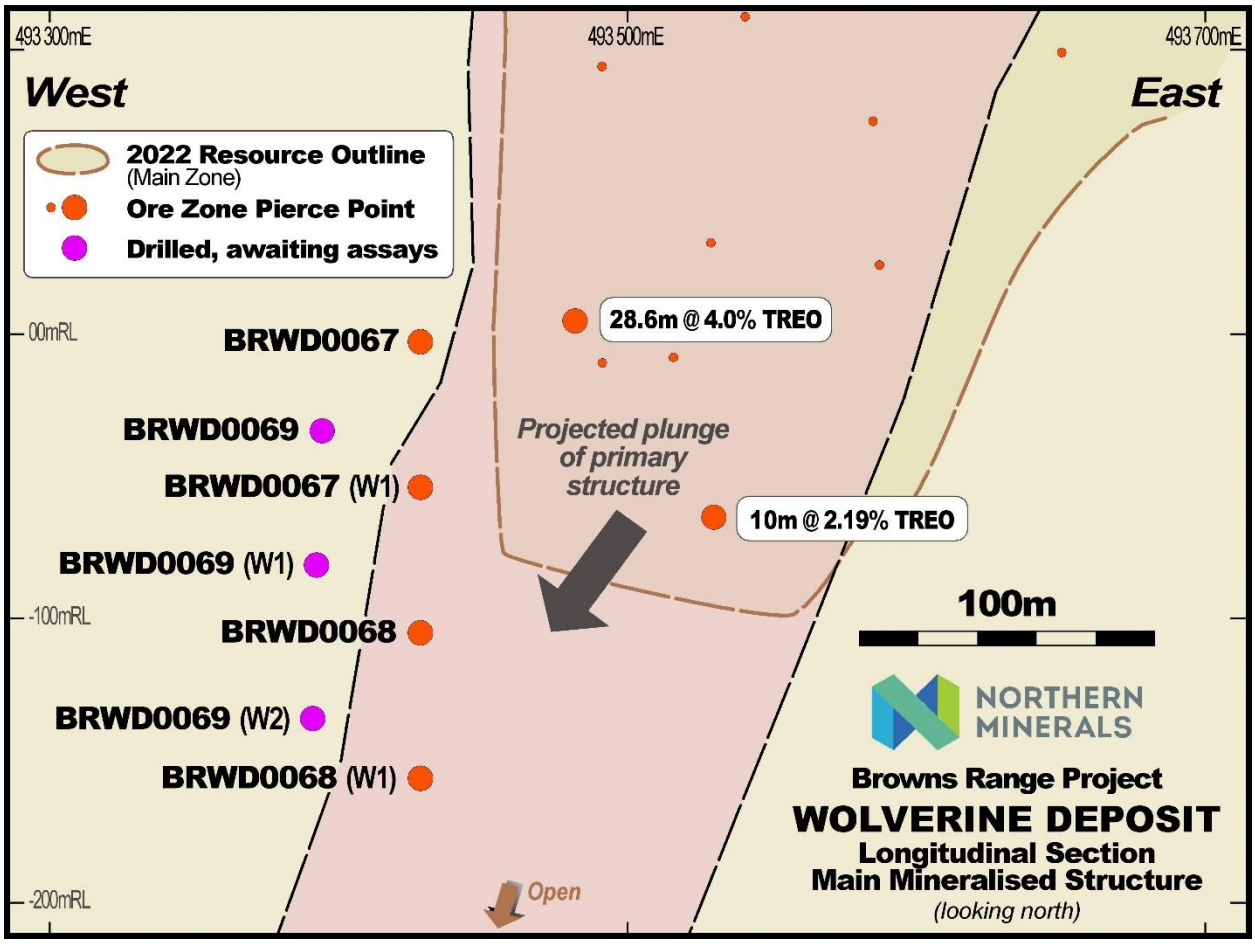


Figure 2: Wolverine Deeps Exploration Drilling Insert



Compliance Statement

The information in this report relating to Exploration Results was compiled by Mr Simon Pooley who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Pooley is a full-time employee of Northern Minerals Limited and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Pooley consents to the inclusion of this information in the form and context in which it appears.

Authorised by the Board of Directors of Northern Minerals Limited

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About Northern Minerals

Northern Minerals Limited (ASX: NTU) (**Northern Minerals,** or the **Company**) owns 100% of the Browns Range Project (**Project**) in northern Western Australia, tenements uniquely rich in the heavy rare earth elements dysprosium (Dy) and terbium (Tb).

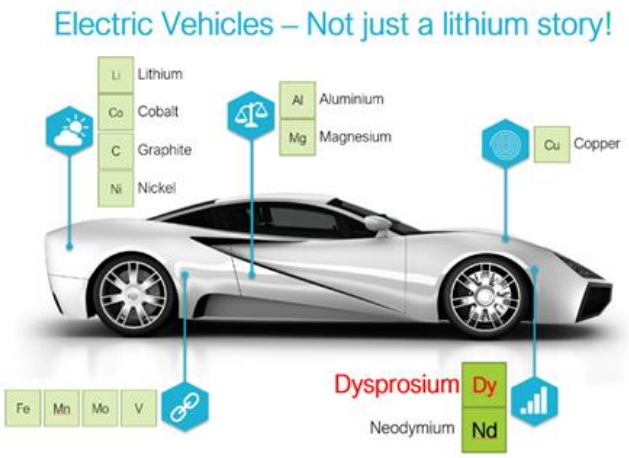
Dysprosium and terbium are critical in the production of dysprosium neodymium iron-boron (DyNdFeB) magnets used in clean energy, military, and high technology solutions. Dysprosium and terbium are prized because their unique properties improve the durability of magnets by increasing their resistance to demagnetisation.

The Project'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. Northern Minerals is one of only a few companies outside of China to have produced these heavy rare earth elements.

To further its strategic objective, Northern Minerals is preparing to undertake a Definitive Feasibility Study for a commercial scale beneficiation plant to process Wolverine ore.

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

For more information: *northernminerals.com.au*.



JORC Code, 2012 Edition

Section 1 - Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	A total of 7 diamond holes inclusive of four wedge daughter holes were drilled at the Wolverine deposit. Assay results have been received for the first 4 holes only. In the field a portable XRF handheld tool was used to provide a preliminary indication of mineralisation. A reading time of 30 seconds was used, with spot readings taken
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The diamond drill holes sampled and assayed were HQ2 or HQ3 sized core. The pXRF instrument is calibrated and serviced annually or more frequently. Additionally, at the start of each sampling session, standards and silica blanks are analysed. Sampling was carried out under NTU protocols and employed QAQC procedures in line with industry standard practice and fit for purpose.
	Aspects of the determination of mineralisation that are Material to the Public Report.	This report relates to exploration results only. Sampling was undertaken at a nominal 1m interval, although geologist's discretion to constrain samples on observed geological intervals was also used. Diamond core samples were dried, crushed, split and pulverised by Intertek Genalysis Laboratories in Perth prior to analysis of the rare earth element suite using a sodium perioxide fusion digest and ICP-MS..
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Diamond core was drilled using either HQ2 or HQ3 diameter. Triple tube was only used where fractured ground was encountered to maximise recovery. Diamond core was orientated using the Reflex ACT orientation tool.

Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. Recovered core was measured and compared against driller's blocks Diamond recovery is measured by measuring the recovered core and comparing to the drilled interval.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond drilling utilised triple tube techniques and drilling fluids in broken or fractured ground in order to assist with maximising recoveries. Competent ground was drilled using standard HQ2.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No known relationship exists.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Diamond core was geologically and geotechnically logged using predefined lithological, mineralogical and physical characteristics (such as colour, weathering, fabric) logging codes. The information collected is sufficient to support mineral resource estimation, mining studies, metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging was generally qualitative in nature except for the determination of core recoveries and geotechnical criteria such as RQD and fracture frequency which was quantitative. Core photos were collected for all diamond drilling.
	The total length and percentage of the relevant intersections logged.	All diamond drill core metres were logged and entered into the database
Sub-sampling techniques and	*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	Diamond core was cut in half using an electric core saw. Sample intervals were marked on the core by the responsible geologist considering lithological and structural features, together with indicative results from handheld XRF measurements. Core selected for duplicate analysis was further cut to quarter core with both quarters submitted individually for analysis. Where possible, core was sampled to leave the orientation line in the core tray.

Sample preparation	*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	The sample preparation techniques employed for the samples follow industry standard practice at Intertek Genalysis Laboratory. Samples are oven dried, crushed if required and pulverised prior to a pulp packet being removed for analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field QAQC procedures included the field insertion of certified reference materials (standards) having a range of values reflecting the general spread of values observed in the mineralisation. Blanks were also inserted in the field and developed from local host rock following chemical analysis. Field duplicates were collected by taking quarter core splits. Insertion rates targeted 1:20 for duplicates, blanks and standards, with increased frequency in mineralised zones.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates were obtained from quartering the core. Insertion rates targeted 1:20 for duplicates, blanks and standards, with increased frequency in mineralised zones.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample is appropriate for the grain size of the material.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Samples assayed by Genalysis for rare earth elements were fused with sodium peroxide within a nickel crucible and dissolved with hydrochloric acid for analysis. Fusion digestion ensures complete dissolution of the refractory minerals such as xenotime, which are only partially dissolved if the pulp is digested in acids. The digestion solution, suitably diluted, is analysed by ICP Mass Spectroscopy (ICP-MS) for the determination of the REE (La – Lu) plus Y, Th and U.
Quality of assay data and laboratory tests	*For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	In the field a portable XRF handheld tool was used to provide a preliminary quantitative indication of mineralisation. A reading time of 30 seconds was used. With diamond core, up to 4-point readings were recorded every metre. Daily checks on the PXRF are completed with the silica blank standard and the TILL-4 yttrium standard checked at the beginning of every sample run.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks)	Certified reference materials, using values across the range of mineralisation, were inserted blindly and randomly. Insertion rates targeted 1:20 for duplicates, blanks and standards, with increased frequency in mineralised zones Results highlight that sample

	and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	assay values are suitably accurate and unbiased. Blanks were inserted in the field and developed from local host rock following chemical analysis. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures.
	The verification of significant intersections by either independent or alternative company personnel.	Internal verification of significant results by more than one company geologist.
Verification of sampling and assay	*The use of twinned holes.*	No holes have been twinned in this program.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Portable XRF Analytical data was collected directly by the Niton pXRF and downloaded by digital transfer to an excel sheet with inbuilt QAQC.Daimaond Drilling Primary data was collected into a proprietary logging package (OCRIS) with in-built validation. Details were extracted and pre-processed prior to loading. Datashed is used as the database storage and management software and incorporates numerous data validation and integrity checks, using a series of defined data loading tools. Data is stored on a SQL server by Northern Minerals Ltd subject to electronic backup. All data was checked by the responsible geologist and digitally transferred to Perth. Datashed is used as the database storage and management software and incorporates numerous data validation and integrity checks using a series of defined data loading tools. Data is stored on a SQL server and electronic backups completed three times per day.
	Discuss any adjustment to assay data.	The assay data were converted from reported elemental assays for a range of elements to the equivalent oxide compound as applicable to rare earth oxides. Oxide calculations are completed by the laboratory and checked by Northern Minerals. No issues were identified. The oxides were calculated from the element according to the following factors below: CeO2 –1.2284, Dy2O3 – 1.1477, Er2O3 – 1.1435, Eu2O3 – 1.1579, Gd2O3 – 1.1526, Ho2O3 – 1.1455, La2O3 – 1.1728, Lu2O3 – 1.1371,

		Nd2O3 – 1.1664, Pr6O11 – 1.2082, Sm2O3 – 1.1596, Tb4O7 – 1.1421, Tm2O3 – 1.1421, Y2O3 – 1.2699, Yb2O3 – 1.1387
	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill collar locations have been surveyed with a high accuracy KGPS receiver with an accuracy of +/- 0.02 metres. Down hole surveys were completed by the drilling contractor using a AXIS Champ gyroscope survey tool at the time of drilling.
Location of data points	*Specification of the grid system used.*	The grid system used is MGA94 Zone 52. All reported coordinates are referenced to this grid.
	Quality and adequacy of topographic control.	Topographic control is based on airborne digital terrain survey data collected in 2011 with accuracy considered to be +/-1m.
	Data spacing for reporting of Exploration Results.	Two lines of drilling were conducted with the eastern line being 40m west of the current wire frame (BRWD0067, 0067W1, BRWD0068 and 0068W1)_. A further line of holes was drilled 40m further to the west (BRWD0069, W1 and W2)
Data spacing and distribution	*Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	Exploration Results only. Data spacing and distribution is currently not yet sufficient to support Mineral Resource or Ore Reserve Estimation.
	Whether sample compositing has been applied.	N/A
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	All diamond drilling completed at Wolverine is at an orientation perpendicular to the interpreted structural and/or lithological trend.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Mineralisation at the Wolverine deposit has an east-west strike and dips steeply north. Current knowledge indicates that the orientation of drilling with respect to overall structural and lithological trends is not expected to introduce any sampling bias.
Sample security	*The measures taken to ensure sample security.*	Samples are collected on site under supervision of the responsible geologist and stored in bulk bags on site prior to transport to Perth by a commercial transport company. The samples are stored in a secure area until loaded and delivered to the Intertek Genalysis laboratory in Perth.

Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits/reviews have been conducted.

Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Wolverine Deposit is located on M80/627. The tenement is located in the company's Browns Range Project approximately 150 kilometres south-east of Halls Creek and adjacent to the Northern Territory border in the Tanami Desert. Northern Minerals owns 100% of all mineral rights on the tenement. The fully determined Jaru Native Title Claim is registered over the Browns Range Project area and the fully determined Tjurabalan claim is located in the south of the project area.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	No previous systematic exploration for REE mineralisation has been completed by other parties prior to Northern Minerals at Wolverine. Regional exploration for uranium mineralisation was completed in the 1980s without success.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Browns Range deposits including Wolverine are unconformity related HREE style deposits. They are located on the western side of the Browns Range Dome, a Paleoproterozoic dome formed by a granitic core intruding the Paleoproterozoic Browns Range Metamorphics (meta-arkoses, feldspathic meta-sandstones and schists) and an Archaean orthogneiss and schist unit to the south. The dome and its aureole of metamorphics are surrounded by the Mesoproterozoic Gardiner Sandstone (Birrindudu Group). The Browns Range xenotime mineralisation is typically hosted in hydrothermal quartz and hematite veins and breccias within the meta-arkoses of the Archaean Browns Range Metamorphics. Various alteration

		styles and intensities have been observed; namely silicification, sericitisation and kaolinite alteration.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *easting and northing of the drill hole collar* *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *dip and azimuth of the hole* *down hole length and interception depth* *hole length.*	See Table 1 in body of text.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Significant intervals were tabulated downhole for reporting. Each metre downhole was analysed using sodium fusion ICP-MS. All individual metres (one result per metre) were averaged over the entire tabulated range. A lower cut-off of 0.15% TREO was used during data aggregation, allowing for 2m of internal dilution. No top-cuts have been applied.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	All intervals were initially based on 1m sample runs but are constrained to geological and mineralisation contacts. The geologist then qualitatively grouped contiguous mineralised runs together and the average analysis of the entire run is reported here.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents values are used for reporting of exploration results.
Relationship between mineralisation widths and intercept lengths	*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	The drilling is designed to intersect at an azimuth approximately perpendicular to the strike of mineralisation. The geometry of mineralisation at the Wolverine Deposit has an east-west strike and dips approximately 75 degrees north

Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer to Figures 1 and 2, in the body of text.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Previous exploration results are the subject of previous reports. The results of all drill holes have been reported. Where holes were not reported with significant intercepts there were no significant results.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	At Browns Range Project WA, airborne magnetic and radiometric surveys were acquired by Northern Minerals in 2011. Hyperspectral data captured during October 2012 by Hyvista Corporation Pty Ltd. Very high resolution "Ultracam" aerial photography was captured by Hyvista during the Hyperspectral survey. Regional reconnaissance including geological mapping, rock chip sampling and also geochemical soil sampling completed over all the prospects reported herein. Ground based radiometric surveys were also completed. Several Mineral Resource estimates have been completed for the Wolverine deposit between 2012 and 2022. Comprehensive metallurgical test work has been undertaken since 2010 allowing the successful development of a process flowsheet incorporating beneficiation and hydrometallurgy circuits. A trial mine and pilot plant operation, including ore extracted from Wolverine, was undertaken between 2017 and 2022 to demonstrate proof of concept of the flowsheet and de-risk the project. Geotechnical studies by external consultants have been undertaken on diamond core from Wolverine between 2013 and 2023 in support of mine planning for open pit and underground operations.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	The diamond drill program was recently completed. Assay results for three holes BRWD0069, BRWD0069W1 and BRWD0069W2 are still pending. Additional holes are planned to test for a lateral extension down plunge to the east.

	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to Figures 1 and 2 in body of text.

Section 3: Estimation and Reporting of Mineral Resources

Not applicable

Section 4: Estimation and Reporting of Ore Reserves

Not applicable