

ASX ANNOUNCEMENT 3 March 2025

Stinger Niobium Exploration Target – Mangaroon 100%

HIGHLIGHTS (All amounts in A\$ unless otherwise stated)

- Dreadnought has undertaken an internal study that has highlighted significant economic potential at the Stinger niobium target (“**Stinger**”). As a result, a JORC 2012 Exploration Target (“**Exploration Target**”) has been estimated for Stinger, part of the Gifford Creek Carbonatite complex that also includes the Yin REE Ironstones and the C3 REE-Nb Resources (ASX 30 Nov 2023, 28 Aug 2023).
- Stinger has delivered the thickest and highest-grade niobium intercepts in the region with mineralogy results confirming the commercially viable pyrochlore as the dominate niobium bearing mineral.
- An Exploration Target has been estimated for Stinger over an area of ~1,700m x 500m and to a depth of ~180m based on drilling results to date:

Table 1: Estimated Stinger Niobium Exploration Target

Tonnage Range (Mt)	Grade Range (% Nb ₂ O ₅)	Contained Nb ₂ O ₅ Range (t)
15 - 60Mt	0.5% – 1.0%	150,000 – 300,000t

**Note that the potential quality and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Resource, and it is uncertain if further exploration will result in the estimation of a Resource. The Exploration Target has been prepared in accordance with JORC 2012.*

- The Exploration Target is based on wide spaced drilling and excludes:
 - Fresh rock depth extensions to Stinger including drill holes ending in mineralisation;
 - Mineralised extensions to Stinger and discoveries within the region; and
 - Other associated critical minerals including titanium, scandium, rare earths and phosphorus.
- An internal study on the smaller, higher grade portion of the Exploration Target, with an open pit down to ~180m and a standard 1mtpa concentrator supports the significant potential of the niobium and justifies further work including infill drilling and metallurgical test work. A partner, preferably already in the steel industry (iron ore, coal, steel), will be sought to advance to this next step.

Dreadnought Resources Ltd (“Dreadnought”) is pleased to announce an Exploration Target for Stinger, part of the 100% owned Mangaroon Critical Metals Project (“Mangaroon”), in the Gascoyne region of WA.

Dreadnought’s Managing Director, Dean Tuck, commented: “The Gifford Creek Carbonatite Complex is one of the largest carbonatite complexes globally and already contains multiple critical minerals including niobium, rare earths, titanium, scandium and phosphorus. Stinger has produced some of the thickest and highest-grade niobium intercepts to date and our internal study justifies the next stage of work in conjunction with an industry partner. Importantly, the Exploration Target compares

well to the deposits at global operating mines.

Dreadnought is now funded to deliver its self-funded explorer strategy by bringing the high-grade Star of Mangaroon gold mine into production. Accordingly, discussions with potential partners will be undertaken in the background.

We remain on track to commence our gold focused exploration drilling in late March 2025.”



Figure 1: Dreadnought’s Claudia Tomkins logging mineralised carbonatite at Stinger.

Exploration Target – Stinger Niobium

The Exploration Target for Stinger is estimated to contain potential mineralisation ranging from 15-60Mt @ 0.5-1.0% Nb₂O₅. The Exploration Target is shown in Table 2 below:

Table 2: Estimated Stinger Niobium Exploration Target

Tonnage Range (Mt)	Grade Range (% Nb ₂ O ₅)	Contained Nb ₂ O ₅ Range (t)
15 – 60Mt	0.5% – 1.0%	150,000 – 300,000t

*Note that the potential quality and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Resource, and it is uncertain if further exploration will result in the estimation of a Resource.

The Exploration Target is based on the data that has been collated as of the date of this announcement, which includes:

- 24 RC drill holes for 3,060m;
- 1,540 drill hole assays;
- 266 density measurements used in the C3 Resource, which is hosted in similar rocks;
- drill logging;
- geophysical data including detailed airborne magnetic, radiometric and Falcon gravity surveys as well as ground gravity; and
- wireframing and 3D modelling of the Stinger mineralisation at a 0.1% Nb₂O₅ and 0.7% Nb₂O₅ cutoff.

The Exploration Target incorporates the wireframed size of the Stinger mineralisation as defined by drilling as well as the potential mineralisation between drilling.

The Exploration Target excludes:

- Fresh rock depth extensions to Stinger including drill holes ending in mineralisation;
- Mineralised extensions to Stinger and discoveries within the region; and
- Other associated critical minerals including titanium, scandium, rare earths and phosphorus.

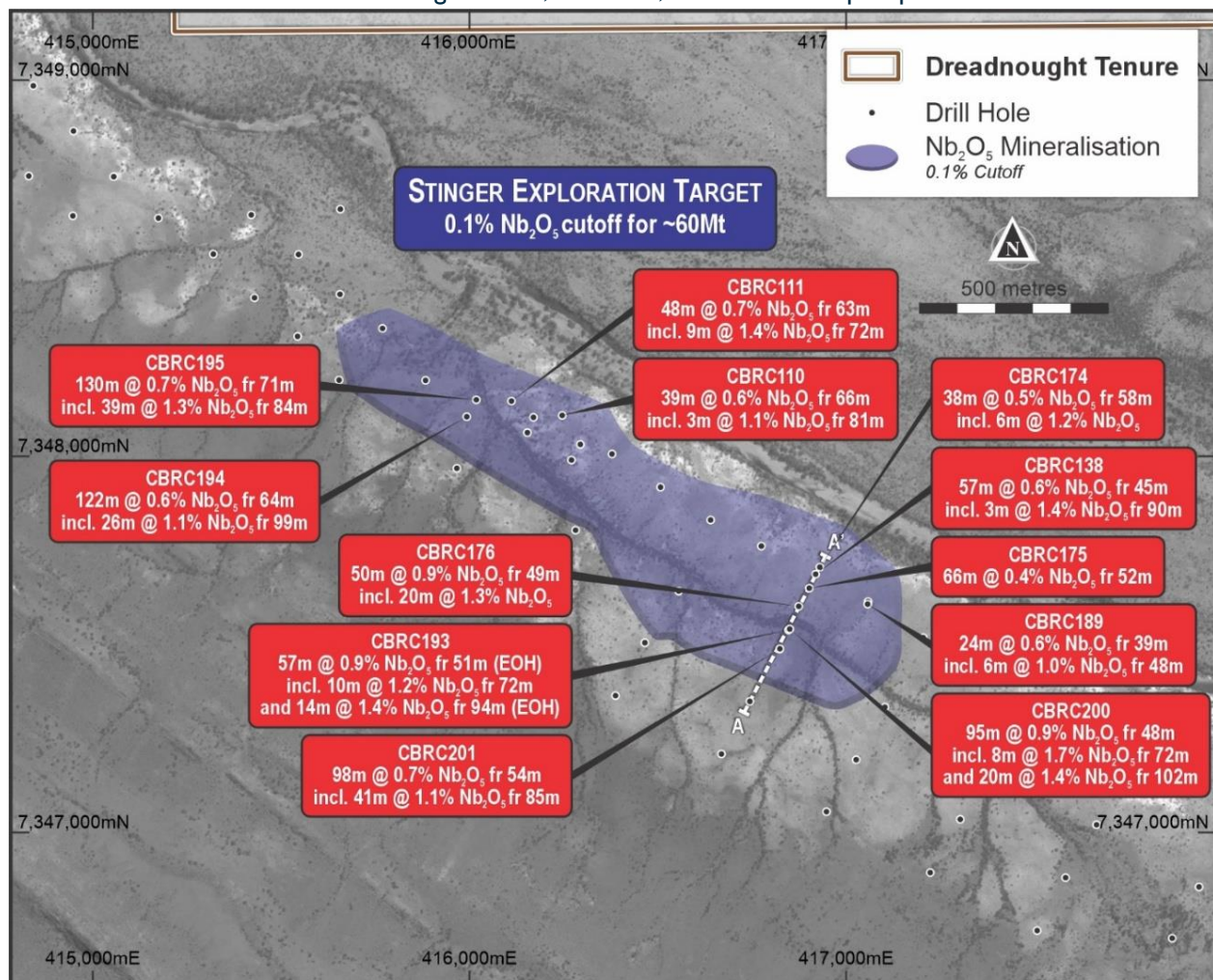


Figure 2: Plan view image showing the wireframed outline of Stinger (~1,700m x 500m) at a 0.1% Nb₂O₅ cut off in relation to drill holes and significant intercepts.

Background

Thick, high grade niobium mineralisation at Stinger was discovered by Dreadnought and has been defined by drilling over ~1,700m x 500m with significant intercepts to date including:

CBRC195: 130m @ 0.7% Nb₂O₅ from 71m, including:

39m @ 1.3% Nb₂O₅ from 84m including 4m @ 2.0% Nb₂O₅ from 86m

CBRC200: 95m @ 0.9% Nb₂O₅ from 48m, including

20m @ 1.4% Nb₂O₅ from 102m and 8m @ 1.7% Nb₂O₅ from 72m

CBRC194: 122m @ 0.6% Nb₂O₅ from 71m, including 26m @ 1.1% Nb₂O₅ from 99m

CBRC201: 98m @ 0.7% Nb₂O₅ from 54m, including 41m @ 1.1% Nb₂O₅ from 85m

CBRC193: 57m @ 0.9% Nb₂O₅ from 51m, including 10m @ 1.2% Nb₂O₅ from 72m

CBRC196: 24m @ 0.7% Nb₂O₅ from 81m, including 8m @ 1.3% Nb₂O₅ from 81m

CBRC176: 50m @ 0.9% Nb₂O₅ from 49m, including 20m @ 1.3% Nb₂O₅ from 56m

CBRC085: 48m @ 0.8% Nb₂O₅ from 30m, including 36m @ 1.0% Nb₂O₅ from 39m

CBRC111: 48m @ 0.7% Nb₂O₅ from 63m, including 9m @ 1.4% Nb₂O₅ from 72m

CBRC125: 59m @ 0.6% Nb₂O₅ from 63m, including 19m @ 1.0% Nb₂O₅ from 99m

CBRC138: 57m @ 0.6% Nb₂O₅ from 45m, including 3m @ 1.4% Nb₂O₅ from 90m

Mineralisation is predominantly hosted within deeply weathered calcio-magnesio carbonatites of the Gifford Creek Carbonatite. Mineralogical test work to date has determined that the dominate niobium mineral at Stinger is pyrochlore with subordinate ilmenorutile. Pyrochlore niobium is commercially viable and accounts for ~95% of global production.

The main mineralisation has been tested with RC drilling and has defined a largely continuous, flat lying sheet of mineralisation ~1,700m in length and up to 500m in width in the deeply weathered sections of the carbonatite with some mineralisation extending down into the fresh rock. Limited drilling has tested down to the fresh rock at 180m and beyond, which has been excluded from this Exploration Target.

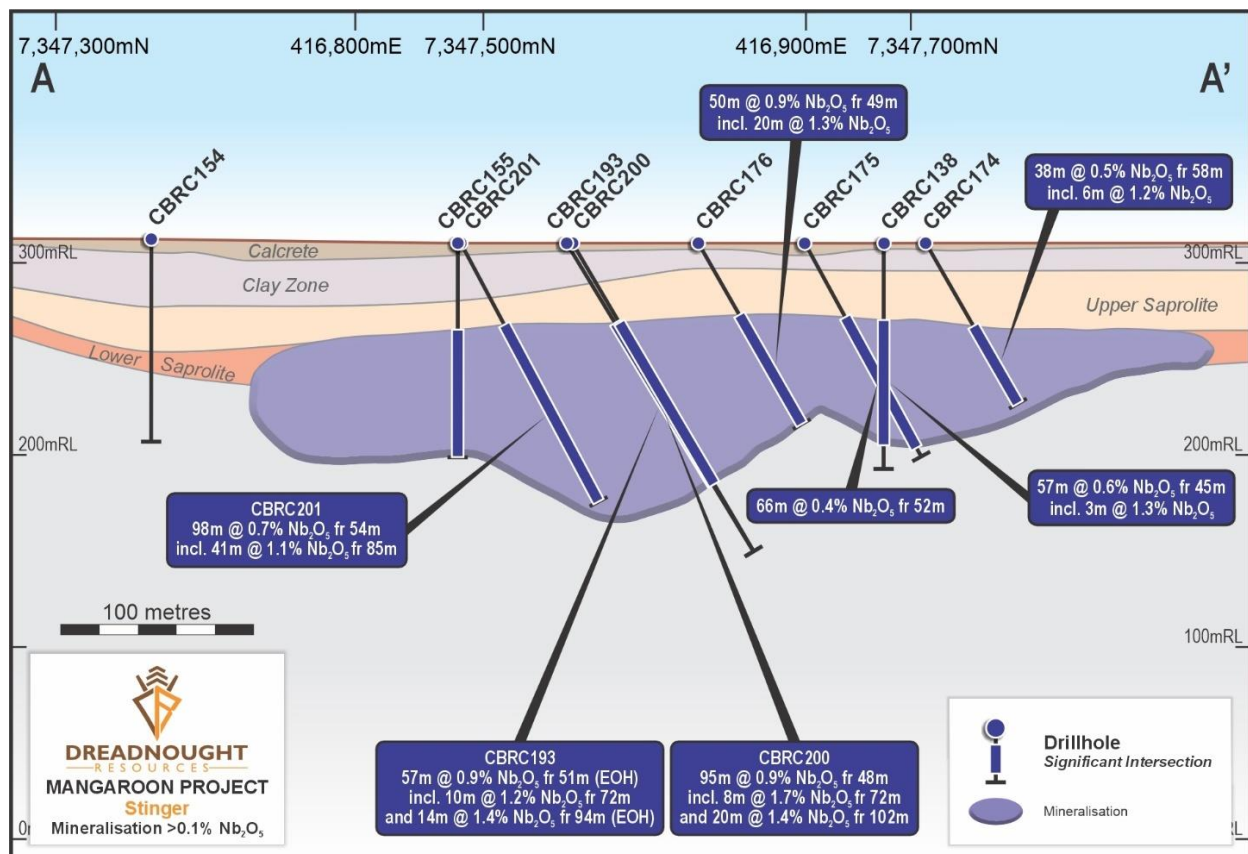


Figure 3: Cross section image showing the wireframed outline of Stinger (~500m width) at a 0.1% Nb₂O₅ cut off in relation to drill holes and significant intercepts. Note that several holes end in mineralisation.

Estimation Methodology

The preparation of the Exploration Target involved the integration of multiple datasets including drilling, geophysics, geological logging and geological interpretation.

The footprint of Stinger is defined by broad spaced ~360m x 180m spaced vertical RC holes. Within that footprint, 4 partial lines of angled fence line drilling have been used to help interpret the geometry of mineralisation at depth. The Exploration Target has been defined to a maximum vertical depth of ~180m from surface. The mineralisation remains open at depth into fresh rock and is loosely closed out by broad spaced drilling along strike.

Volume estimates were based on the creation of two wireframes. One using a lower grade 0.1% Nb₂O₅ cut off and the other using a higher grade 0.7% Nb₂O₅ cut off. Mineralised intersections were defined using a minimum down hole width of 6m with a 0.1% Nb₂O₅ cut off and a minimum down hole width of 1m with a 0.7% Nb₂O₅ cut off.

A weighted average of the Nb₂O₅ grade was calculated on 1,018 assay results using the 0.1% Nb₂O₅ cut off and on 326 assay results using the 0.7% Nb₂O₅ cut off. Using these parameters, the length weighted grade ranged from 0.53% - 1.07% Nb₂O₅. These numbers were conservatively rounded down to 0.5% and 1.0% for the Exploration Target grade range.

A total of 266 density measurements were used from diamond drilling in the C3 REE-Nb Resource as coded with lithology and weathering. A supergene density of 2.0 t/m³ was used for the Exploration Target due to rock type similarities (ASX 28 Aug 2023).

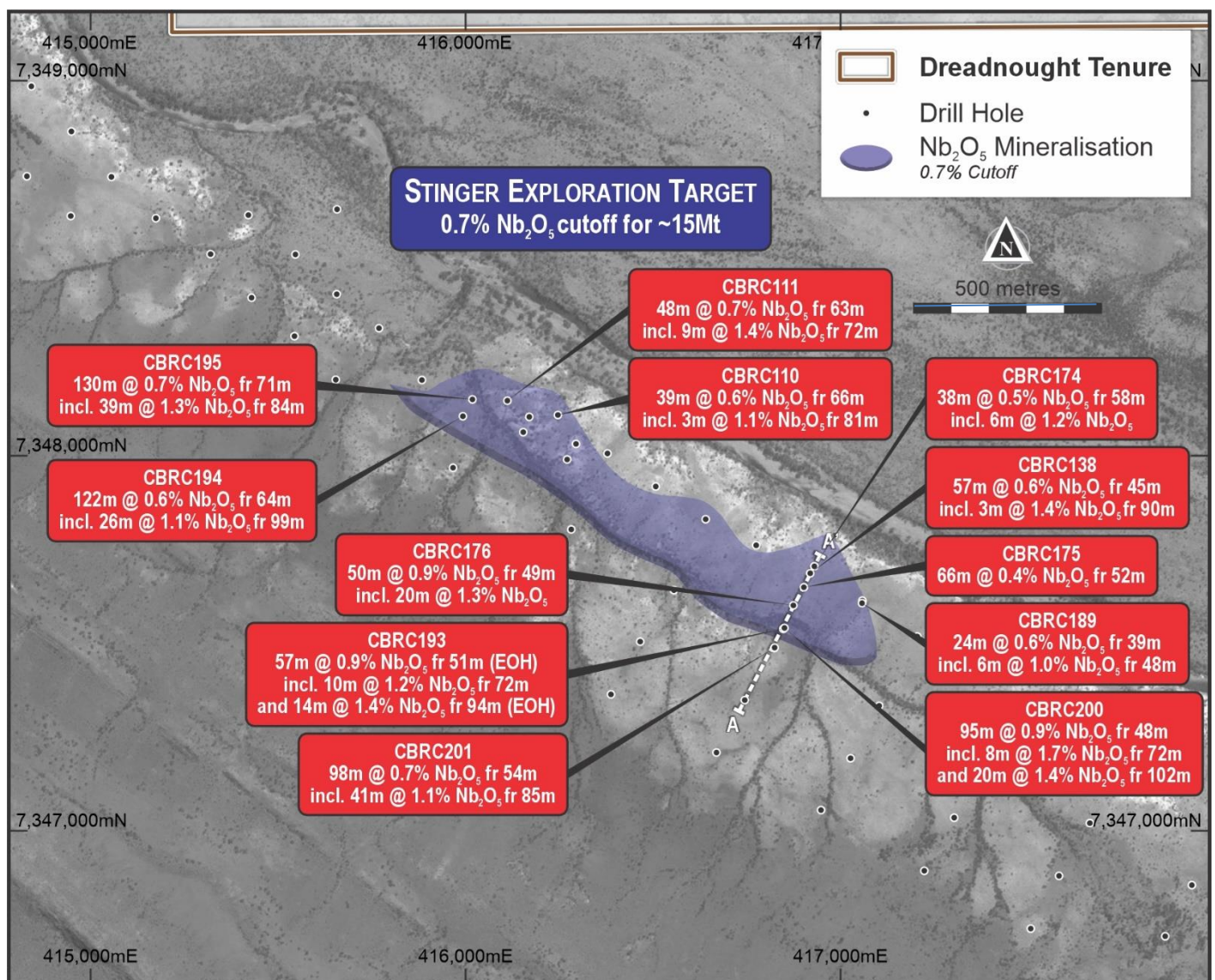


Figure 4: Plan view image showing the wireframed outline of Stinger (1,400m x 300m) at a 0.7% Nb₂O₅ cut off in relation to drill holes and significant intercepts.

Overview of the Gifford Creek Carbonatite Complex

The Gifford Creek Carbonatite and the Yin Ironstones together form one of the largest alkali-carbonatite complexes in the world (Figure 5). Carbonatite intrusions are known globally to host several different commodities including rare earths, niobium, phosphate, titanium and scandium, often as separate deposits within the same intrusion. Examples of this include Mt Weld in Australia, Ngualla in Tanzania, Araxa in Brazil and Bayan Obo in China.

Since the initial discovery of the Yin Ironstones and the Gifford Creek Carbonatite in 2021, Dreadnought has delivered multiple discoveries and Resources, including:

- Yin REE Ironstones: **29.98Mt @ 1.0% TREO (87% M+I Resource)** including **11.63Mt @ 1.9% TREO (94% M+I Resource)** (ASX 30 Nov 2023) over just ~4.6kms of the 43km long Yin Ironstones.
- C3 REE-Nb Inferred Resource of **10.84Mt @ 1.0% TREO and 0.22% Nb₂O₅** (ASX 28 Aug 2023).

Wide spaced drilling over <25% of the ~17km long Gifford Creek Carbonatite has already identified 3 zones of mineralisation containing Nb-REE-Sc-Ti-P. This makes for a critical mineral mix of co-products with significant intercepts including:

- CBRC115: **102m @ 1.1% TREO** from 3m, including **29m @ 2.1% TREO** from 76m
- CBRC148: **43m @ 11.9% P₂O₅** from 87m, including **24m @ 14.5% P₂O₅** from 105m to EOH
- CBRC138: **12m @ 319ppm Sc** from 48m and CBRC125: **10m @ 270ppm Sc** from 18m
- CBRC086: **72m @ 8.6% TiO₂** from 12m, including **6m @ 12.8% TiO₂** from 66m
- CBRC200: **95m @ 0.9% Nb₂O₅** from 48m, including **20m @ 1.4% Nb₂O₅** from 102m

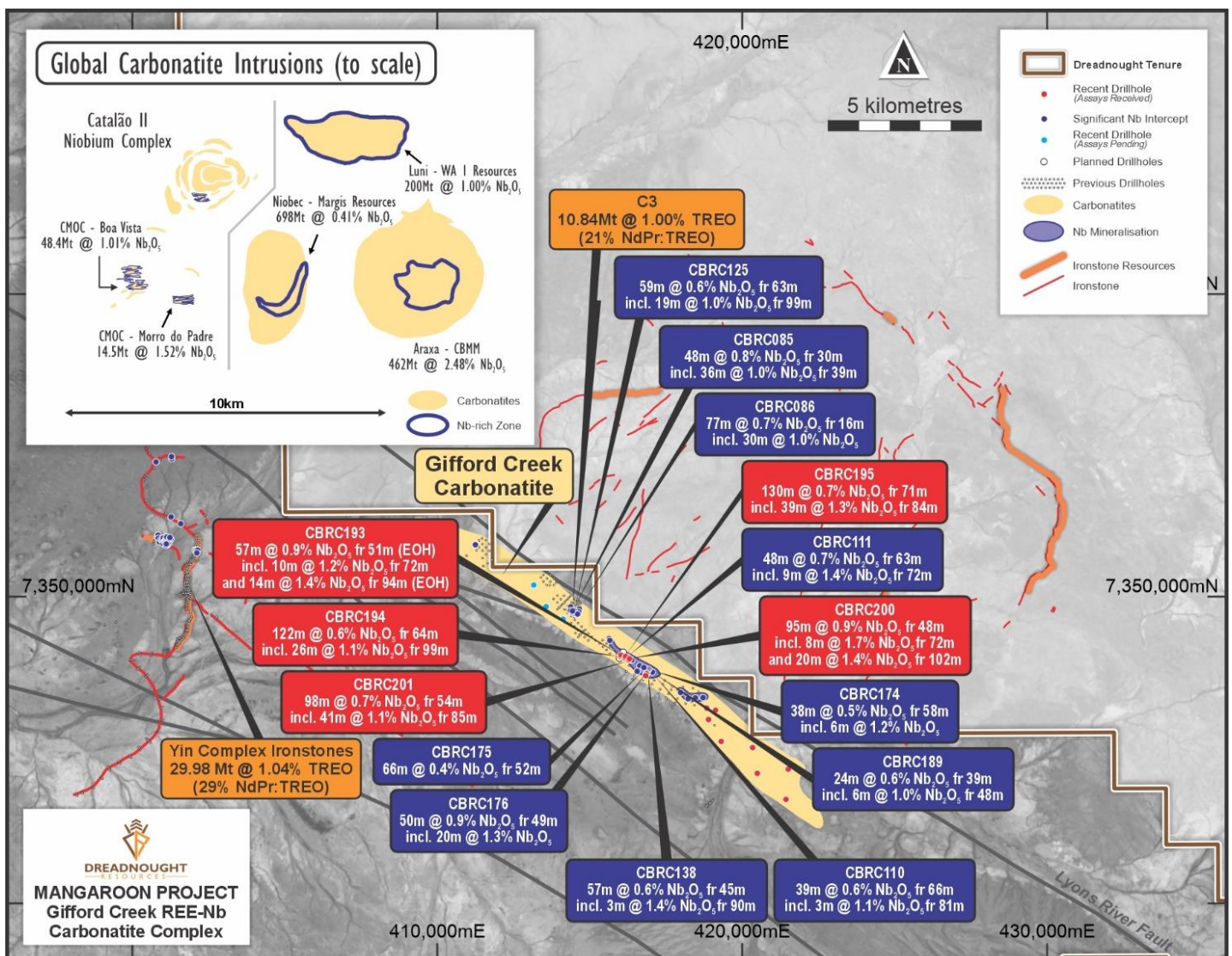


Figure 5: Location of significant niobium mineralisation intersected at the Gifford Creek Carbonatite. Inset image shows globally significant carbonatite complexes at a similar scale highlighting the footprints of niobium mineralisation.

Commercialisation Strategy

Dreadnought recently announced a Resource and scoping study for the Star of Mangaroon that includes an initial production target of ~20koz at 10g/t Au delivering robust financials including a maximum cash drawdown of ~\$10M at a AISC of \$1,800/oz and a post capital and tax operating cashflow of ~\$40M at a \$4,100/oz gold price increasing to ~\$50M at forward gold prices of \$4,600/oz (ASX 27 Nov 2024, 28 Jan 2025). Mineralisation at the Star of Mangaroon remains open along strike and depth with significant potential to add ounces.

Dreadnought is now funded to deliver its self-funded explorer strategy by bringing the high-grade Star of Mangaroon gold mine into production by delivering the following:

- Obtaining the remaining mining approvals for the Star of Mangaroon;
- Adding ounces on the existing mining leases (Star of Mangaroon extensions, Popeye, Pritchard, etc.); and
- Filling the discovery pipeline with new targets (Bordah, High Range).

The self-funded explorer strategy is Dreadnought's focus. An internal study on an open pit down to ~180m and a standard 1mtpa concentrator supports the significant potential of the niobium and justifies further work including infill drilling and metallurgical test work. Accordingly, a partner, preferably already in the steel industry (iron ore, coal, steel), will be sought to advance to this next step. This potential is further supported by the proximity to existing infrastructure including ports, roads and gas pipeline (Figure 6).

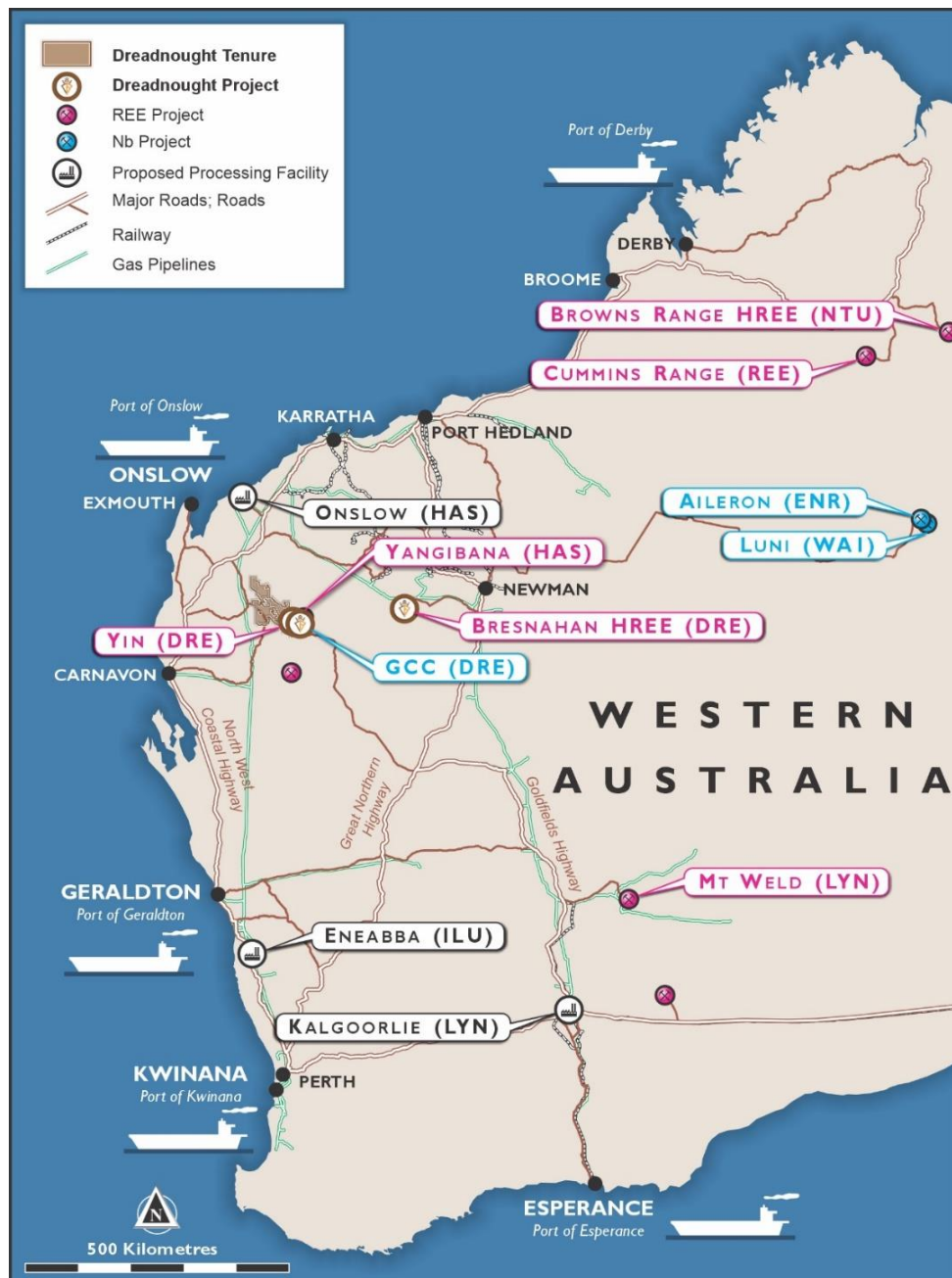


Figure 6: Map showing the locations of significant critical metal (REE-Nb) projects in Western Australia in relation to existing infrastructure.
ASX:DRE
Dreadnought Resources Ltd 6

Dreadnought's planned transition to self-funded explorer

	Mar 2025 Quarter	Jun 2025 Quarter	Sep 2025 Quarter	Dec 2025 Quarter
Star of Mangaroon Open Pit	Scoping Study	Mining, Haul, Process Agreement	Approvals and Commencement of Production	
Additional Resource Drilling	Granted Mining Leases including: Star of Mangaroon extensions, Popeye, Pritchard's, Lead and Two Peaks			
Gold Exploration	Target Generation Bordah and High Range	Target Definition Bordah and High Range		Exploration Drilling

For further information please refer to previous ASX announcements:

- 25 November 2020 *Mangaroon Ni-Cu-PGE & Au Project*
- 15 March 2021 *Exploration Commences at Mangaroon Ni-Cu-PGE & Au Project*
- 17 May 2021 *Update on Mangaroon Ni-Cu-PGE & Au Project*
- 17 October 2022 *Mineralised Carbonatites Discovered at C3 and C4*
- 23 November 2022 *Multiple, Large Scale, REE-Nb-Ti-P Carbonatites*
- 28 December 2022 *Initial High-Grade, Independent Resource over 3kms at Yin*
- 24 January 2023 *Carbonatite Discovery Shaping up as Regional Rare Earth Source*
- 29 March 2023 *Yin Resource to Grow, Carbonatite Drilling Commenced*
- 3 April 2023 *Carbonatites Deliver Thick, Near Surface REE Results*
- 29 May 2023 *Metallurgical Test Work Supports High-Value Concentrate*
- 5 July 2023 *40% Increase in Resource Tonnage at Yin*
- 10 July 2023 *High Grade Rare Earth & Niobium Zones at C3 & C5*
- 17 July 2023 *High Grade Rare Earth & Niobium Zones at C3 & C5*
- 7 August 2023 *Rare Earth Ironstone and Carbonatite Drilling Update*
- 28 August 2023 *Initial, Independent REE-Nb-P-Ti-Sc Resource at C3*
- 2 October 2023 *Mangaroon Carbonatite now >17km – Higher Grade Zones Fingerprinted*
- 30 November 2023 *Large, High Confidence Yin Ironstone Resource*
- 6 December 2023 *Gifford Creek REE-Nb-P-Ti-Sc Carbonatite Drilling Update*
- 6 June 2024 *Gifford Creek REE-Nb Carbonatite Update*
- 12 August 2024 *Gifford Creek Niobium Drilling Update*
- 19 August 2024 *Thick High-Grade Niobium Intercepts from Gifford Creek Carbonatite*
- 9 October 2024 *Exceptional Niobium Intercepts at the Stinger Discovery*

~Ends~

For further information please contact:

Dean Tuck
Managing Director
Dreadnought Resources Limited
E: dtuck@dreres.com.au

Jessamyn Lyons
Company Secretary
Dreadnought Resources Limited
E: jlyons@dreres.com.au

This announcement is authorised for release to the ASX by the Board of Dreadnought.

SNAPSHOT – MANGAROON CRITICAL MINERALS

Mangaroon is 100% Owned

- 100% owned Mangaroon confirmed as a globally significant critical minerals complex with proven potential for niobium (Nb), rare earths (REE), scandium (Sc), titanium (Ti) and phosphorous (P).

Genuine Scale Potential for Niobium and other Critical Minerals

- Three zones of thick oxide niobium mineralisation confirmed to date with significant intercepts including:
 - CBRC195: **130m @ 0.7% Nb₂O₅** from 71m, including **39m @ 1.3% Nb₂O₅** from 84m (Stinger)
 - CBRC176: **50m @ 0.9% Nb₂O₅** from 49m, including **20m @ 1.3% Nb₂O₅** from 56m (Stinger)
 - CBRC194: **122m @ 0.7% Nb₂O₅** from 71m, including **26m @ 1.1% Nb₂O₅** from 99m (Stinger)
 - CBRC201: **98m @ 0.7% Nb₂O₅** from 54m, including **41m @ 1.1% Nb₂O₅** from 85m (Stinger)
 - CBRC085: **48m @ 0.8% Nb₂O₅** from 30m, including **36m @ 1.0% Nb₂O₅** from 39m (C3)
 - CBRC125: **59m @ 0.6% Nb₂O₅** from 63m, including **19m @ 1.0% Nb₂O₅** from 99m (C3)
- Fresh niobium mineralisation has been confirmed over 1.2 km strike, open in all directions at Stinger.

Multiple Critical Minerals Potential at the Gifford Creek Carbonatite

- The Gifford Creek Carbonatite and associated ironstones is one of the largest carbonatite complexes in the world.
- Wide spaced drilling over <25% of the ~17km long Gifford Creek Carbonatite has already identified 3 zones of mineralisation containing Nb-REE-Sc-Ti-P. This makes for a critical minerals mix of co-products with significant intercepts including:
 - CBRC115: **102m @ 1.1% TREO** from 3m, including **29m @ 2.1% TREO** from 76m
 - CBRC148: **43m @ 11.9% P₂O₅** from 87m, including **24m @ 14.5% P₂O₅** from 105m to EOH
 - CBRC138: **12m @ 319ppm Sc** from 48m and CBRC125: **10m @ 270ppm Sc** from 18m
 - CBRC086: **72m @ 8.6% TiO₂** from 12m, including **6m @ 12.8% TiO₂** from 66m

Positive Mineralogical Results

- Recent mineralogical work at the Gifford Creek Carbonatite has confirmed the presence of pyrochlore, which is a high niobium mineral (>50%) which is commercially viable and from which ~95% of global niobium is produced.

Global Strategic Imperative Driving Critical Minerals Growth

- Supply chain security and low carbon transition are imperatives against a backdrop of heightened geopolitical tension.
- Niobium is a critical mineral primarily used in high strength, low alloy steel with application to renewables, infrastructure and vehicles. The addition of a small amount of niobium increases the strength of steel whilst decreasing weight by ~30%.
- Niobium-based technology breakthroughs are being experienced in the battery sector where niobium is reducing electric vehicle charge times to ~5 minutes.

Background on Mangaroon (E08/3178, E08/3229, E08/3274, E08/3275, E09/2290, E09/2359, E09/2370, E09/2383, E09/2384, E09/2405, E09/2422, E09/2433, E09/2448, E09/2449, E09/2450, E09/2467, E09/2473, E09/2478, E09/2535, E09/2616, E08/3539, E08/3740, E09/2994, E09/2989, E09/2982, M09/91, M09/146, M09/147, M09/174, M09/175: 100%)

Mangaroon (Figure 7) covers >4,500kms² of the Mangaroon Zone in the Gascoyne Region of Western Australia and is comprised of:

- >45km long Money Intrusion (Ni-Cu-Co-PGE): containing high tenor magmatic Ni-Cu-Co-PGE.
- Mangaroon Gold Camp (Au, Cu-Zn-Ag): Containing 5 granted mining leases where fractured, small-scale ownership has limited previous gold exploration with only ~200m of the >12km long Mangaroon Shear Zone having been drilled. This area also contains the ~12km x 6km Bordah and ~50km long High Range prospects where limited previous exploration has identified outcropping gold and base metal mineralisation.
- ~43km long Yin Ironstone (REE): which already contains: an independent Resource of 20.06Mt @ 1.03% TREO (ASX 5 Jul 2023) over only ~4km of the ~43km of ironstones including an initial Indicated Resource of 5.52Mt @ 1.23% TREO over only ~250m of strike (ASX 5 Jul 2023).
- ~17km long Gifford Creek Carbonatites (REE-Nb-Ti-P-Sc): which contains a suite of critical minerals including the Stinger Exploration Target and an initial independent Inferred Resource of 10.84Mt @ 1.00% TREO at C3 (ASX 28 Aug 2023).

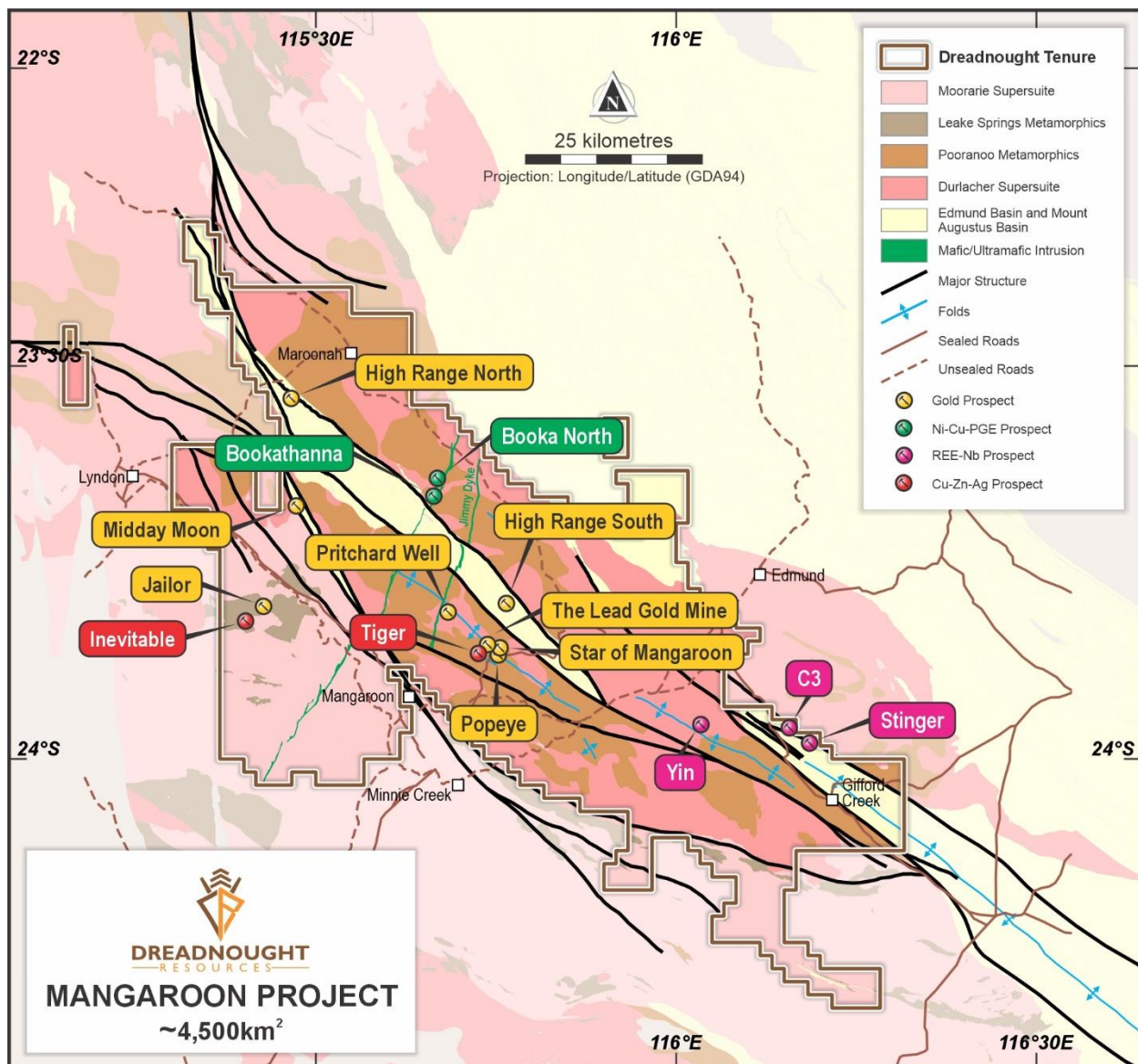


Figure 7: Plan view map of Dreadnought's 100% owned Mangaroon Project: the >45km long Money Intrusion (Ni-Cu-Co-PGE); the Mangaroon Gold Camp (Cu-Zn-Ag-Au); Yin Ironstone Complex (REE) and the Gifford Creek Carbonatites (REE-Nb) in relation to major structures, geology and roads.

Cautionary Statement

This announcement and information, opinions or conclusions expressed in the course of this announcement contains forecasts and forward-looking information. Such forecasts, projections and information are not a guarantee of future performance, involve unknown risks and uncertainties. Actual results and developments will almost certainly differ materially from those expressed or implied. There are a number of risks, both specific to Dreadnought, and of a general nature which may affect the future operating and financial performance of Dreadnought, and the value of an investment in Dreadnought including and not limited to title risk, renewal risk, economic conditions, stock market fluctuations, commodity demand and price movements, timing of access to infrastructure, timing of environmental approvals, regulatory risks, operational risks, reliance on key personnel, reserve estimations, native title risks, cultural heritage risks, foreign currency fluctuations, and mining development, construction and commissioning risk.

Competent Person's Statement – Mineral Resources

The information in this announcement that relates to the Star of Mangaroon Mineral Resource is based on information compiled by Mr. Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr. Payne is a full-time employee of Payne Geological Services Pty Ltd and is a shareholder of Dreadnought Resources Limited. Mr. Payne has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr. Payne consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

Competent Person's Statement – Exploration Results

The information in this announcement that relates to geology, exploration results and planning, and exploration targets was compiled by Mr. Dean Tuck, who is a Member of the AIG, Managing Director, and shareholder of the Company. Mr. Tuck has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr. Tuck consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.

The Company confirms that it is not aware of any further new information or data that materially affects the information included in the original market announcements by Dreadnought Resources Limited referenced in this report and in the case of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. To the extent disclosed above, the Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

RESOURCES SUMMARY

Yin Ironstone Complex – Yin, Yin South, Y2, Sabre Measured, Indicated and Inferred Resources

Table 3: Summary of Yin Resources at 0.20% TREO Cut off.

Type	Measured			Indicated			Inferred			Total			
	Tonnes (Mt)	TREO (%)	TREO (kt)	Tonnes (Mt)	TREO (%)	TREO (t)	Tonnes (Mt)	TREO (%)	TREO (t)	Tonnes (Mt)	TREO (%)	TREO (t)	NdPr:TREO Ratio (%)
Oxide	2.47	1.61	39.7	13.46	1.06	142.6	1.51	0.75	11.2	17.44	1.11	193.6	29
Fresh	2.70	1.09	29.5	7.67	0.95	72.8	2.17	0.75	16.3	12.54	0.95	118.7	29
Total	5.17	1.34	69.3	21.13	1.02	215.4	3.68	0.75	27.6	29.98	1.04	312.3	29

Table 4: Summary of Yin Resources at 1.00% TREO Cut off.

Type	Measured			Indicated			Inferred			Total			
	Tonnes (Mt)	TREO (%)	TREO (kt)	Tonnes (Mt)	TREO (%)	TREO (t)	Tonnes (Mt)	TREO (%)	TREO (t)	Tonnes (Mt)	TREO (%)	TREO (t)	NdPr:TREO Ratio (%)
Oxide	1.60	2.22	35.6	5.34	1.99	106.4	0.26	1.67	4.3	7.20	2.03	146.3	30
Fresh	1.36	1.68	22.8	2.65	1.81	47.9	0.42	1.72	7.3	4.43	1.76	78.0	29
Total	2.96	1.97	58.4	7.99	1.93	154.3	0.68	1.70	11.6	11.63	1.93	224.3	29

Gifford Creek Carbonatite – Inferred Resource

Table 5: Summary of the Gifford Creek Carbonatite Inferred Resource at various % TREO Cut offs.

Cut-Off (%TREO)	Resource (Mt)	TREO (%)	NdPr:TREO (%)	Nb2O5 (%)	P2O5 (%)	TiO2 (%)	Sc (ppm)	Contained TREO (t)	Contained Nb2O5 (t)
0.90	5.73	1.18	21	0.25	3.8	5.4	92	67,500	14,500
0.70	10.84	1.00	21	0.22	3.5	4.9	85	108,000	23,700
0.50	20.55	0.80	21	0.15	3.0	3.9	68	164,600	31,100
0.30	45.87	0.58	21	0.10	2.7	3.0	52	265,300	44,800

Star of Mangaroon – Indicated and Inferred Resources

Table 6: Resource (2g/t Au cut off grade) - Numbers may not add up due to rounding

Type	Indicated			Inferred			Total		
	Tonnes	Au (g/t)	Au (Oz)	Tonnes	Au (g/t)	Au (Oz)	Tonnes	Au (g/t)	Au (Oz)
Transition	1,900	26.9	1,700	-	-	-	1,900	26.9	1,700
Fresh	42,500	13.0	17,800	12,200	9.8	3,900	54,700	12.3	21,700
Total	44,400	13.6	19,500	12,200	9.8	3,900	56,600	12.8	23,400

Table 7: Stinger Intersections based on a minimum length of 6m and a lower cut off grade of 0.1% Nb₂O₅, Drill Collar Data (GDA94 MGAz50)

*Some of these will be different from previously reported due to minimum length and lower cut off.

Hole ID	Type	Easting	Northing	RL	Dip	Azimuth	EOH	Interval (m)	Nb ₂ O ₅ (%)	Prospect
CBRC050	RC	415770	7348340	296	-90	0	123	18	0.12%	Stinger
CBRC107	RC	416640	7347831	309	-90	0	105	54	0.23%	
CBRC108	RC	416507	7347918	308	-90	0	93	33	0.12%	
CBRC109	RC	416379	7348006	307	-90	0	93	30	0.11%	
CBRC110	RC	416246	7348109	306	-90	0	105	39	0.62%	
CBRC111	RC	416112	7348147	305	-90	0	111	48	0.70%	
CBRC138	RC	416919	7347687	310	-90	0	117	63	0.56%	
CBRC148	RC	416556	7347642	306	-90	0	129	30	0.37%	
CBRC155	RC	416823	7347488	308	-90	0	111	63	0.18%	
CBRC174	RC	416930	7347706	310	-60	31	96	42	0.49%	
CBRC175	RC	416902	7347650	309	-60	32	126	73	0.39%	
CBRC176	RC	416874	7347602	308	-60	29	108	56	0.82%	
CBRC177	RC	416774	7347762	308	-90	0	72	6	0.14%	
CBRC178	RC	417058	7347614	310	-90	0	55	25	0.37%	
CBRC189	RC	417057	7347608	310	-90	0	108	69	0.34%	
CBRC193	RC	416847	7347539	306	-60	32	108	59	0.86%	
CBRC194	RC	415993	7348105	303	-61	33	186	125	0.64%	
CBRC195	RC	416019	7348150	303	-60	31	210	144	0.72%	
CBRC196	RC	416171	7348104	305	-61	32	168	45	0.60%	
CBRC197	RC	416154	7348063	303	-61	33	168	103	0.43%	
CBRC198	RC	416295	7348031	305	-61	39	168	75	0.24%	
CBRC199	RC	416271	7347990	303	-61	34	162	45	0.34%	
CBRC200	RC	416850	7347541	306	-60	37	186	96	0.86%	
CBRC201	RC	416824	7347489	308	-61	33	152	154	0.70%	
Length Weighted Average of Dreadnought Holes								62	0.53%	

Table 8: Stinger Intersections based on a minimum length of 1m and a lower cut off grade of 0.7% Nb₂O₅, Drill Collar Data (GDA94 MGAz50)

*Some of these will be different from previously reported due to minimum length and higher cut-off.

Hole ID	Type	Easting	Northing	RL	Dip	Azimuth	EOH	Interval (m)	Nb ₂ O ₅ (%)	Prospect
CBRC107	RC	416640	7347831	309	-90	0	105	3	0.73%	Stinger
CBRC110	RC	416246	7348109	306	-90	0	105	17	0.74%	
CBRC111	RC	416112	7348147	305	-90	0	111	9	1.40%	
CBRC138	RC	416919	7347687	310	-90	0	117	15	0.82%	
CBRC174	RC	416930	7347706	310	-60	31	96	7	1.18%	
CBRC175	RC	416902	7347650	309	-60	32	126	1	0.99%	
CBRC176	RC	416874	7347602	308	-60	29	108	28	1.18%	
CBRC189	RC	417057	7347608	310	-90	0	108	6	1.03%	
CBRC193	RC	416847	7347539	306	-60	32	108	36	1.13%	
CBRC194	RC	415993	7348105	303	-61	33	186	55	0.97%	
CBRC195	RC	416019	7348150	303	-60	31	210	69	1.09%	
CBRC196	RC	416171	7348104	305	-61	32	168	8	1.31%	
CBRC197	RC	416154	7348063	303	-61	33	168	16	1.02%	
CBRC198	RC	416295	7348031	305	-61	39	168	3	0.70%	
CBRC199	RC	416271	7347990	303	-61	34	162	6	0.84%	
CBRC200	RC	416850	7347541	306	-60	37	186	53	1.17%	
CBRC201	RC	416824	7347489	308	-61	33	152	45	1.09%	
Length Weighted Average of Dreadnought Holes								22	1.07%	

JORC Code, 2012 Edition – Table I Report Template

Section I Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	<p>Reverse Circulation (RC) drilling was undertaken to produce samples for assaying.</p> <p>Laboratory Analysis</p> <p>Two sampling techniques were utilised for this program, 1m metre splits directly from the rig sampling system for each metre and 3m composite sampling from spoil piles. Samples submitted to the laboratory were determined by the site geologist.</p> <p>1m Splits</p> <p>From every metre drilled a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter from each metre of drilling.</p> <p>3m Composites</p> <p>All remaining spoil from the sampling system was collected in buckets from the sampling system and neatly deposited in rows adjacent to the rig. An aluminium scoop was used to then sub-sample each spoil pile to create a 2-3kg 3m composite sample in a calico bag.</p> <p>A pXRF is used on site to determine mineralised samples. Mineralised intervals have the 1m split collected, while unmineralised samples have 3m composites collected.</p> <p>All samples are submitted to ALS Laboratories in Perth for determination of Niobium and Rare Earth Oxides by Lithium Borate Fusion and ICP-MS and ICP-AES (ALS Method ME-MS81h and ME-ICP06h).</p> <p>QAQC samples consisting of duplicates, blanks and CRM's (OREAS Standards) were inserted through the program at a rate of 1:50 samples. Duplicate samples are submitted as a B-bag from the Metzke's cone splitter.</p>
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<p>RC Drilling</p> <p>Topdrill undertook the program utilising a truck mounted Schramm T685WS drill rig with additional air from an auxiliary compressor and booster. Bit size was 5 1/2 ".</p>
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<p>RC Drilling</p> <p>Drilling was undertaken using a 'best practice' approach to achieve maximum sample recovery and quality through the mineralised zones.</p> <p>Best practice sampling procedure included: suitable usage of dust suppression, suitable shroud, lifting off bottom between each metre, cleaning of sampling equipment, ensuring a dry sample and suitable supervision by the supervising geologist to ensure good sample quality.</p> <p>At this stage, no known bias occurs between sample recovery and grade.</p>
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<p>RC Drilling</p> <p>RC chips were logged by a qualified geologist with sufficient experience in this geological terrane and relevant styles of mineralisation using an industry standard logging system which could eventually be utilised within a Mineral Resource Estimation.</p> <p>Lithology, mineralisation, alteration, veining, weathering and texture were all recorded digitally.</p> <p>Chips were washed each metre and stored in chip trays for preservation and future reference.</p> <p>RC pulp material is also analysed on the rig by pXRF and magnetic susceptibility meter to assist with logging and the identification of mineralisation.</p> <p>Logging is qualitative, quantitative or semi-quantitative in nature.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. 	<p>RC Drilling</p> <p>From every metre drilled, a 2-3kg sample (split) was sub-sampled into a calico bag via a Metzke cone splitter.</p>

Criteria	JORC Code explanation	Commentary
	<p>and whether sampled wet or dry.</p> <ul style="list-style-type: none"> For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<p>QAQC in the form of duplicates and CRM's (OREAS Standards) were inserted through the ore zones at a rate of 1:50 samples. Additionally, within mineralised zones, a duplicate sample was taken and a blank inserted directly after.</p> <p>2-3kg samples are submitted to ALS laboratories (Perth), oven dried to 105°C and pulverised to 85% passing 75um to produce a 0.1g charge for determination of Niobium and Rare Earth Oxides by Lithium Borate Fusion and ICP-MS and ICP-AES (ALS Method ME-MS81h and ME-ICP06h).</p> <p>Standard laboratory QAQC is undertaken and monitored.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<p>Laboratory Analysis</p> <p>Lithium borate fusion is considered a total digest and Methods ME-MS81h and ME-ICP06h are appropriate for Nb₂O₅, REE, P₂O₅, TiO₂ determination.</p> <p>Standard laboratory QAQC is undertaken and monitored by the laboratory and by the company upon assay result receipt.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<p>Logging and Sampling</p> <p>Logging and sampling were recorded directly into a digital logging system, verified and eventually stored in an offsite database.</p> <p>Significant intersections are inspected by senior company personnel.</p> <p>No diamond twinning of RC holes has been completed at Stinger. However, 27 pairs of twinned RC and DD holes have been drilled at Yin and C3 and compared to validate the RC drilling.</p> <p>No adjustments to any assay data have been undertaken.</p>
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<p>Collar position was recorded using a Emlid Reach RS2 RTK GPS system (+/- 0.2m x/y, +/-0.5m z).</p> <p>GDA94 Z50s is the grid format for all xyz data reported.</p> <p>Azimuth and dip of the drill hole was recorded after the completion of the hole using an Axis Champ North-seeking Gyro. A reading was undertaken every 10th metre with an accuracy of +/- 0.75° azimuth and +/-0.15° dip.</p>
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<p>See tables in the announcement for hole positions and information.</p> <p>Drill spacing is not suitable for a mineral resource.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<p>Orientation of residual mineralisation is interpreted to be flat lying near the base of weathering for which vertical drill holes are generally perpendicular and represent true thickness.</p> <p>Fresh mineralisation is interpreted to have a dyke like geometry with a southerly dip, based off the resource drilling at C3. Angled drill holes are interpreted to be generally perpendicular to this mineralisation.</p> <p>No sample bias is known at this time.</p>
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<p>All geochemical samples were collected, bagged, and sealed by Dreadnought staff and delivered to Exmouth Haulage in Exmouth.</p> <p>Samples were delivered directly to ALS Laboratories Perth by Exmouth Haulage out of Exmouth and Jarraharbar Contracting out of Carnarvon.</p>
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<p>The program is continuously reviewed by senior company personnel.</p>

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>The Mangaroon Project consists of 20 granted Exploration Licenses (E08/3178, E08/3229, E08/3274, E08/3275, E08/3439, E09/2290, E09/2359, E09/2370, E09/2384, E09/2405, E09/2422, E09/2433, E09/2448, E09/2449, E09/2450, E09/2467, E09/2473, E09/2478, E09/2535, E09/2616), 1 pending Exploration License (E08/3539) and 5 granted Mining Licenses (M09/91, M09/146, M09/147, M09/174, M09/175).</p> <p>All tenements are 100% owned by Dreadnought Resources. E08/3178, E09/2370, E09/2384 and E09/2433 are subject to a 2% Gross Revenue Royalty held by Beau Resources. E08/3274, E08/3275, E09/2433, E09/2448, E09/2449, E09/2450 are subject to a 1% Gross Revenue Royalty held by Beau Resources. E09/2359 is subject to a 1% Gross Revenue Royalty held by Prager Pty Ltd. E09/2422, E08/3229 and E08/3539 are subject to a 1% Gross Revenue Royalty held by Redscope Enterprises Pty Ltd. E09/2290, M09/146 and M09/147 are subject to a 1% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry. M09/174 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson. M09/175 is subject to a 0.5% Gross Revenue Royalty held by STEHN, Anthony Paterson and BROWN, Michael John Barry. M09/91 is subject to a 1% Gross Royalty held by DOREY, Robert Lionel.</p> <p>The Mangaroon Project covers 4 Native Title Determinations including the Budina (WAD131/2004), Thudgari (WAD6212/1998), Gnulli (WAD22/2019) and the Combined Thiin-Mah, Warriyangka, Tharrkari and Jiwarli (WAD464/2016).</p> <p>The Mangaroon Project is located over Lyndon, Mangaroon, Gifford Creek, Maroonah, Minnie Creek, Edmund, Williambury and Towera Stations.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>Historical exploration of a sufficiently high standard was carried out by a few parties which have been outlined and detailed in this ASX announcement including:</p> <p>Regional Resources 1986-1988s: WAMEX Reports A23715, 23713</p> <p>Peter Cullen 1986: WAMEX Report A36494</p> <p>Carpentaria Exploration Company 1980: WAMEX Report A9332</p> <p>Newmont 1991: WAMEX Report A32886</p> <p>Hallmark Gold 1996: WAMEX Report A49576</p> <p>Rodney Drage 2011: WAMEX Report A94155</p> <p>Sandfire Resources 2005-2012: WAMEX Report 94826</p>
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>The Mangaroon Project is located within Mangaroon Zone of the Gascoyne Province.</p> <p>The Mangaroon Project is prospective for orogenic gold, VMS base metals, magmatic Ni-Cu-PGE mineralisation and carbonatite hosted Nb-REEs.</p>

Criteria	JORC Code explanation	Commentary
Drill hole information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	An overview of the drilling program is given within the text and tables within this document.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>All results greater than 6m at 0.1% Nb₂O₅ and greater than 1m at 0.7% Nb₂O₅ have been reported.</p> <p>Significant intercepts are length weight averaged for all samples with Nb₂O₅ values >0.1% Nb₂O₅ and >0.7% Nb₂O₅ with up to 3m of internal dilution (<0.1% Nb₂O₅ or <0.7% Nb₂O₅ respectfully).</p> <p>No metal equivalents are reported.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	Drilling is undertaken close to perpendicular to the dip and strike of the mineralisation.
Diagrams	<ul style="list-style-type: none"> 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 within this report.
Balanced reporting	<ul style="list-style-type: none"> 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. 	The accompanying document is a balanced report with a suitable cautionary note.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	Suitable commentary of the geology encountered are given within the text of this document.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<p>Additional RC drilling</p> <p>Diamond Drilling</p> <p>Metallurgical test work</p> <p>Additional Resource Modelling</p>