DSO MINERAL RESOURCE UPGRADE: CHAMPION AND BLACKJACK

- Completion of geological re-interpretation and resource estimation of the Champion and Blackjack deposits at the 100%-owned Blacksmith Iron Ore Project

- An additional DSO Mineral Resource of 73.5Mt at a grade of 59.9% Fe estimated for Champion and Blackjack deposits to complement Delta and Paragon deposits

- Significant increase in total Blacksmith DSO Mineral Resource Estimate to 173.8Mt at a grade of 60% Fe, predominantly hematite and goethite from Champion, Blackjack, Delta and Paragon deposits

- 95% of the Mineral Resource is classified as Indicated

- The Champion and Blackjack Mineral Resource Estimate will be included in the Blacksmith Project Preliminary Feasibility Study currently underway

Red Hawk Mining Limited (ASX: **RHK**, "**Red Hawk**" or "**the Company**") is pleased to announce a Mineral Resource Estimate (**MRE**) for Direct Shipping Ore (**DSO**) for the Champion and Blackjack deposits at the 100%-owned Blacksmith Iron Ore Project (**Blacksmith**) of 73.5Mt at 59.9% Fe. The addition of the Champion and Blackjack Mineral Resources increases **the total Blacksmith Mineral Resource to 173.8Mt grading 60.0% Fe.** Importantly, 95% of the MRE is in the Indicated category with 5% in the Inferred category.

**Table 1: Champion and Blackjack DSO MRE (57.5% Fe cut-off)**

JORC classification	Tonnage Mt	Fe %	P %	SiO$_2$ %	Al$_2$O$_3$ %	LOI %
Indicated	69.2	59.9	0.079	5.66	3.40	4.33
Inferred	4.3	59.7	0.107	4.02	2.16	7.55
Total	**73.5**	**59.9**	**0.080**	**5.56**	**3.33**	**4.52**

See notes on page 25.

Table 2: Blacksmith DSO MRE (57.5% Fe cut-off)

JORC classification	Tonnage Mt	Fe %	P %	SiO$_2$ %	Al$_2$O$_3$ %	LOI %
Indicated	165.2	60.0	0.085	5.11	3.24	4.86
Inferred	8.6	59.8	0.102	4.12	2.54	6.98
Total	**173.8**	**60.0**	**0.086**	**5.06**	**3.20**	**4.97**

The DSO Mineral Resource Estimate for the Champion and Blackjack deposits, now combined with the MRE for Delta and Paragon (released to the ASX on 6 September 2023), is one of the largest undeveloped hematite/goethite resources in the Pilbara wholly owned by an ASX-listed junior iron ore company (see notes on page 25). With an average resource grade of 60.0% Fe, the Blacksmith deposits have the potential to produce a DSO iron ore product saleable in the current market without the need for beneficiation or upgrading.
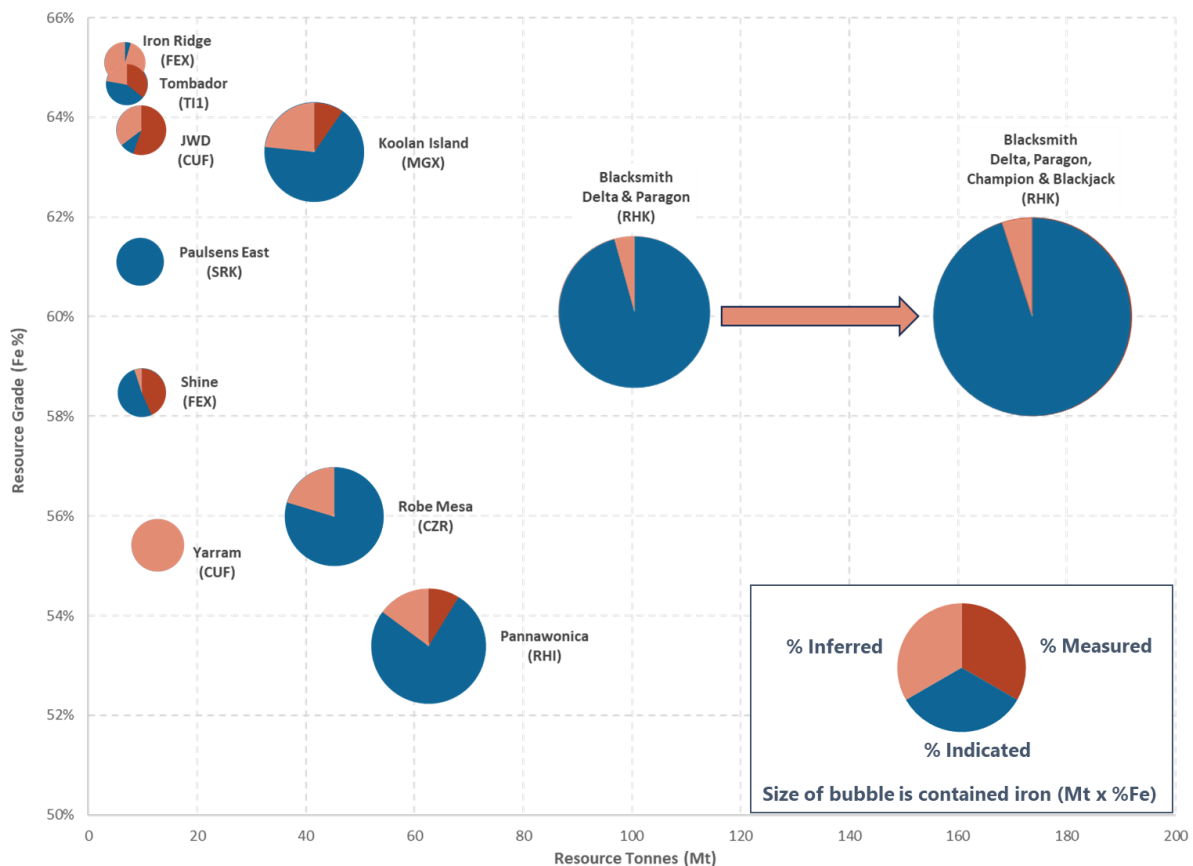
See notes on page 25.

Figure 1: Iron ore resources for selected ASX-listed companies (excludes magnetite resources)

Commenting on the DSO Mineral Resource Estimate at Champion and Blackjack, Red Hawk's Managing Director, Steven Michael, said:

"Red Hawk's recently released 3Mtpa Scoping Study confirms the significant value in developing high quality DSO resources at the Blacksmith Project, in the Pilbara Region of Western Australia. The DSO MRE at Champion and Blackjack increases the total Blacksmith DSO resource base to over 170Mt of iron ore, and provides a catalyst for considering ways to increase annual production from Blacksmith without impacting on mine life.

The new expanded Blacksmith DSO MRE will form the basis of a Pre-Feasibility Study which commenced immediately after the Scoping Study was finalised. The PFS is expected to be released in 1Q 2024."
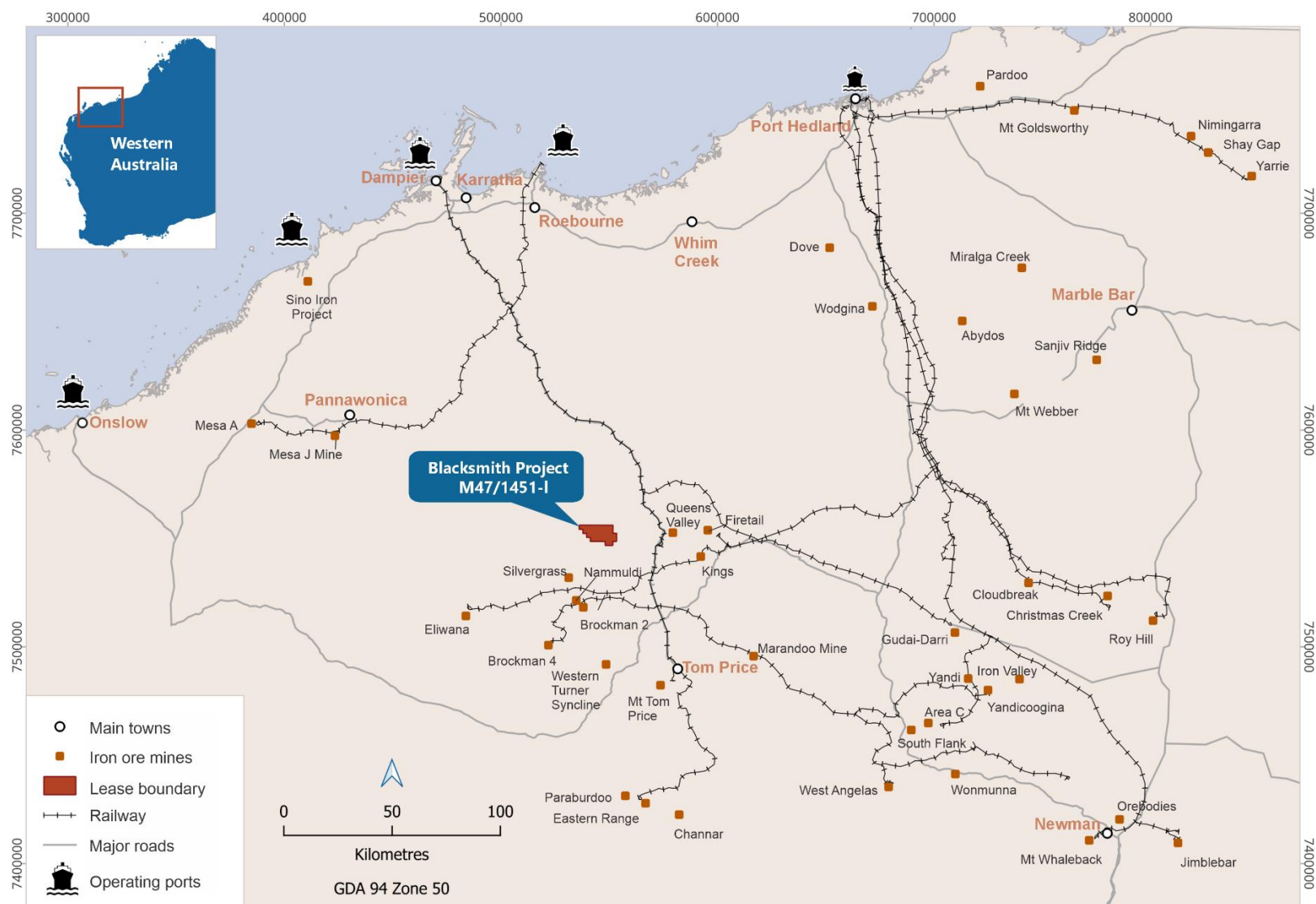
Figure 2: Location map showing Blacksmith Project in the Pilbara Region of Western Australia
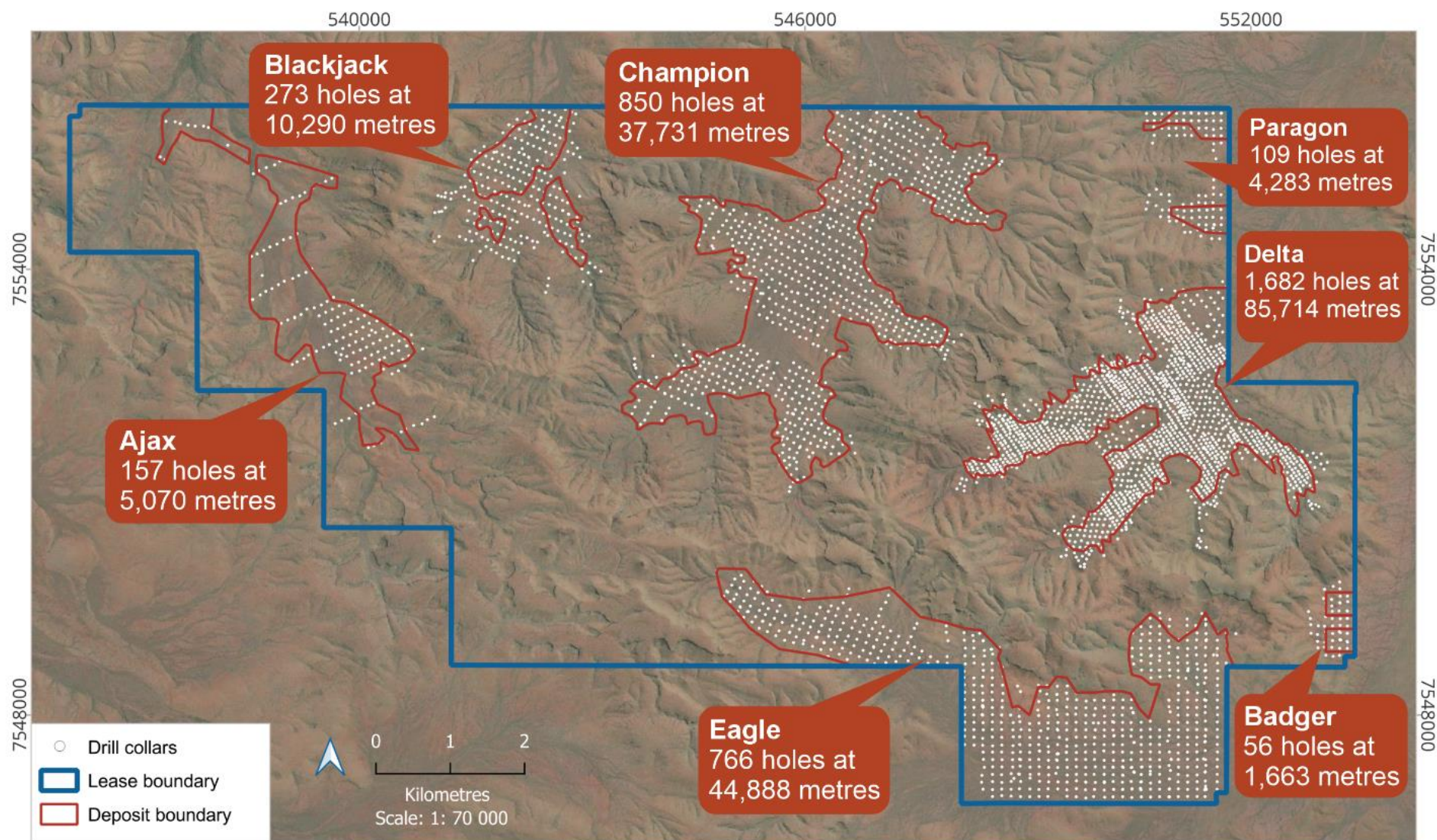
Figure 3: Blacksmith Project (M47/1451-I) showing drill hole collars and deposits

DSO Mineral Resource Estimate (Champion and Blackjack)

Red Hawk has released a DSO Mineral Resource Estimate for the Champion and Blackjack deposits as part of the development of the Blacksmith Project. This MRE incorporates the outcomes of a recent geological re-interpretation of these deposits undertaken by CSA Global.

The MRE comprises 73.5Mt grading 59.9% Fe with 95% of the resource classified as Indicated (Table 1). The addition of the Champion and Blackjack Mineral Resource to the previously released Delta and Paragon Mineral Resource has substantially increased the total Blacksmith resource base to 173.8Mt grading 60% Fe.

Table 3: MRE by deposit and classification (57.5% Fe cut-off)

Champion deposit

JORC classification	Tonnage Mt	Fe %	P %	SiO_2 %	Al_2O_3 %	LOI %
Indicated	37.8	59.8	0.081	5.42	3.45	4.59
Inferred	0.4	59.6	0.088	5.87	2.76	4.88
Total	**38.2**	**59.8**	**0.081**	**5.42**	**3.44**	**4.60**

Blackjack deposit

JORC classification	Tonnage Mt	Fe %	P %	SiO_2 %	Al_2O_3 %	LOI %
Indicated	31.4	60.0	0.076	5.95	3.34	4.02
Inferred	3.9	59.8	0.109	3.83	2.10	7.83
Total	**35.3**	**60.0**	**0.079**	**5.71**	**3.20**	**4.44**

Total Champion and Blackjack deposits

JORC classification	Tonnage Mt	Fe %	P %	SiO_2 %	Al_2O_3 %	LOI %
Indicated	69.2	59.9	0.079	5.66	3.40	4.33
Inferred	4.3	59.7	0.107	4.02	2.16	7.55
Total	**73.5**	**59.9**	**0.080**	**5.56**	**3.33**	**4.52**

See notes on page 25.

The Blacksmith Project is underpinned by a substantial deposit knowledge base, including over 200,000m of historical drilling, assays, geological modelling, metallurgical testwork and geophysical data. This knowledge base has been re-interpreted to improve the geological characterisation and lithological domaining of the Champion and Blackjack deposits. The technical work included the re-assessment of 1,123 existing drill holes on 47 geological sections within the Champion deposit and 21 geological sections within the Blackjack deposit.

A cut-off grade of 57.5% Fe has been applied to the MRE as it reflects the in-situ chemistry of the iron mineralisation likely to be mined to target a DSO product grading ~60.5% Fe. The potentially economic mineralisation types reported comprise canga (hematite) and Dales Gorge Member hardcap (goethite), with minor contribution from detrital materials (Figure 4). These lithologies have an in-situ iron

mineralisation suitable for processing by Pilbara standard dry crush and screen practices to produce a DSO product.

A Scoping Study based on the Delta and Paragon DSO MRE was released to the ASX on 9 October 2023. Following the positive outcomes of the Study, Red Hawk has initiated a Preliminary Feasibility Study (**PFS**) to further mature the development of the Blacksmith Project. The PFS will extend the Project's scope to include the updated MRE from Champion and Blackjack. The volume of resource contained in Champion and Blackjack adds to the Project's capacity to produce a high-quality product across a long life of mine. In addition, the overall combined MRE further supports the opportunity to increase production by utilising alternative export infrastructure.
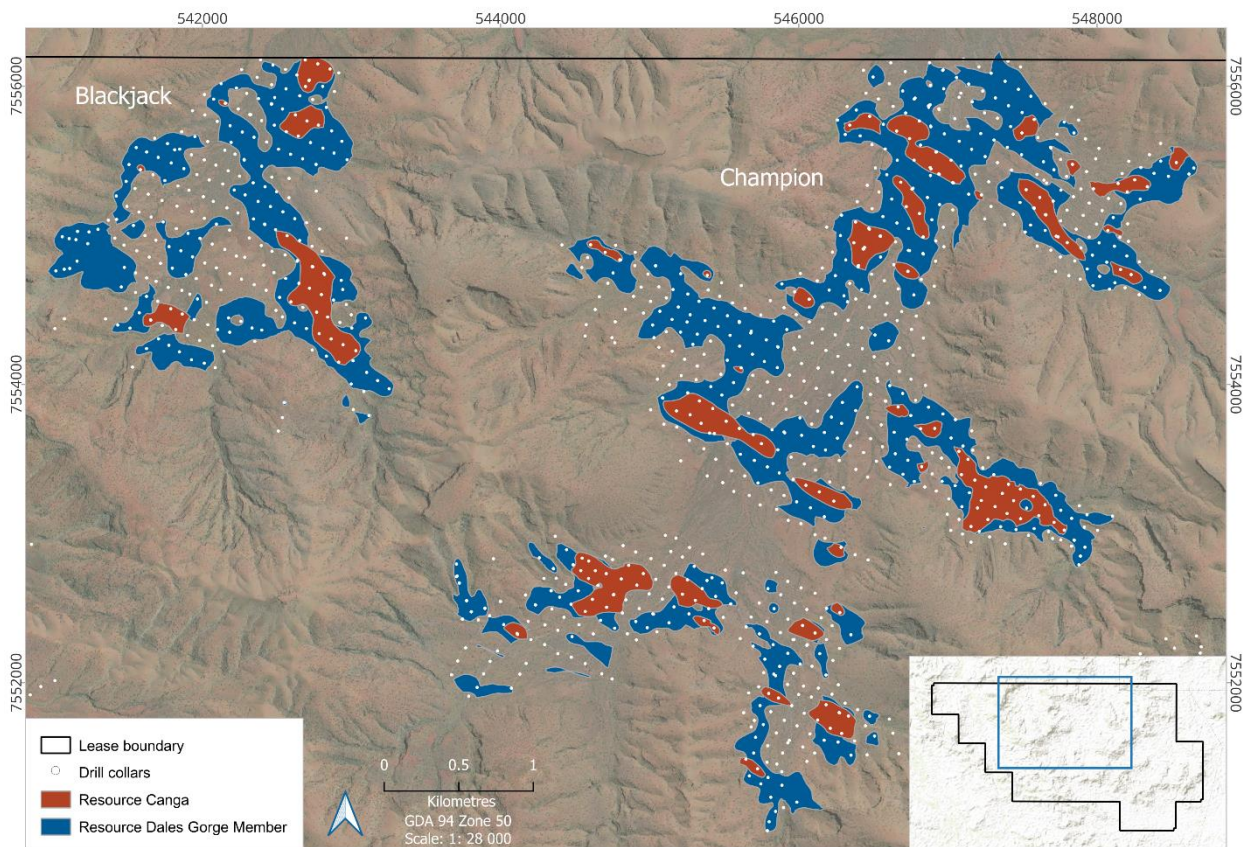

Figure 4: Mineral Resource Estimate outlines for the Champion and Blackjack deposits

2023 Mineral Resource Estimate

Geology and Geological Interpretation

The Blacksmith Project is situated within the Hamersley Province which covers an area of approximately 80,000km^2 and comprises Late Archaean to Palaeo-Proterozoic rocks of the Mount Bruce Supergroup, which consists of the Fortescue, Hamersley, and Turee Creek groups, overlain by remnants of the Wyloo Group. The banded iron formation (**BIF**) units of the Hamersley Group host the bedded iron deposits of the Pilbara with mineralisation occurring predominantly within the Marra Mamba Iron Formation and Brockman Iron Formation. Substantial mineralisation also occurs in overlying detrital units.

The Brockman Iron Formation at Blacksmith is present as either an unenriched BIF or as martite-goethite mineralisation within the Dales Gorge Member, although predominantly as a heavily hard-capped goethite-rich style of mineralisation.

The higher topographic elevations are dominated by the Joffre Member which is not mineralised.

A geological re-interpretation of Blacksmith, including the Champion and Blackjack deposits, has been completed by CSA Global. The purpose of the re-interpretation was to define the internal stratigraphy of the detritals (CzD3) and bedrock geology based on integrated geology, physical properties, chemistry, and downhole geophysics to enable alignment to its metallurgical properties and industry standard nomenclature.

Work completed included:

- Development of a more industry-standard lithological classification of the detrital mineralisation
- Completion of a cross-sectional interpretation of each deposit based on the new geological interpretation and units
- 3D modelling of the respective geological units, grade estimation/block modelling, and reporting
- Estimation of a maiden DSO MRE in accordance with the JORC Code (2012) for the Champion and Blackjack deposits.

Detritals

The detritals (CzD3) are described as coarse hematitic colluvial/alluvial fragments ranging to pelloidal. BIF-derived textures are typical. The detrital stratigraphic unit as defined by CSA Global are shown in Table 4.

Table 4: Stratigraphic units identified by CSA Global at Blacksmith

Stratigraphy	Unit/member	Brief description
CzD3	SZ	Surface detrital/colluvium.
	HMZ	High soil matrix with trace clasts.
	LZ	Unconsolidated to compacted detritals with angular to subrounded clasts in a red-brown soil matrix. Clast rather than matrix dominated.
	PZ	Pisolitic high maghemite (<1–2mm), well rounded supported in a hematite/soil matrix.
	Canga	Cemented hematite clasts in a hematite/goethite cement matrix.

Stratigraphy	Unit/member	Brief description
CzD2	CzD2	Mixture of clay and textureless goethite in various proportions.
	CID	Channel iron deposit.
Dales Gorge Member	PHbd	Bedrock can be enriched beneath detritals and CID. Mostly hardcap. Occasionally magnetite with potential for crocidolite (asbestos).
Mount McRae Shale	AHr	Shale and chert. Can be black and pyritic (potential for acid rock drainage issues).

The SZ and HMZ units have not been reported as they don't contain any DSO grade material and are therefore considered sub-economic. The LZ and PZ units provide minor contribution, with higher grade materials typically being located adjacent to the canga mineralisation.

The hematite dominant canga is the highest iron grade unit within the CzD3 stratigraphy and represents approximately 23Mt of the total 73.5 MRE. This unit is typically a competent, cemented basal detrital unit occurring above the bedrock. It generally has an iron content above 60% Fe, although can be as high as 65% Fe. An example of the canga which is relatively consistent in physical appearance across Blacksmith is presented in Figure 5.

Figure 5: Canga (drill hole HPDD0022,) competent and grading >60% Fe, hematite dominant

Dales Gorge Member

The Dales Gorge Member mineralisation underlies the canga and is characterised by a honeycomb hardcapped texture with minor relict primary banding. The mineralisation is predominantly goethite with minor hematite and is extensive across the Champion and Blackjack deposits. The resource is relatively flat lying to shallow dipping of average thickness 5-25m in both outcrop and under shallow cover.

The iron mineralisation grades between 55% to 62% Fe and is typically lower in silica (average 3.6% - 3.7% SiO_2) and alumina (average 2.2% - 2.3% Al_2O_3) than the canga unit. The Dales Gorge Member comprises approximately 25.4Mt of the total 73.5Mt MRE. An example of the Dales Gorge Member mineralisation which is relatively consistent in physical appearance across Blacksmith is shown in Figure 6.
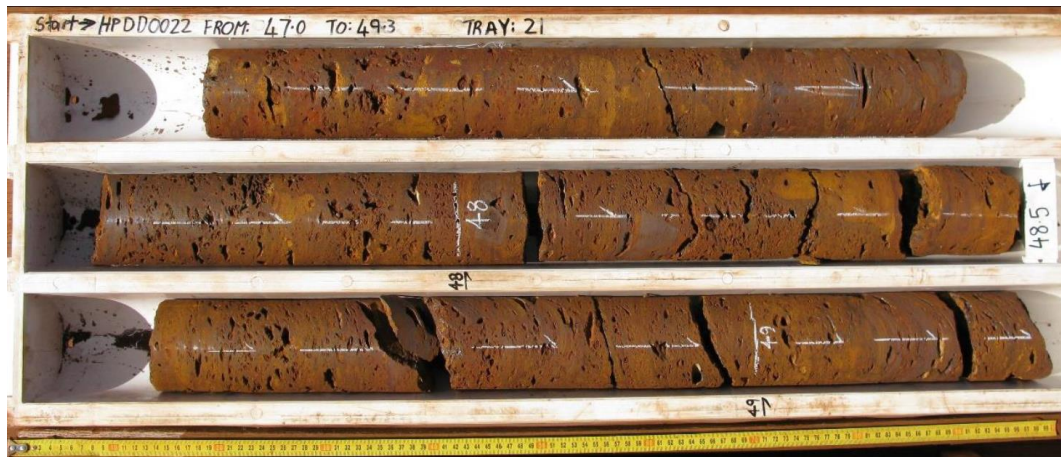
Figure 6: Dales Gorge Member (HPDD0022) mineralised hardcap, dominant by goethite

Champion geology

Champion is approximately 5km in strike and 3km across strike. The depth of the stratigraphic units ranges from 5m to 90m.

Detrital mineralisation at Champion is predominantly PZ which occurs distal to outcrop, with zones of LZ close to outcrop. Areas of canga overlie hardcap mineralisation Dales Gorge Member, and minor CID occurs in a channel in the far northwest of the deposit.

Canga occurs throughout the Champion deposit as discrete lenses directly on top of hardcap. It tends to predominate along the channel margins where it can assume thicknesses of up to 20m. It becomes more dominant in the northern, narrowest part of the valley where it occurs as lenses up to 15m thick on both sides of the valley. In addition, substantial canga occurs in the western part of Champion.

In the northern part of Champion, mineralisation is restricted to the central and western sides of the valley, with the eastern half being almost barren apart from thin lenses of LZ overlying thin canga. In the central part of the valley abutting the CID, the PZ is up to 30m thick.

A representative cross section of the Champion deposit showing the waste detrital units SZ overlying LZ and PZ, and the higher grade canga and mineralised Dales Gorge Member is presented in Figure 7.
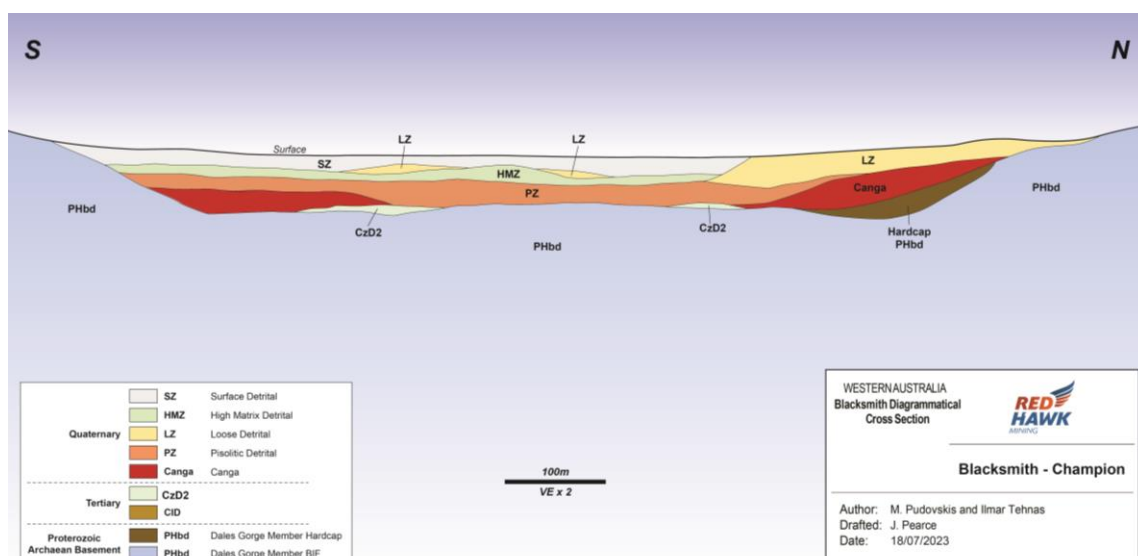

Figure 7: Generalised schematic Champion cross section

Blackjack geology

Blackjack is approximately 2.4km in strike and 1.6km across strike. The depth of the stratigraphic units ranges from 2m to 53m. The deeper parts are mainly in the northern part of the deposit.

The detrital valley is shallower (up to 60m deep) and narrower than in Champion and Delta. Consequently, no major deposition of HMZ has occurred. Similarly, no CzD2 or CID was identified.

The Blackjack valley comprises a thin SZ overlying a simple "layer cake" sequence of LZ and PZ, in approximate 50:50 proportions. A continuous lens of canga occurs to the east. This may grade into PZ along strike towards the centre of the valley. Small lenses of canga occasionally occur at the base of the detrital valley but these have no continuity.

Hardcap mineralisation has formed in the Dales Gorge Member in the west as well as to the east in the southern part of the deposit.

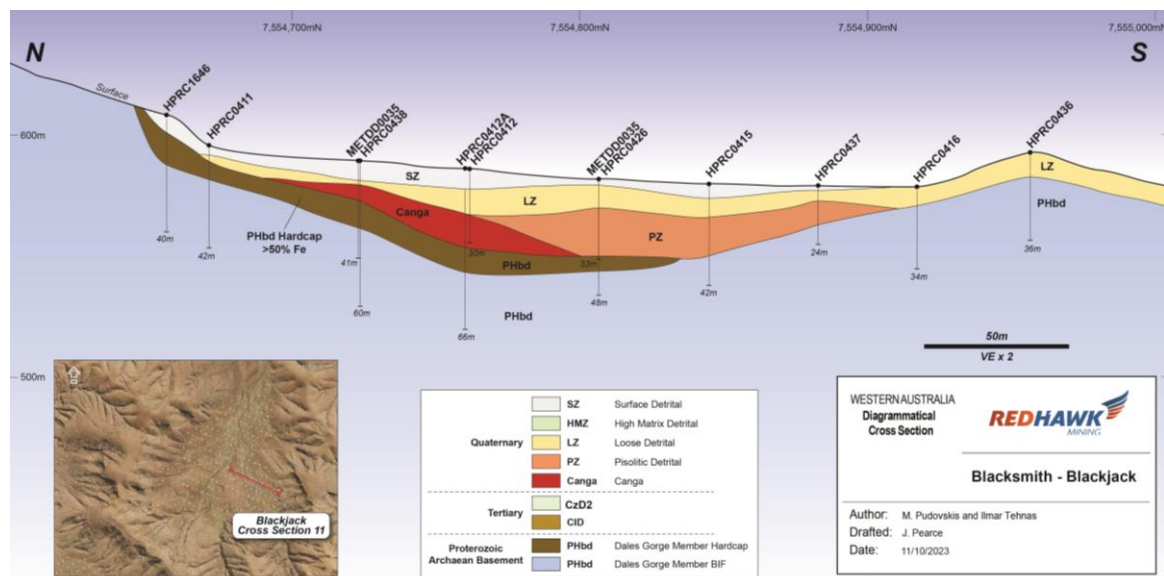A representative cross section of the Blackjack deposit is presented in Figure 8.

Figure 8: Generalised schematic Blackjack cross section

Sampling, sub-sampling and drilling techniques

A total of 3,893 drillholes (189,639m) was drilled by Red Hawk from 2008 through 2017 across the entire Blacksmith Project as shown in Table 5 with drill collar locations presented in Figure 3 and Figure 4.

Table 5: Blacksmith drillhole data

Deposit	Total holes	Total (metres)
Ajax	157	5,070
Badger	56	1,663
Blackjack	273	10,290
Champion	850	37,731
Delta	1,682	85,714
Eagle	766	44,888

Deposit	Total holes	Total (metres)
Paragon	109	4,283
Total	**3,893**	**189,639**

Drilling on Champion has comprised a total of 850 drillholes (37,731m) completed between 2008 through 2017, including 792 reverse circulation percussion (**RCP**) holes used to estimate the Mineral Resource. A drilling summary is provided in Table 6.

46 diamond drillholes and 12 sonic holes have also been completed on Champion but were excluded from the MRE as they were drilled for metallurgical and geotechnical purposes hence sampled differently from the RCP holes and not consistently assayed. They were used to guide the geological interpretation.

Champion comprises 47 sections on a spacing of approximately 100m x 100m in the northeast-southwest directions and in the northwest-southeast directions. Drill sections have been oriented based on the dominant trend of the channel within the deposit.

Table 6: Champion drillhole summary

Year	Reverse circulation holes	Diamond drill holes	Sonic drill holes	Total holes	Total metres (metres)
2008	107	-	-	107	5,333
2009	39	7	-	46	2,024
2010	280	-	-	280	14,058
2011	159	16	-	175	8,124
2014	207	11	-	217	6,901
2017	-	12	12	24	1,356
Total	**792**	**46**	**12**	**849**	**37,796**

Blackjack was drilled by Red Hawk between 2008 and 2017 with 262 RC drill holes completed for 9,759m. In addition to the RC drilling, five diamond holes and six sonic holes were completed but excluded from the MRE as they were drilled for metallurgical and geotechnical purposes hence sampled differently from the RC holes and not consistently assayed. They were used to guide the geological interpretation.

The Blackjack drilling summary is shown in Table 7 with drill collar locations presented in Figure 3 and Figure 4.

A total of 21 sections were drilled within Blackjack on a nominal section spacing of 100m x 100m in the northeast-southwest directions and in the northwest-southeast directions.

Table 7: Blackjack drillhole summary

Year	Reverse circulation holes	Diamond drill holes	Sonic drill holes	Total holes	Total metres (m)
2008	32			32	1,285
2009	11			11	480
2014	219	3		222	8,120
2017		2	6	8	406
Total	**262**	**5**	**6**	**273**	**10,291**

Detailed geological logging of all Champion and Blackjack RC holes captured various geological parameters including mineralogy, lithology, colour, texture and sample quality. Logging was both qualitative and quantitative. RC holes were logged at 2m intervals with over 90% of samples logged as good recovery.

Reverse circulation drilling with a 5½ inch (140 mm) bit utilising a face sampling hammer was used to collect samples in pre-labelled bags via a cone splitter mounted directly below the cyclone. Samples were stored on site prior to being dispatched to the laboratory.

Samples were sent primarily to the Ultra Trace laboratory in Perth or the Amdel laboratory in Cardiff, New South Wales.

At the laboratory, samples are sorted, dried at 105°C, and weighed prior to being crushed and split via a riffle or rotary splitter to obtain a sub-fraction for pulverisation (75 µm).

Further drilling is planned to upgrade a portion of the Champion and Blackjack deposits from Inferred and Indicated to Measured classification. Plans in each area include:

- For the Champion deposit, Measured classification may be achieved via additional density data and infill RC drilling to a nominal 50m x 50m spaced grid.
- Blackjack will require RC infill drilling to a nominal 50m x 50m, supported by downhole density data to improve the resource classification.

Champion Mineral Resource Estimate

The Champion deposit MRE is summarised in Table 8, reported by JORC classification.

A reporting cut-off grade of 57.5% Fe was selected as it reflects the in-situ chemistry of the iron mineralisation likely to be mined to produce a DSO iron fines product. Only material from Zone 2 (LZ -unconsolidated to compacted detritals), Zone 3 (PZ – Pisolitic high maghemite detritals), Zone 4 (Canga) and Zone 5 (Dales Gorge Member – mineralisation) has been reported.

Mineral Resources have been reported according to the following criteria:

- Indicated and Inferred material (Rescat=2 or Rescat=3)
- Blocks with Fe % grade >57.5%
- Material from LZ, PZ, Canga and Dales Gorge Member.

Table 8: Champion MRE – total LZ, PZ, canga and Dales Gorge Member (57.5% Fe cut-off)

JORC classification	Tonnage Mt	Density	Fe %	P %	SiO_2 %	Al_2O_3 %	LOI %
Indicated	37.8	3.03	59.8	0.081	5.42	3.45	4.59
Inferred	0.4	2.95	5.6	0.088	5.87	2.76	4.88
Total	**38.2**	**3.03**	**59.8**	**0.081**	**5.42**	**3.44**	**4.60**

See notes on page 25.

The Mineral Resources reported by JORC classification and individual domains are provided in Table 9.

Table 9: Champion MRE by LZ, PZ, canga and Dales Gorge Member zone (57.5% Fe cut-off)

Zone	JORC classification	Tonnage Mt	Density t/m^3	Fe %	P %	SiO_2 %	Al_2O_3 %	LOI %
LZ	Indicated	1.0	2.85	58.2	0.047	8.81	4.67	2.49
	Inferred	0.06	2.85	57.8	0.129	11.07	2.77	2.82
	Sub-total	**1.1**	**2.85**	**58.2**	**0.052**	**8.93**	**4.58**	**2.50**
PZ	Indicated	6.3	3.00	58.4	0.046	8.46	5.03	2.07
	Inferred	-	-	-	-	-	-	-
	Sub-total	**6.3**	**3.00**	**58.4**	**0.046**	**8.46**	**5.03**	**2.07**
Canga	Indicated	17.6	3.25	61.5	0.066	5.05	3.46	2.50
	Inferred	0.1	3.25	61.4	0.074	4.23	3.29	3.07
	Sub-total	**17.8**	**3.25**	**61.5**	**0.066**	**5.04**	**3.46**	**2.50**
Dales Gorge Member	Indicated	12.8	2.80	58.4	0.123	4.15	2.55	8.90
	Inferred	0.2	2.80	58.9	0.086	5.58	2.40	6.65
	Sub-total	**13.0**	**2.80**	**58.4**	**0.122**	**4.17**	**2.54**	**8.87**
Total		**38.2**	**3.04**	**59.8**	**0.081**	**5.42**	**3.44**	**4.60**

See notes on page 25.

Figure 9 shows the horizontal extent of the canga and mineralised Dales Gorge Member within the Champion MRE with the RCP, metallurgical and geotechnical drill holes.
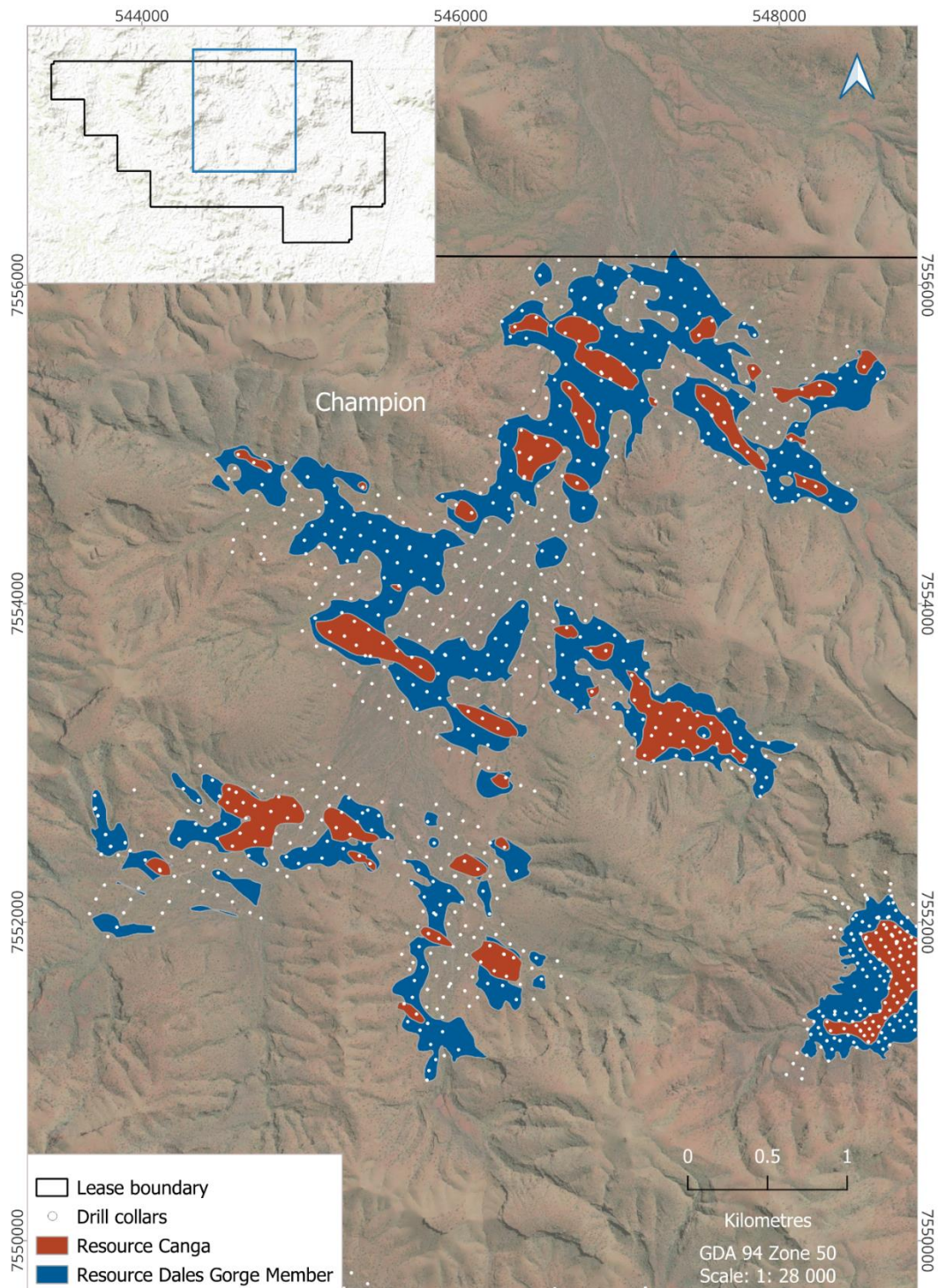

Figure 9: Champion canga and Dales Gorge Member DSO MRE outline

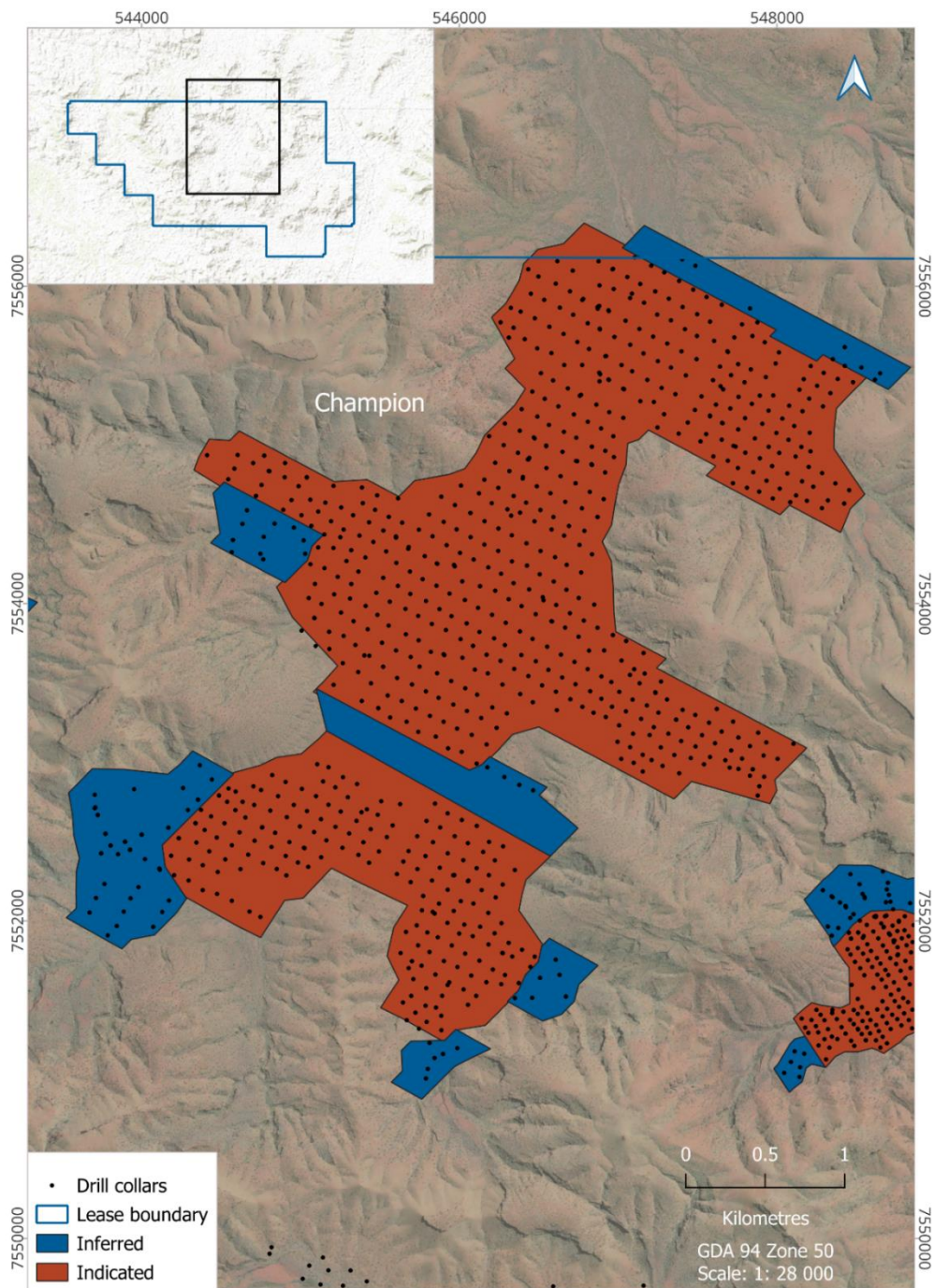Figure 10 presents the location of the Indicated and Inferred resources within Champion.

Figure 10: Champion Mineral Resource classification

Figure 11 presents the grade vs tonnage curve for the total Champion MRE. Figure 12 and Figure 13 present the grade vs tonnage curves for the canga and mineralised Dales Gorge Member, respectively.
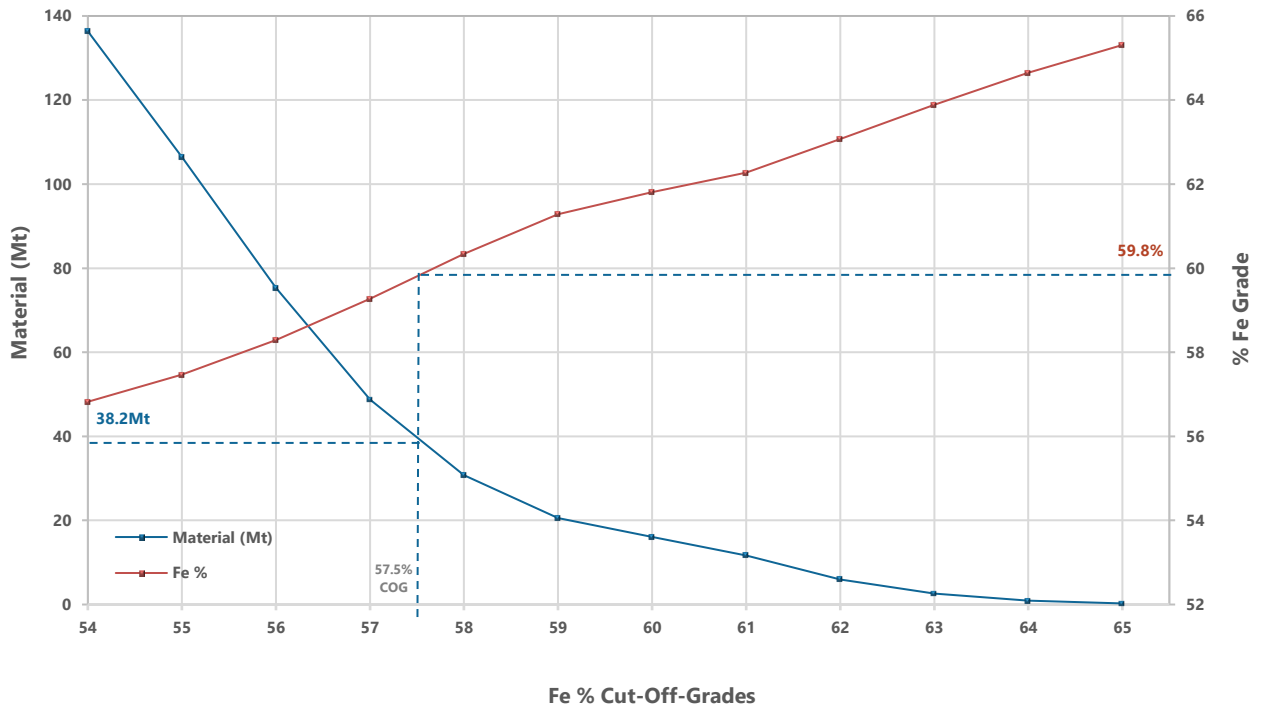
Figure 11: Champion MRE grade vs tonnage curve
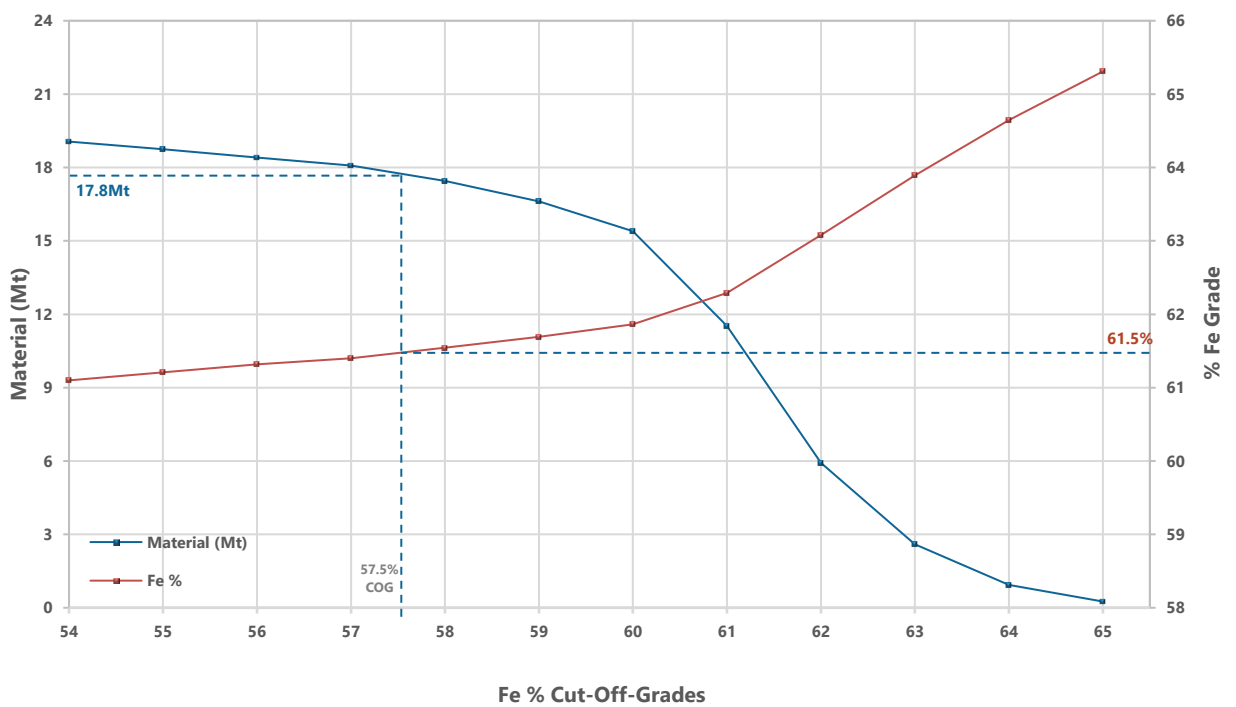
Figure 12: Champion canga grade vs tonnage curve
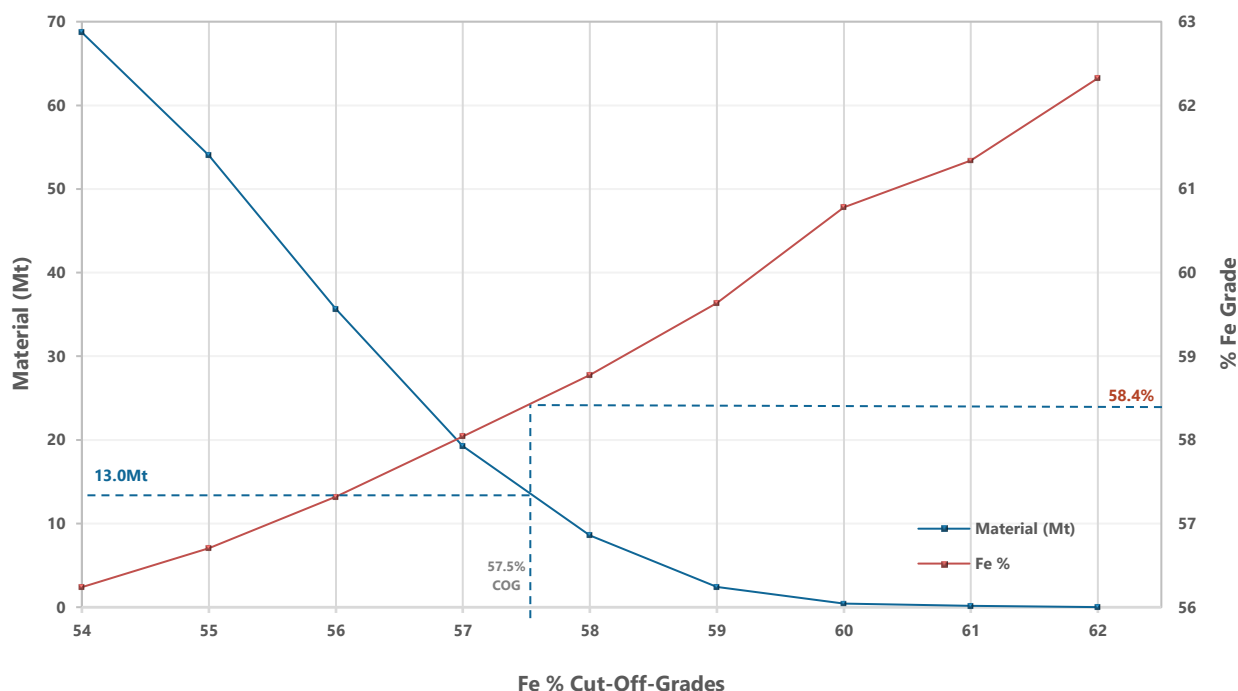
Figure 13:   Champion mineralised Dale Gorge Member grade vs tonnage curve

Blackjack Mineral Resource Estimate

The Blackjack deposit MRE is summarised in Table 10, reported by JORC classification.

A reporting cut-off grade of 57.5% Fe was selected as it reflects the in-situ chemistry of the iron mineralisation likely to be mined to produce a DSO iron fines product. Only material from Zone 2 (LZ -unconsolidated to compacted detritals), Zone 3 (PZ – Pisolitic high maghemite detritals), Zone 4 (Canga) and Zone 5 (Dales Gorge Member – mineralisation) has been reported.

Mineral Resources have been reported according to the following criteria:

- Indicated and Inferred material (Rescat=2 or Rescat=3)
- Blocks with Fe % grade >57.5%
- Material from LZ, PZ, Canga and Dales Gorge Member.

Table 10: Blackjack MRE by classification (57.5% Fe cut-off)

JORC classification	Tonnage Mt	Density	Fe %	P %	SiO_2 %	Al_2O_3 %	LOI %
Indicated	31.4	2.97	60.0	0.076	5.95	3.34	4.02
Inferred	3.9	2.80	59.8	0.109	3.83	2.10	7.83
Total	**35.3**	**2.96**	**60.0**	**0.079**	**5.71**	**3.20**	**4.44**

See notes on page 25.

The Blackjack Mineral Resource reported by JORC classification and individual domains are provided in Table 11.

Table 11: Blackjack MRE by LZ, PZ, canga and Dales Gorge Member zone (57.5% Fe cut-off)

Zone	JORC classification	Tonnage Mt	Density	Fe %	P %	SiO_2 %	Al_2O_3 %	LOI %
LZ	Indicated	2.5	2.85	59.2	0.056	8.21	4.32	2.03
	Inferred	0.05	2.85	60.5	0.092	6.10	2.82	3.01
	Sub-total	**2.6**	**2.85**	**59.2**	**0.056**	**8.17**	**4.29**	**2.05**
PZ	Indicated	14.7	3.00	59.4	0.053	8.01	4.29	1.86
	Inferred	-	-	-	-	-	-	-
	Sub-total	**14.7**	**3.00**	**59.4**	**0.053**	**8.01**	**4.29**	**1.86**
Canga	Indicated	5.6	3.25	63.8	0.080	3.30	2.29	2.14
	Inferred	-	-	-	-	-	-	-
	Sub-total	**5.6**	**3.25**	**63.8**	**0.080**	**3.30**	**2.29**	**2.14**
Dales Gorge Member	Indicated	8.6	2.80	58.9	0.118	3.46	2.12	9.52
	Inferred	3.9	2.80	59.7	0.109	3.80	2.09	7.90
	Sub-total	**12.4**	**2.80**	**59.2**	**0.115**	**3.56**	**2.11**	**9.02**
Total		**35.3**	**2.96**	**60.0**	**0.079**	**5.71**	**3.20**	**4.44**

See notes on page 25.

Figure 14 shows the lateral extent of the canga and mineralised Dales Gorge Member projected to surface within the Blackjack MRE with the RCP, metallurgical and geotechnical drill holes.
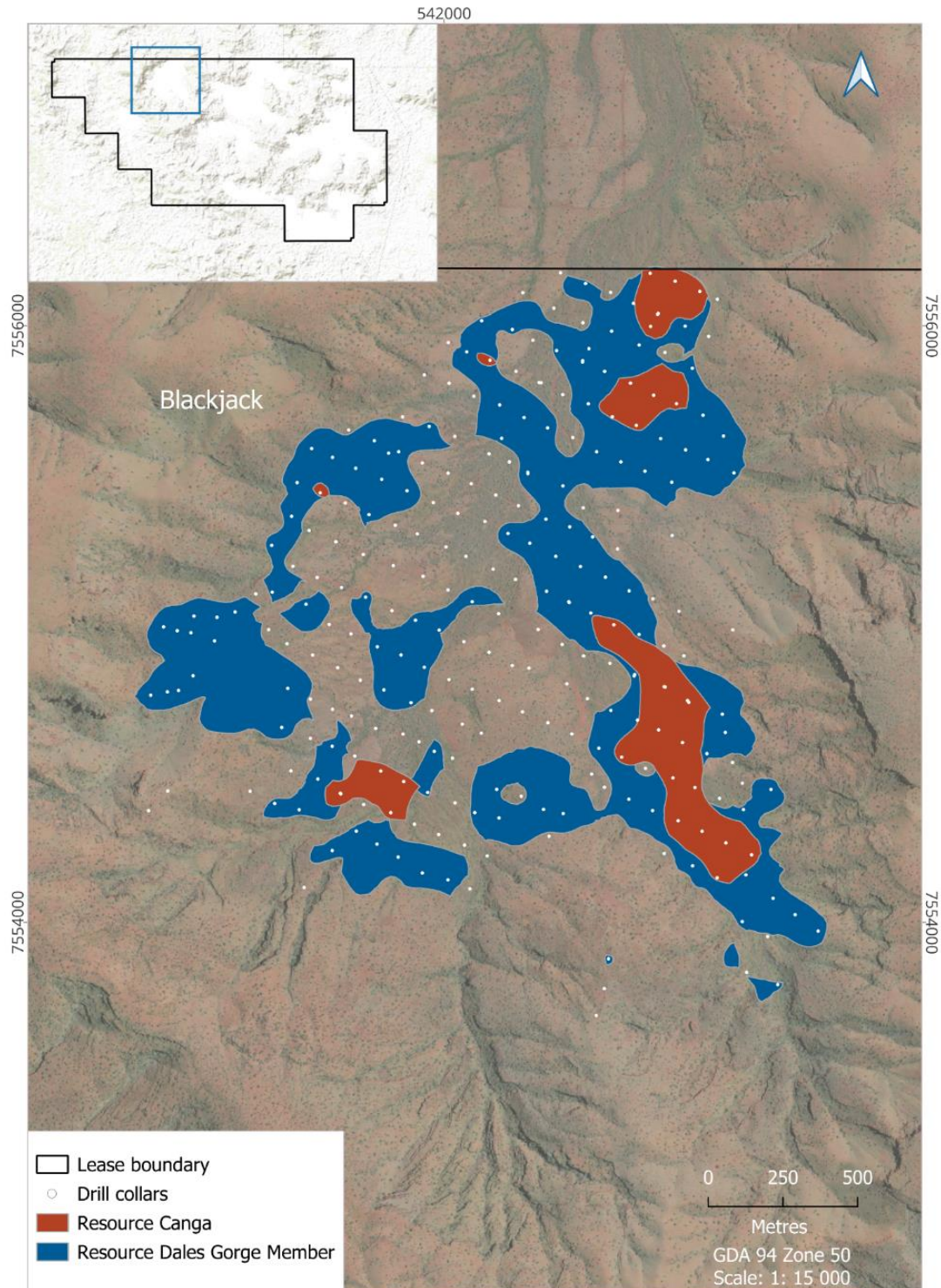
Figure 14: Blackjack canga and Dales Gorge Member DSO MRE outline

Figure 15 presents the location of the Indicated and Inferred resources within Blackjack.
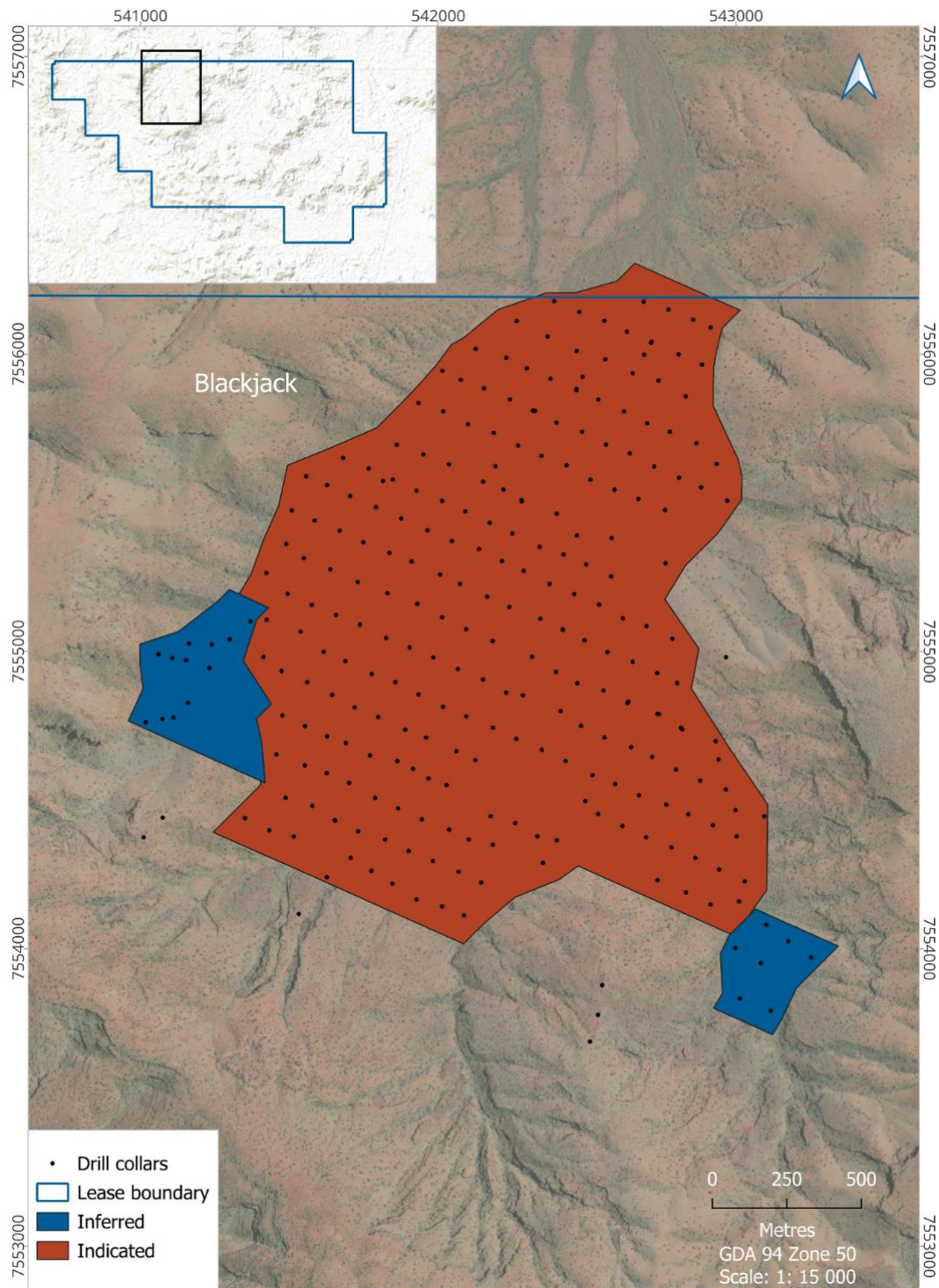

Figure 15 Plan showing Blackjack Mineral Resource classification and drillholes

Figure 16 presents the grade vs tonnage curve for the total Blackjack MRE. Figure 17 and Figure 18 present the grade vs tonnage curves for the canga and mineralised Dales Gorge Member, respectively.
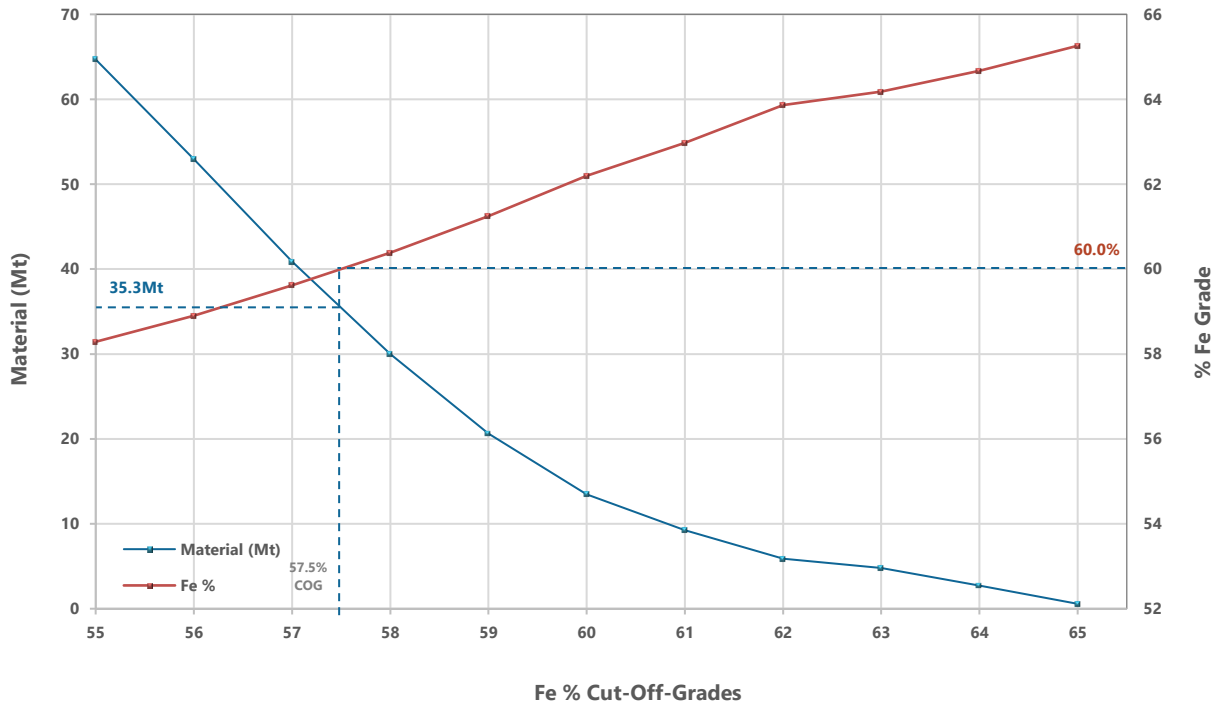
Figure 16 Blackjack MRE grade vs tonnage curve
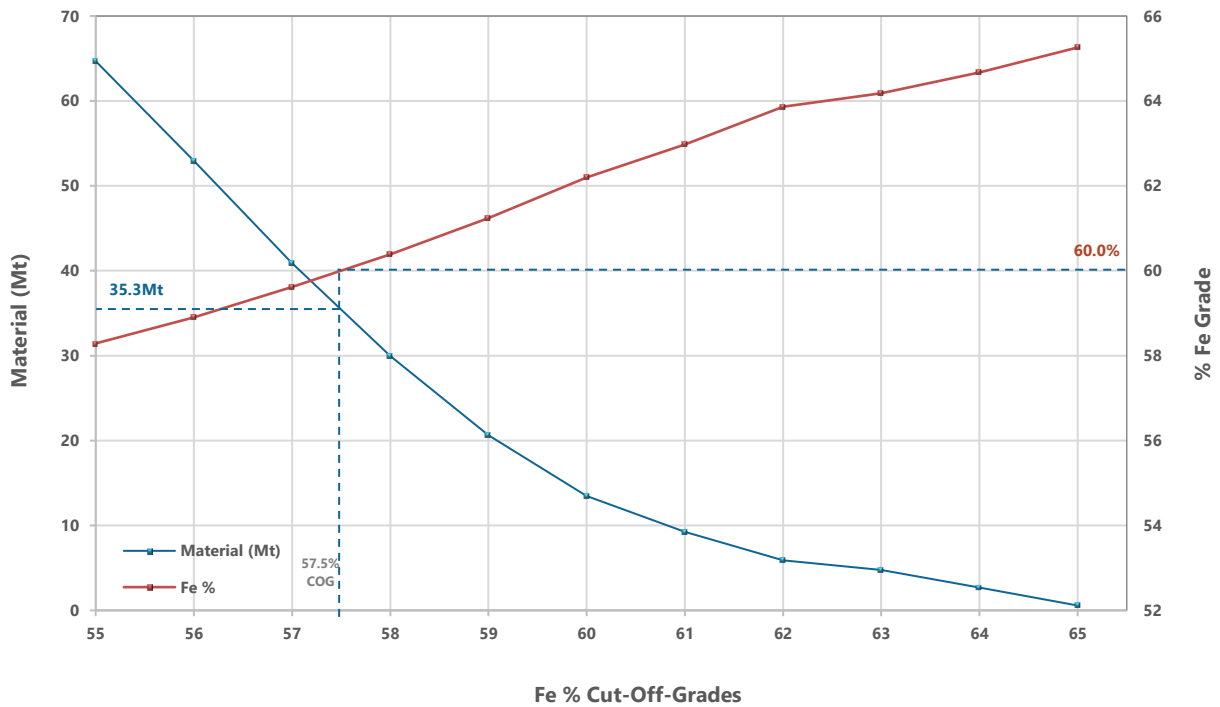
Figure 17: Blackjack canga grade vs tonnage curve
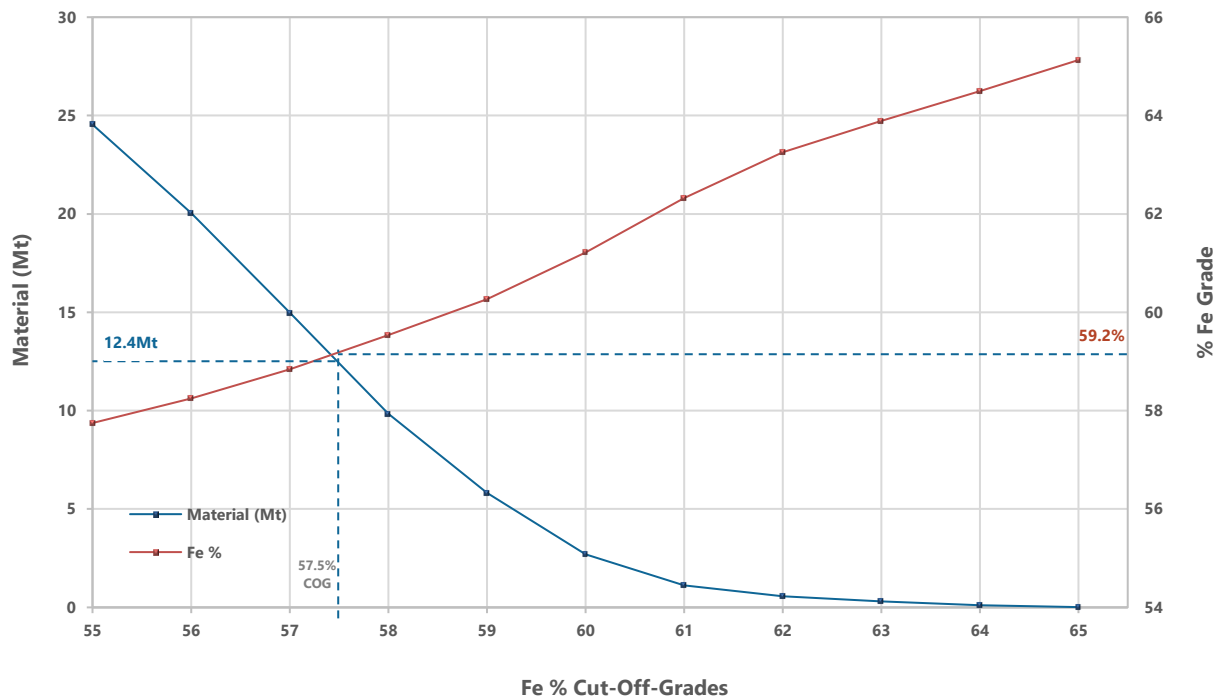
Figure 18: Blackjack mineralised Dale Gorge Member grade vs tonnage curve

Next steps

Red Hawk plans to bring forward production at the Blacksmith Project via the execution of a 3Mtpa DSO project. As part of the development sequence a Scoping Study has been completed and was released to market in October 2023[1]. Red Hawk plans to:

- Complete additional drilling and geotechnical works in 2023 to convert a portion of the Delta MRE to a Measured classification.

- Undertake a PFS to consolidate and validate the Scoping Study project economics.

- Develop conceptual pit shells and production schedules for Champion and Blackjack for incorporation into the PFS.

- Engage with Project critical contractors to acquire market pricing and develop the commercial relationships to underpin the execution and operation of the Project.

- Continue liaising with Main Roads Western Australia and the Pilbara Ports Authority to enable the transport and export of the DSO product.

1. *Blacksmith Project: DSO Scoping Study* released to ASX 9 October 2023

Sample analysis method and quality assurance

Assaying

Analysis for both Champion and Blackjack used fused bead x-ray fluorescence for the determination of iron, silicon dioxide, aluminium oxide, titanium dioxide, manganese oxide, calcium oxide, phosphorous, sulphur, magnesium oxide, potassium oxide, zinc, lead, copper, barium oxide, vanadium oxide, chromium, nickel, cobalt, and sodium oxide. Thermogravimetric analysis was used to determine LOI at 425°C, 650°C and 1,000° C.

Quality Assurance / Quality Control (QAQC)

Field duplicates were taken at a rate of four per 100 samples for the Blacksmith Project. Both the primary and duplicate samples were obtained by taking a split from the rig-mounted rotary cone splitter.

Certified reference materials (**CRMs**) were inserted at a rate of five per 100 samples for the Blacksmith area. The CRMs are inserted in every calico bag ending in 11, 31, 51, 71 and 91. The selection of the CRM placed in the calico bag was completed on a random basis by the rig geologist at the time.

Field RCP duplicate results indicate good precision, giving confidence in sampling procedures. CRM results give confidence in the accuracy of the primary laboratory. Check assay results provide further validation of the accuracy of the primary laboratory.

Mineral Resource estimation methodology

Unless otherwise stated, the Mineral Resource estimate process for Champion and Blackjack was the same.

Data import, validation, geological modelling and block modelling was undertaken using Datamine Studio RM software. Snowden Supervisor (version 8) was used for statistical and geostatistical analysis.

The relogged stratigraphic units were used to create a cross-sectional interpretation of the detrital deposits at Blacksmith. These sections were then used to develop geological domains or Zones. A grade of 50% Fe obtained from the histogram plot was used to separate the Dales Gorge member hardcap mineralisation from the Dales Gorge Member BIF. Each stratigraphic unit was considered as being a separate estimation domain.

Density values were assigned to the block model domains/zones based on the core measurements completed by Red Hawk, downhole geophysics densities and the density analysis completed by CSA Global.

For Champion, a 50m(E) x 50m(N) x 2m(RL) parent cell size was used to honour wireframe boundaries. The drillhole data spacing is variable throughout the deposit but most of the area has a spacing approximating 100m along strike by 100m across strike. Sampling has been completed on 2m intervals. The block size therefore represents approximately half the drillhole spacing in easting and northing.

For Blackjack a 50m(E) x 50m(N) x 2m(RL) parent cell size was used to honour wireframe boundaries. The drillhole data spacing is variable throughout the deposit but most of the area has a spacing approximating 120m along strike by 100m across strike. Sampling has been completed on 2m intervals. The block size therefore represents approximately half the drillhole spacing in easting and northing.

Top cuts were selected following statistical analysis. Quantitative kriging neighbourhood analysis was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids. A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not be met.

Dynamic anisotropy was used to ensure that undulation in the mineralisation relating to the folded nature of the stratigraphy was captured by the search ellipses (i.e. rotating search ellipses). Ordinary kriging was adopted to interpolate grades into cells, with variogram rotations consistent with the search ellipse rotations. All interpolated grades variable utilise the search and sample selection plan obtained from the QKNA of the Fe domains.

Block model validation was completed visually by comparing drillhole grades with cell model grades. Domain drillhole and block model statistics were compared. Swath plots were then created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposits. The block model reflected the tenor of the grades in the drillhole samples both globally and locally.

Reasonable prospects hurdle

Clause 20 of the JORC Code (2012) requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction, regardless of the classification of the Mineral Resource.

The Competent Persons deem that there are reasonable prospects for eventual economic extraction of mineralisation on the following basis:

- Mineralisation at Champion and Blackjack is continuous and has been well delineated by drilling and is near surface, amenable to simple open pit mining.
- Reported Champion and Blackjack iron and deleterious element grades are comparable to iron products presently being exported into the global seaborne iron ore trade from the Pilbara ports of Port Hedland, Dampier and Cape Lambert.

Mineral Resource classification

The Mineral Resources for Champion and Blackjack have been classified in accordance with guidelines contained in the JORC Code. The classification applied reflects the author's view of the uncertainty that should be assigned to the Mineral Resources reported herein. Key criteria that have been considered when classifying the Mineral Resource are detailed in JORC Table 1 which is contained in Appendix A.

After considering data quality, data distribution, and geological and grade continuity, the following approach was adopted when classifying the Mineral Resources:

- Geological continuity was assessed, and the domains were reasonably continuous along and across the strike of the deposit.
- The block model was initially coloured by slope of regression (**SOR**). Drillholes were then loaded to gain an understanding of how SOR related to drillhole spacing. For majority of the model areas, SOR values around 0.7 or above were found to relate to a drillhole spacing of 100m(N) x 100m(E) to 130m(N) x 100m(E) for Blackjack. SOR values around 0.6 or above were found to relate to a drillhole spacing of 100m(N) x 100m(E) for Champion.

- The model areas of Blackjack with a SOR values of approximately 0.5 to 0.7 were found to relate to a drillhole spacing of greater than 100m and up to about 160 m. A wireframe was created to capture this area and it was classified as Inferred.

- The model areas of Champion with SOR values of less than 0.6 were found to relate to a drillhole spacing of greater than 100m and up to about 200m. This area was classified as Inferred.

Metallurgy

Red Hawk is targeting the production of a high-quality DSO product from the Champion and Blackjack deposits using Pilbara standard dry crush and screen practices to produce DSO lump and fine product. For this reason, the historical metallurgical testwork (reported most recently by the Company: ASX, 7 January 2020) which focused on upgrading lower grade LZ and PZ detritals (typically less than the 57.5% Fe cut-off), although valid and of technical and historical interest, does not have any material influence on the reporting of the Delta or Paragon Mineral Resource.

The metallurgical testwork completed on the physical properties of the canga and Dales Gorge Member identified no processing issues for a DSO plant.

Steven Michael

Managing Director and CEO
Red Hawk Mining Limited

This ASX announcement was authorised by the Board of Red Hawk Mining Limited

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Notes:

1. **Mineral Resource Estimate (Tables 1, 2, 6 and 7)**
   - Due to effects of rounding, totals may not represent the sum of all components.
   - Tonnages are rounded to the nearest 0.1 million tonnes and grades are shown to two significant figures.
   - Reporting criteria are: Indicated and Inferred material (RESCAT=2 or RESCAT=3), Fe >57.5%, Zone=2, Zone=3, Zone=4 or Zone=5.

2. **Iron ore resources for selected ASX-listed companies (Figure 1)**
   - JWD and Yarram – CuFe Limited (ASX: CUF): 2023 Annual Report (ASX announcement 28/09/2023)
   - Iron Ridge and Shine – Fenix Resources Limited (ASX: FEX): 2023 Annual Report (ASX announcement 29/08/23)
   - Tombador – Tombador Iron Limited (ASX: TI1): Financial Report for 6 Months to December 2022 (ASX announcement 31/03/2022)
   - Robe Mesa – CZR Resources Ltd (ASX: CZR): 2023 Annual Report (ASX announcement 22/09/2023)
   - Koolan Island – Mount Gibson Iron Limited (ASX: MGX): Mineral Resources and Ore Reserves Statement 2023 (ASX announcement 28/09/23)
   - Pannawonica – Red Hill Minerals Limited (ASX: RHI): 2023 Annual Report (ASX announcement 21/09/2023)
   - Paulsens East – Strike Resources Limited (ASX:SRK): Significant Upgrade of JORC Resource (ASX announcement 04/09/2019)

Disclaimer:

This announcement includes forward-looking statements within the prevailing regulatory laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of words such as "aim", "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "targets", "outlook" and "guidance", or other similar words and may include, without limitation, statements regarding estimated reserves and resources, certain plans, strategies, aspirations and objectives of management, anticipated production, study or construction dates, expected costs, cash flow or production outputs and anticipated productive lives of projects and mines. Such statements are subject to prospective risks and uncertainties and may cause actual developments to differ materially from the reported results.

The forward-looking statements in this announcement were prepared based on the present intentions of the current Red Hawk board and management team, numerous assumptions concerning current conditions and future events, as well as the business environment where Red Hawk conducts business. Red Hawk has no obligation to guarantee that the valid information presented will bring the specific results as expected.

Competent Person's Statement:

The information in this report that relates to Mineral Resources is based on information compiled by Mr Aaron Meakin and Mr Mark Pudovskis. Mr Aaron Meakin is a full-time employee of CSA Global Pty Ltd and is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Mark Pudovskis is a full-time employee of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Aaron Meakin and Mr Mark Pudovskis have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Aaron Meakin and Mr Mark Pudovskis consent to the disclosure of the information in this report in the form and context in which it appears. Mr Mark Pudovskis assumes responsibility for matters related to Sections 1 and 2 of JORC Table 1, while Mr Aaron Meakin assumes responsibility for matters related to Section 3 of JORC Table 1.

With respect to previously reported Mineral Resources, the Company confirms that the form and context in which the results are presented and all material assumptions and technical parameters underpinning the estimates (including the production targets and forecast financial information derived from the production targets) in the original market announcements continue to apply and have not materially changed from the original announcements and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcements *DSO Mineral Resource Estimate – Delta and Paragon Deposits* on 6 September 2023 and *Blacksmith Project DSO Scoping Study* on 9 October 2023.

ABOUT RED HAWK MINING

Red Hawk Mining (ASX:RHK) is focussed on developing its 100%-owned Blacksmith Iron Ore Project in the Pilbara region of Western Australia. The Pilbara hosts many world-class iron ore mines and is the world's largest producing region of seaborne iron ore.[1] With its close proximity to major iron ore markets, including China, Japan, South Korea and India, iron ore exports from the Pilbara exceeded 750 million tonnes in 2022.[2]

BLACKSMITH PROJECT

The Blacksmith Project is located approximately 70km north-west of Tom Price and is surrounded by many major iron ore projects and significant associated road, rail and power infrastructure. The Project, containing mining lease M47/1451, has the potential to be a long-term supplier of iron ore to global steelmakers.

Source:
1. Minerals Council of Australia
2. Pilbara Ports Authority

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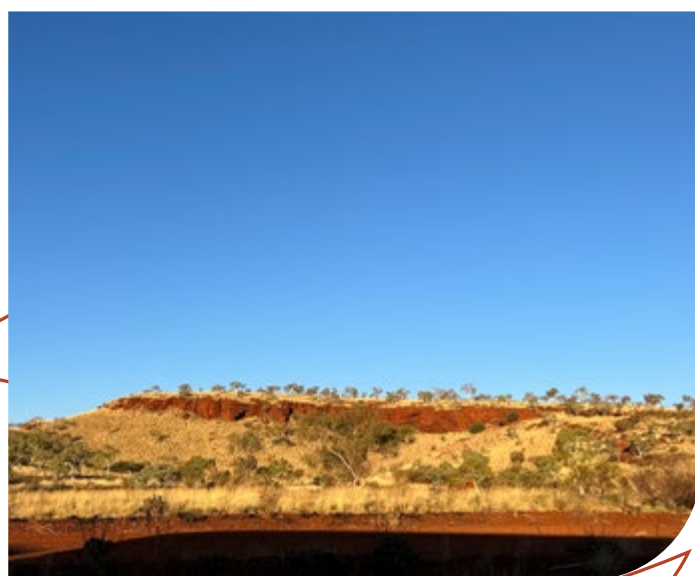
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Appendix A - JORC Table 1

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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	**Champion Deposit** The sampling database for Champion includes 792 reverse circulation (**RC**) holes, 46 diamond drilling (**DD**) holes and 12 sonic drilling holes. **Blackjack Deposit** The sampling database for Blackjack includes 262 RC holes, five DD holes, and six sonic drilling holes.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC samples were collected on 2m intervals using a static cone splitter mounted below a cyclone. DD samples were collected using PQ or HQ size diameter core with triple tube to maximise recovery.
	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. "RC drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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.	2m samples averaging 4–5kg from RC drilling were collected. DD samples were either half or quarter cored for quality assurance/quality control (**QAQC**) purposes, whole core was sent for metallurgical and geotechnical testwork. Certified reference material (**CRMs**) and field duplicates were used to monitor accuracy and precision of sampling. All RC samples were dried at 105°C, crushed, split, and pulverised to 75µm using a s chrome steel ring mill or bowl and puck style pulveriser. A test portion was analysed using the fused bead x-ray fluorescence (**XRF**) method for Fe, SiO_2, Al_2O_3, TIO_2, MnO, CaO, P, S, MgO, K_2O, Zn, Pb, Cu, BAO, V_2O_5, Cr, Ni, Co and Na_2O. Another test portion was analysed by thermogravimetric analysis (TGA) to determine the Loss on ignition (**LOI**) at 425°C, 650°C and 1,000°C.
Drilling techniques	*Drill type (e.g. core, RC, 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.).*	RC drilling with a 5½" (140 mm) bit hammer utilising a face sampling hammer button was used to collect samples. PQ (8.5cm) sized DD holes were drilled for metallurgical work and HQ (6.35cm) sized core diameter were used to collect geotechnical and QAQC purposes. A triple tube was used to maximise recovery in diamond drilling. The Competent Person considers that the drilling techniques adopted were appropriate for the style of mineralisation and for reporting a Mineral Resource.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	RC sample recovery was recorded as good (G) or poor (P) based on visual estimate of the number of cuttings recovered. **Champion Deposit** 89% of the intervals recorded good recovery. **Blackjack Deposit** 93% of the intervals recorded good recovery. Recovery for DD is not recorded in the database, but the author assumes they were good based on previous Mineral Resource reports.

Criteria	JORC Code explanation	Commentary
	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.*	Results from RC diamond twin holes indicate there is no significant bias in RC compared to DD assays, however, there is uncertainty in the comparisons due to poor DD recoveries in some intervals.
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.*	Detailed geological logging for all RC and DD holes captured lithology, stratigraphy, colour, texture, grain size, moisture, weathering, hardness, and colour
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is qualitative in nature. Photos for RC chips and all DD core are available and were viewed by the Competent Person.
	The total length and percentage of the relevant intersections logged.	All holes were fully logged.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	DD samples are sawn in half or quarter core using a core saw. Approximately 15cm sections of whole core were selected for bulk density measurements where good recoveries were achieved.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC samples were collected in pre-labelled calico bags from a cone splitter mounted directly below cyclone. Wet and dry samples were collected using the same technique and wet samples were dried before processing.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were analysed at Ultra Trace laboratory in Perth or the Amdel laboratory in Cardiff, New South Wales for sample preparation and analysis. Samples received at the laboratory were weighed, dried at 105°C, crushed and split using a riffle split and then pulverised to 75µm using a chrome steel ring mill or bowl and puck style pulveriser.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	CRMs obtained from Geostats Pty Ltd were inserted at a rate of one for every 20 samples. Field duplicates were taken at a rate of one for every 25 samples. Internal laboratory CRMs and duplicates were used at different sampling stages.
	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.	RC samples were collected from the cone splitter at the drill rig. Field duplicates were collected from the cone splitter in a similar manner as the original samples. DD samples are sawn in half or quarter core using a core saw.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	No formal analysis of sample size vs grain size has been undertaken by Red Hawk. The Competent Person does not consider this material for the style of mineralisation.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples were submitted to Ultra Trace laboratory in Perth and Amdel laboratory in Cardiff, New South Wales for analysis. Samples were analysed via fused bead XRF method for a standards suite of Fe, SiO_2, Al_2O_3, TIO_2, MnO, CaO, P, S, MgO, K_2O, Zn, Pb, Cu, BaO, V_2O_5, Cr, Ni, Co and Na_2O. LOI was determined by TGA at 425°C, 650°C and 1,000°C. CRMs were inserted by Red Hawk at a rate of one for every 20. The iron grades of CRMs ranged between 20% and 61% Fe. Field duplicates were taken at a rate of one for every 25.

Criteria	JORC Code explanation	Commentary
		Pulp samples were sent to SGS laboratory in Perth for umpire analysis as part of the Red Hawk QAQC protocol.
	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.	No geophysical tools were used to support the preparation of this Mineral Resource estimate (MRE). Downhole geophysics was used in 2022 to verify calliper density measurements. The density probe was appropriately calibrated.
	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.	CRM results from the 2018 MRE report show that most CRMs are within the acceptable tolerance of ±2 standard deviations and no minor biases were noted by Red Hawk during the 2013–2014 drilling, but these were considered insignificant. Field duplicates reported a high precision with 90% of the samples having less than 10% half absolute relative distance (HARD) for major elements. No significant issues were identified on comparison of the original assays and the umpire results from SGS Perth. The Competent Person considers that acceptable levels of accuracy and precision have been established.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections have been verified by Red Hawk geologists and CSA Global.
	The use of twinned holes.	Limited twin drilling (RC vs DD and RC vs RC) has been completed across the Blacksmith area. Results were acceptable, in that good correlation existed between the holes. Generally, twin drilling is not an iron ore industry standard practice.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Logging data was collected directly via Ocris logging software with inbuilt validation checks and loaded into a Geobank database. Assay data was loaded directly into the database. A physical check of assays within the database against hard copies previously reveal no significant errors.
	Discuss any adjustment to assay data.	No adjustments were made to the analytical data, other than replacing below detection results with a value equal to half the detection limit.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	**Champion Deposit** 708 (83%) hole collars were located using a differential global position system (GPS),23 (3%) of the drillholes were located using a handheld GPS, 20 (2%) were not surveyed, and the survey method for 99 (12%) remains unknown. The 20 metallurgical DD holes were not surveyed. **Blackjack Deposit** 203 (74%) drill collars were located using a differential global position system (GPS), 25 (9%) of the drillholes were located using a handheld GPS, 2 (1%) holes were not surveyed and the survey method for 43 (16%) of the holes is not known. Two metallurgical diamond holes were not surveyed. The differential GPS has a nominal accuracy of 5cm in the horizontal and vertical directions. There was some minor variation between the topographic elevation and the collar elevation of some drillholes. These drill hole elevations were stitched to topography elevation. This is not considered material to the MRE.
	Specification of the grid system used.	The grid system used is Mercator projection and the Geocentric Datum of Australia 1994 (MGA94) Zone 50.

Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	The topographic surface uses the light detection and ranging (LiDAR) 2m contours acquired by Red Hawk in 2009.
Data spacing and distribution	*Data spacing for reporting of Exploration results.*	**Champion Deposit** The drill spacings were variable, generally ranging from approximately 100m x 100m to 100m x 130m in the northeast-southwest directions and in the northwest-southeast directions. The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource classifications applied. **Blackjack Deposit** Holes were drilled on a nominal section spacing of 100m x 100m in the northeast-southwest directions and in the northwest-southeast directions. The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource classifications applied.
	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.	The Competent Persons believe the data spacing is sufficient to support the classifications applied to the Mineral Resources. Mineral Resource estimation procedures are also considered appropriate give the quantity of data available and style of mineralisation under consideration.
	Whether sample compositing has been applied.	Compositing was not applied at the sampling stage.
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.*	**Champion Deposit** Majority of the holes are vertical and less than 100m. The stratigraphical units are generally flat to moderate dipping and any deviation of the vertical holes will have minimal impact on geological interpretation. **Blackjack Deposit** Majority of the holes are vertical and less than 80m. The stratigraphical units are generally flat to moderate dipping and any deviation of the vertical holes will have minimal impact on geological interpretation.
	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.	Not applicable for the style of mineralisation.
Sample security	*The measures taken to ensure sample security.*	Sample chain of custody was managed by Red Hawk. Samples in calico bags were packed into polyweave bags and then placed into heavy bulk bags for transport to Tom Price. Samples were then transported via commercial freight to the laboratory. Consignment notes for each submission are tracked and monitored.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews of sampling techniques and data have been carried out.

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 Blacksmith Iron Ore Project (Blacksmith) comprises two 100% owned tenements, M47/1451 and R47/21. M47/1451-I was granted on 26 March 2012 and expires on 26 March 2033, and R47/21 was granted on 30 January 2020 and expires on 30 January 2028. The tenements lie within the Eastern Guruma Native Title Determination. Red Hawk has a Native Title Agreement in place.
	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 with no known impediments.

Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Towards the end of 2006, the primary focus of Blacksmith changed from diamonds to iron ore following discoveries of secondary iron ore deposits by Rio Tinto and the Fortescue Metals Group (FMG) in close proximity to E47/882 (now Blacksmith).
		
		The iron ore work history since 2007 is summarised below.
		
		2007
		
		Exploration included:
		
		• 18 helicopter supported samples to retest previous reports of diamonds and indicator minerals. No positive results were reported.
		• Consultant geologist Dr Richard Russell reviewed the iron ore tonnage in E47/882 in view of recent FMG drilling results. Results reported:
		  o Channel iron deposit (CID), an upper limit of 340 Mt and a lower limit of 284 Mt
		  o Canga, an upper limit of 50 Mt and a lower limit of 41 Mt.
		• This led Flinders Diamonds to change the emphasis of its exploration activities from diamonds towards developing an iron ore Inferred Mineral Resource.
		
		2008
		
		Exploration included:
		
		• Geological mapping by Dr Richard Russell on E47/882 confirmed five (A-E) exploration targets, confirming an Exploration Target estimated at between 333 Mt and 380 Mt averaging between 45% and 60% Fe on E47/882.
		• 19 rock chip samples of CID and detrital iron deposit (DID) which returned an average iron grade of 59.6% and low deleterious elements.
		• Drilling comprising 177 RC drillholes (9,065m) over Targets C, D and E (eastern Blacksmith). Drilling spaced at 500m x 200m. The objective was to test secondary iron enrichment identified by Dr Richard Russell.
		
		2009
		
		Exploration included:
		
		• Drilling comprising 491 reverse circulation (RC) drillholes (23,180m) and 21 HQ diamond drillholes 1,086.3m).
		• Area names changed. Ajax (A), Blackjack (B), Champion (C), Delta (D) and Eagle (E).
		• Recommendation to assess bedded iron formation (bedded iron deposit – BID) targets.

Criteria	JORC Code explanation	Commentary
		• Resource estimation of the Blacksmith CIDs completed by Golder Associates (Golder) on behalf of Flinders.
		• An Inferred Mineral Resource of 510 Mt (50% Fe cut-off) grading 55.4% Fe, 4.6% Al2O3, 9.8% SiO2, 0.07% P, 5.7% LOI. The assumption was that all material modelled was CID.
		Golder commented that the wide-spaced drilling provided limited geological control on the boundaries of the detrital channels.
		2010
		Exploration included:
		• Drilling comprising 755 RC drillholes (38,891m) and eight diamond drillholes (380.1m).
		• Downhole geophysics completed with 259 drillholes surveyed.
		• The Company recognised that DID is overlying the CID.
		• Stream sampling program to test an anomalous circular feature thought to be related to a kimberlite body. Results negative for diamonds.
		• Resource estimation of the Anvil and Blacksmith projects completed by Golder on behalf of the Company. An Indicated and Inferred Mineral Resource of 747.6 Mt (50% Fe cut-off) grading 55.4% Fe, 4.9% Al_2O_3, 10.0% SiO_2, 0.07% P, 5.0% LOI. The global estimate comprised DID, CID and BID lithologies.
		Golder commented that the wide-spaced drilling provided limited geological control on the boundaries of the detrital channels.
		2011
		Exploration included:
		• Negotiations with joint venture partner Prenti resulted in Red Hawk acquiring 100% ownership of the iron ore within the Blacksmith Project. The viability of the Project was further enhanced in 2012 with the Western Australian State Government granting a mining lease at Blacksmith.
		• Drilling comprising 1,189 RC drillholes.
		• Mineral Resource estimation completed by Optiro Pty Ltd.
		2012
		Exploration included:
		• Drilling comprising 35 diamond and eight geotechnical drillholes
		• BID target generation
		• Metallurgical testwork by AmmTec, physical characterisation of BID and DID
		• Preliminary geotechnical investigation for the Delta pit completed by Peter O'Bryan & Associates.
		2013
		No exploration activities were completed.
		2014
		Exploration included:
		• A total of 887 RC drillholes (36,592 m) were completed with the objective being to upgrade the majority of the Mineral Resource to Indicated category.
		• In addition, drilling comprising 67 RC drillholes targeting the bedded resources of Blackjack, Champion, Delta and Paragon was completed.
		• An initial bulk sample program completed in Delta.

Criteria	JORC Code explanation	Commentary
		• Metallurgical testwork by Nagrom.
		• MRE completed by Optiro. A total of 960 Mt (792 Mt as Indicated) grading 55.8% Fe, 9.20% SiO2, 4.60%, Al2O3, 0 07% P and 5.60% LOI reported.
		• Alliance agreement was signed with Rutila Resources. This agreement provided Red Hawk with an avenue to transport and ship ore via the proposed rail and port infrastructure of the Balla Balla Joint Venture.
		2015
		• No exploration activities were completed.
		2016
		• No exploration activities were completed.
		• An independent strategic review was conducted of Blacksmith by Advisian, a global advisory firm and part of Worley Parsons Group. The review concluded that the Blacksmith resource potentially provides for the development of an iron ore mine; however, further understanding of mine planning and the metallurgy was required to confirm the ability for the mine to operate at an economic production rate.
		2017 to 2018
		Work activities included:
		• A total of 114 metallurgical and geotechnical drillholes (5,802m) were completed between June and November 2017, with samples collected by diamond and sonic drilling techniques.
		• 13 hydrological drillholes were completed and installed with monitoring bores.
		• Four heritage surveys.
		• Two environmental surveys.
		• An update to the Blacksmith Project Mineral Resource was completed by Snowden Mining Industry Consultants Pty Ltd (Snowden), at the request of Red Hawk. A total of 1,307Mt grading 52.8% Fe, 13.90% SiO2, 4.81% Al2O3, 0.066% P and 4.81% LOI reported for Blacksmith, and 176Mt grading 47.1% Fe, 21.30% SiO2, 6.05% Al2O3, 0.044% P and 4.13% LOI reported for Anvil.
		• At the request of Red Hawk, CSA Global completed (in March 2018) a high-level technical due diligence of the geological interpretation underpinning the above tabulated Snowden MREs.
		2018 to 2019
		Work activities included:
		• An archaeological and ethnographic survey was completed between 2 October 2018 and 12 October 2018 over M47/1451-1 and E47/1560-I
		• Field reconnaissance and high-level targeting.
		2019 to 2020
		Work activities included:
		• A review of all potential infrastructure solutions was completed as part of the proposed transaction with BBIG
		• A scoping study to assess the mining potential using the Blacksmith Measured, Indicated and Inferred Mineral Resources of 1,484Mt
		• Commencement of a geological re-interpretation framework over Blacksmith which would allow an improved geological classification of Blacksmith detrital

Criteria	JORC Code explanation	Commentary
		• A rehabilitation audit on Anvil.
		2020 to 2021
		Work activities included:
		• Completion of a geological re-interpretation across Blacksmith and development of a geological logging guide
		• Mine planning and design – mine planning for mining options assessments and planning and input into planning field programs, including rehabilitation and future drilling
		• Water monitoring – quarterly water level monitoring
		• Ore processing design – review and design updates of processing plant designs and options assessment.
		• Blacksmith camp refurbishment
		• Drillhole pad and access track rehabilitation.
		2021 to 2022
		Work activities included:
		• Drillhole pad and access track rehabilitation.
		2023
		Work activities included:
		• Drillhole pad and access track rehabilitation.
		• Heritage assessments
		• Commencement of metallurgical PQ3 drilling on Delta and Paragon
Geology	*Deposit type, geological setting and style of mineralisation.*	Blacksmith is situated within the Hamersley Province which covers an area of approximately 80,000km² and is comprised of Late Archaean to Palaeo-Proterozoic rocks of the Mount Bruce Supergroup, which consists of the Fortescue, Hamersley, and Turee Creek groups, overlain by remnants of the Wyloo Group. The banded iron formation (**BIF**) units of the Hamersley Group host the bedded iron deposits (**BIDs**) of the Pilbara with mineralisation occurring predominantly within the Marra Mamba Iron Formation and Brockman Iron Formation. Substantial mineralisation also occurs in overlying detrital units, primarily channel iron deposit (**CID**) which occupies paleo-drainage, and CzD3. The Hamersley Group contains five major BIF units, of which two, the Marra Mamba Iron Formation and the Brockman Iron Formation, host most of the iron mineralisation (including most of the exploited iron ore deposits) in the Hamersley Province. The geological setting and mineralisation at Blacksmith are described in detail in the main body of this ASX release
Drillhole information	A summary of all information material to the understanding of the Exploration results including a tabulation of the following information for all Material drillholes: • Easting and northing of the drillhole collar • Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar • Dip and azimuth of the hole • Downhole length and interception depth	Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
	• 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.	Exploration results are not being reported.
Data aggregation methods	*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.*	Exploration results are not being reported.
	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.	Exploration results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.*	Exploration results are not being reported.
	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").	Exploration results are not being reported.
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 drillhole collar locations and appropriate sectional views.*	Relevant maps and diagrams are included in the body of the report.
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.*	Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
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.*	No substantive exploration data not already mentioned in this table has been used in the preparation of this MRE.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Future work may include: • All holes from future drilling programs should be geophysically logged for density so that a representative, valid dataset can be obtained for use in future MRE • All density measurements and methods should be included in the master database and used in each block as a variable to estimate • Further infill drilling to potentially a nominal 50m x 50m grid to improve the confidence in the Mineral Resource classification • Future waste characterisation drilling (identification of asbestiform minerals in Dales Gorge Member BIF) may be required along the periphery of the extent of the Mineral Resource to aid mine planning studies.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been included in the body of this report.

Section 3 – Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Logging data was collected directly via Ocris logging software with inbuilt validation checks and loaded into a Geobank database. Assay data was loaded directly into the database. A physical check of assays within the database against hard copies previously reveal no significant errors. Red Hawk engaged RSC Consulting to update and validate the database between 2017 and 2018. All current and historical drilling data was imported into Micromine software and reviewed in 3D to check for spatial errors. Any errors found were corrected using the original field data. A selection of assay results from the database were compared original laboratory certificates and no significant issues were found.
	Data validation procedures used.	CSA Global completed numerous checks on the data. Absent collar data, multiple collar entries, suspect downhole survey results, absent survey data, overlapping intervals, negative sample lengths and sample intervals which extended beyond the hole depth defined in the collar table were reviewed.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The Competent Person (Mark Pudovskis) has visited Blacksmith many times since 2017. The visits included field reconnaissance and relogging of all historical DD and sonic drill cores stored on site. Visits to the Red Hawk Balcatta warehouse where core is also stored were made.

Criteria	JORC Code explanation	Commentary
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The availability of historical drill cores on site and in Balcatta, complemented by a significant volume of RCP chip trays enabled a robust and confident interpretation. In addition, various internal technical position reports and field mapping reports were completed aiding the interpretation.
	Nature of the data used and of any assumptions made.	The geological interpretation used the drillhole database, historical RCP chips trays, diamond and sonic cores stored on site and in the Red Hawk Balcatta warehouse, including re-assaying of select cores.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The geological interpretation is based on geometallurgy and geology, balanced against geochemistry. The adopted stratigraphy and nomenclature are aligned to industry standard. No other interpretation was considered.
	The use of geology in guiding and controlling Mineral Resource estimation. *The factors affecting continuity both of grade and geology.*	Integrated geology and drill assays were the primary driver for guiding the MRE. All historical diamond and sonic drill cores were geologically relogged to a high level of detail. Complemented by the relogging and verification of drill chips in stored RCP chip trays and by field geological reconnaissance, cross sections were drafted and stratigraphy interpreted for every drill section.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	**Champion Deposit** Champion is approximately 5km in strike and 3km across strike. The depth of the stratigraphic units range from 5m to 90m. **Blackjack Deposit** Blackjack is approximately 2.4km in strike and 1.6km across strike. The depth of the stratigraphic units range from 2m to 53m. The deeper parts are mainly in the northern part of the deposit.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	The MRE has been completed using the approach described below. **Champion Deposit** Top cuts were selected following statistical analysis. The point at which the number of samples supporting the high-grade tail diminishes was the primary method. The selected top cuts are shown below.

Table (within Estimation and modelling techniques commentary):

Zone	Fe	Al_2O_3	K_2O	LOI	MnO	Na_2O	P	S	SiO_2	TiO_2
1	-	-	1.2	-	0.4	0.3	0.08	0.06	-	1.1
2	-	-	1.2	-	0.24	-	0.14	0.05	-	2.5
3	-	-	0.3	-	0.2	-	-	-	50	2.5
4	-	7	-	-	-	-	-	-	20	2
5	-	-	0.15	-	1.5	0.2	0.26	-	23	2
6	-	28	8	15	3.5	0.8	-	1.5	-	2.5
7	-	-	0.46	-	-	-	-	0.04	-	-
8	-	-	-	-	0.15	-	-	-	60	-
9	-	-	-	-	0.3	-	-	-	-	-

Quantitative kriging neighbourhood analysis (**QKNA**) was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency (KE) and slope of regression (SOR) were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids.

Criteria	JORC Code explanation	Commentary
		A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not be met. Dynamic anisotropy was used to ensure undulation in the mineralisation relating to the folded nature of the stratigraphy was captured by the search ellipses (i.e. rotating search ellipses). Ordinary kriging was adopted to interpolate grades into cells, with variogram rotations consistent with the search ellipse rotations. All interpolated grades variable utilise the search and sample selection plan obtained from the QKNA of the iron domains. A minimum of four and maximum of 10-16 samples per estimate, with a maximum number of samples per drillhole of two for all ZONES was used. **Blackjack Deposit** Top cuts were selected following statistical analysis. The point at which the number of samples supporting the high-grade tail diminishes was the primary method. The selected top cuts are shown below. (table below) Quantitative kriging neighbourhood analysis (QKNA) was undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency (KE) and slope of regression (SOR) were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids. A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not be met. Dynamic anisotropy was used to ensure undulation in the mineralisation relating to the folded nature of the stratigraphy was captured by the search ellipses (i.e. rotating search ellipses). Ordinary kriging was adopted to interpolate grades into cells, with variogram rotations consistent with the search ellipse rotations. All interpolated grades variable utilise the search and sample selection plan obtained from the QKNA of the iron domains. A minimum of four and maximum of twelve samples per estimate, with a maximum number of samples per drillhole of two for all ZONES was used.
	The availability of check estimates, previous estimates and/or mine production records and whether the MRE takes appropriate account of such data.	No mine production records were available.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding the recovery of by-products.

Zone	Fe	Al_2O_3	K_2O	LOI	MnO	Na_2O	P	S	SiO_2	TiO_2
1	52	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-

Criteria	JORC Code explanation	Commentary
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	Non grade variables Al_2O_3, P and SiO_2 were estimated as standard iron ore suite elements. There was no indication of elevated sulphur.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	**Champion Deposit** A 50m(E) x 50m(N) x 2m(RL) parent cell size was used to honour wireframe boundaries. The drillhole data spacing is variable throughout the deposit but most of the area has a spacing approximating 100m along strike by 100m across strike. Sampling has been completed on 2m intervals. The block size therefore represents approximately half the drillhole spacing in easting and northing. **Blackjack Deposit** A 50m(E) x 50m(N) x 2m(RL) parent cell size was used to honour wireframe boundaries. The drillhole data spacing is variable throughout the deposit but most of the area has a spacing approximating 120m along strike by 100m across strike. Sampling has been completed on 2m intervals. The block size therefore represents approximately half the drillhole spacing in easting and northing.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units.
	Any assumptions about correlation between variables	No assumptions have been made regarding correlation between variables.
	Description of how the geological interpretation was used to control the resource estimates.	The relogged stratigraphic units were used to create across-sectional interpretation of the detrital deposits at Blacksmith. These sections were then used to develop five geological domains or Zones. A grade of 50% Fe obtained from the histogram plot was used to separate the Dales Gorge member hardcap mineralisation from the Dales Gorge member BIF. Each stratigraphic unit is considered as being a separate estimation domain. Dynamic anisotropy was used to ensure undulation in the mineralisation domains was captured by the search ellipses during grade interpolation.
	Discussion of basis for using or not using grade cutting or capping.	Grade capping was applied to all grade variables prior to grade interpolation. Histograms and log-probability plots were reviewed for to understand the distribution of grades and assess the requirement for grade capping for each estimation domain. Selection of no top cut can lead to significant grade over-estimation and bias in the block model if extreme grades outliers are within the grade population variables.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Drillhole grades were initially visually compared with cell model grades. Domain drillhole and block model statistics were compared. Swath plots were then created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposit. The block model reflected the tenor of the grades in the drillhole samples both globally and locally.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	**Champion Deposit** All tonnages have been estimated on an in-situ dry basis 54% of the resource is above water table, and any in-situ moisture is considered negligible. **Blackjack Deposit** All tonnages have been estimated on an in-situ dry basis. 99% of the resource is above water table, and any in-situ moisture is considered negligible.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	A reporting cut-off grade of 57.5% Fe was selected as it reflects the in-situ chemistry of the iron mineralisation likely to be mined to produce a DSO iron fines product. Only material from ZONE 2 (LZ - unconsolidated to compacted detritals), ZONE 3 (PZ – Pisolitic high maghemite detritals), ZONE 4 (Canga) and ZONE 5 (Dales Gorge Member – mineralisation) has been reported.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The cut-off grade assumes that open pit mining methods would be applied.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Red Hawk is targeting a low annual tonnage higher-grade DSO product from the Champion and Blackjack deposits using Pilbara standard dry crush and screen practices to produce a DSO fines product. For this reason, the historical metallurgical testwork (reported most recently by Red Hawk (FMS): ASX 7 January 2020) which focused on upgrading lower grade LZ and PZ detritals (typically less than 56% Fe), although valid and of technical and historical interest, does not have any material influence on the reporting of the Paragon Mineral Resource.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Environmental considerations have not been considered. It is therefore assumed that waste could be disposed in accordance with a site-specific mine and rehabilitation plan.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Density values were assigned to the block model domains/Zones based on the core measurements completed by Red Hawk, downhole geophysics densities and the density analysis completed by CSA Global. The density values were applied to each stratigraphic unit as shown in the table below:

Criteria	JORC Code explanation	Commentary

Unit/Member	Zone	Density
SZ	1	2.50
LZ	2	2.85
PZ	3	3.00
Canga	4	3.25
PHbd Hard cap mineralisation	5	2.80
PHbd BIF	6	2.60
HMZ	7	2.40
CzD2	8	2.40
CID	9	2.70

Criteria	JORC Code explanation	Commentary
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	Not applicable.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Density values were assigned to different domains based on the core measurements completed by Red Hawk, the downhole geophysics densities, and the density analysis completed by CSA Global.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. **Champion Deposit** After considering data quality, data distribution, and geological and grade continuity, the following approach was adopted when classifying the Mineral Resource: • The Mineral Resource was classified as a combination of Indicated and Inferred. • Geological continuity was assessed, and the domains were reasonably continuous along and across the strike of the deposit. • The block model was initially coloured by SOR. Drillholes were then loaded to gain an understanding of how SOR related to drillhole spacing. For majority of the model areas, SOR values around 0.6 or above were found to relate to a drillhole spacing of 100m(N) x 100m(E). A wireframe was created to capture this area. A wireframe was created to capture this area. These areas were classified as Indicated. • The model areas with a SOR values less than 0.6 were found to relate to a drillhole spacing of greater than 100m and up to about 200m. This area was classified as Inferred. **Blackjack Deposit** After considering data quality, data distribution, and geological and grade continuity, the following approach was adopted when classifying the Mineral Resource: • The Mineral Resource was classified as a combination of Indicated and Inferred. • Geological continuity was assessed, and the domains were reasonably continuous along and across the strike of the deposit.

Criteria	JORC Code explanation	Commentary
		• The block model was initially coloured by SOR. Drillholes were then loaded to gain an understanding of how SOR related to drillhole spacing. For majority of the model areas, SOR values around 0.7 or above were found to relate to a drillhole spacing of between 100 m(N) x 100 m(E) and 120 m(N) x 100 m(E). A wireframe was created to capture this area. A wireframe was created to capture this area. These areas were classified as Indicated. • The model areas with SOR values of approximately 0.5 to 0.7 were found to relate to a drillhole spacing of greater than 100m and up to about 200m. A wireframe was created to capture this area the area was classified as Inferred.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The MRE appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	*The results of any audits or reviews of MREs.*	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the MRE using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The MRE has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production data is available.