

## ASX MARKET ANNOUNCEMENT

### Significant Upgrade of JORC Mineral Resource into Indicated Category at Paulsens East Iron Ore Project

#### Highlights

- Significant upgrade from Inferred to Indicated JORC Mineral Resource of 9.6 million tonnes at 61.1 % Fe at the Paulsens East Iron Ore Project in the Pilbara.
- Importantly, the Indicated Mineral Resource estimated to outcrop at surface in a 3 kilometre-long ridge feature has increased by 50% to 3 million tonnes (refer Figures 1 and 7) with potential to significantly extend mineralisation further along strike.
- Excellent progress with study and approvals process for potential Direct Shipping Ore (DSO) mining operation, taking advantage of current iron ore prices and targeting near term cashflow.
- Discussions progressing with operators of potential ship-loading locations from Onslow (233 kilometres by road from Paulsens East), Karratha or Port Hedland, transport and mining contractors and potential offtake partners.

#### Summary

Strike Resources Limited (ASX:SRK) (**Strike**) is pleased to report that the Maiden JORC Mineral Resource<sup>1</sup> for its Paulsens East Iron Ore Project (Strike:100%) located in the Pilbara, Western Australia has now been upgraded from JORC Inferred to a **JORC Indicated Mineral Resource of 9.6 Million tonnes at 61.1 % Fe, 6.0% SiO<sub>2</sub> and 3.6% Al<sub>2</sub>O<sub>3</sub>.**

This upgrade is as a result of a programme of surveying and sampling recently completed at the Project, which was undertaken to increase the confidence in the iron ore mineralisation and to enable a detailed mine plan and economic model to be developed.

As previously reported, a key feature of the Paulsens East Mineral Resource is an approximately 3 kilometre-long ridge of outcropping hematite conglomerate which extends up to 60 metres above the surrounding terrain (refer Figures 1 and 7). Strike is pleased to report that, as a consequence of the recently completed field programme, the estimate of potential DSO material that may be able to be mined with minimal overburden from the outcropping portion of the ridge has increased by 50%, from 2 million tonnes to 3 million tonnes at 61% Fe.

Such an operation could be undertaken relatively simply using shovels and trucks, with the material then to be crushed and screened on site prior to transport by road to a suitable port facility for export.

The Indicated Mineral Resource estimate is based upon data derived from two drilling campaigns undertaken by Strike (comprising a total of 66 reverse circulation (**RC**) holes for 3,537 metres drilled) together with extensive rock chip sampling and recently completed precision drone survey, mapping and sampling programmes.

1 Refer SRK ASX Announcement dated 15 July 2019: Maiden JORC Resource of 9.1 Million Tonnes at 63.4% Fe - Paulsens East Iron Ore Project in the Pilbara



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Rapid progress has also been made with the Project study and approvals, including:

- The lodging of an application with the Department of Mines Industry Regulation and Safety (DMIRS) to convert the current Retention Licence R47/07 to a Mining Lease.
- The completion of the first stage of field work for the Environmental Impact Assessment (EIA).
- The engagement of a native title consultant to assist the Company with its Native Title negotiations.
- The commencement of the mine planning study.
- The commencement of detailed metallurgical testwork.
- Ongoing discussions with potential transport and mining contractors.
- Ongoing discussions with potential offtake partners.

Strike will continue to update the market in relation to the above key items as they advance and expects to be able to provide the market with estimates of likely capital and operating costs for the Paulsens East DSO Project within the next 4 – 6 weeks.

Strike Managing Director, William Johnson:

*“This upgrade on the Maiden JORC Resource at Paulsens East, where we essentially converted the whole Inferred Resource into an Indicated Resource, is a major step forward for the Company and is confirmation of the quality of the asset. From our discussions to date with the various relevant service providers, we remain confident of an economically viable DSO operation at Paulsens East and look forward to keeping the market updated as we tick the boxes required to bring this asset into production”.*



Figure 1: Paulsens East Hematite Ridge, facing North

## JORC Mineral Resource Estimate

Table 1 summarises the JORC Indicated Mineral Resources within the 58% Fe lower grade cut-off wireframe. These resources extend from the surface to 75 metres below the deepest drill intersection or the 150 metre RL (reduced level), whichever occurs first.

JORC Category	Fe% Range	Million Tonnes	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	S%	LOI%
Indicated	>58	9.6	61.1	6.0	3.6	0.08	0.01	2.1

Table 1: Paulsens East Mineral Resource estimate using a 58% Fe lower cut-off wireframe

Of the Indicated Mineral Resource referred to above, approximately 3 million tonnes of 61% Fe (with 5.9% SiO<sub>2</sub> and 3.6% Al<sub>2</sub>O<sub>3</sub>) hematite material (a significant increase from the previously reported 2 million tonnes of 62% Fe with 5.7% SiO<sub>2</sub> and 3% Al<sub>2</sub>O<sub>3</sub>) is now estimated to occur above the base of the ridge (as defined by drill hole collars) with minimal overburden.

In addition, there is potential to extend the resource for a strike distance of approximately 2 kms along an arcuate extension of the ridge to the south east. This extension is based on small hematite conglomerate outcrops along the surface and a plus 60% Fe drill intersection at a depth of 20 metres at the eastern boundary of the tenement.

The previous Maiden JORC Mineral Resource estimate for Paulsens East announced on 15 July 2019 was an Inferred Resource of approximately 9.1 million tonnes at 63.4% Fe, 5.6% SiO<sub>2</sub> and 3.2% Al<sub>2</sub>O<sub>3</sub>.<sup>1</sup> Since this previous resource estimate, the Competent Person conducted a site visit to inspect the geology and style of mineralisation. In addition, the topography has been accurately surveyed using photogrammetry along with high resolution georeferenced aerial photos that enabled accurate photo mapping and a field technician followed the footwall and hangingwall of the mineralisation for the whole extent of the resource with a hand-held GPS.

This extra field work improved the geological understanding of the mineralisation sufficient to assume geological and grade continuity between points of observation where data and samples were gathered. **The resource has therefore been re-classified as being in the Indicated category as defined under the JORC Code (2012) and is in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.**

Using the georeferenced photography and improved topographic survey, along with the improved understanding of the geology and mineralisation gained by the site visit, the shallow resources following the ridge are better defined.

Some lower grade drill intersections were included in the resource polygons to allow proper continuity of the mineralised conglomerate beds between cross sections at the expense of a slight reduction in the previously reported grade.

Further technical details are set out in Appendices A, B and C.

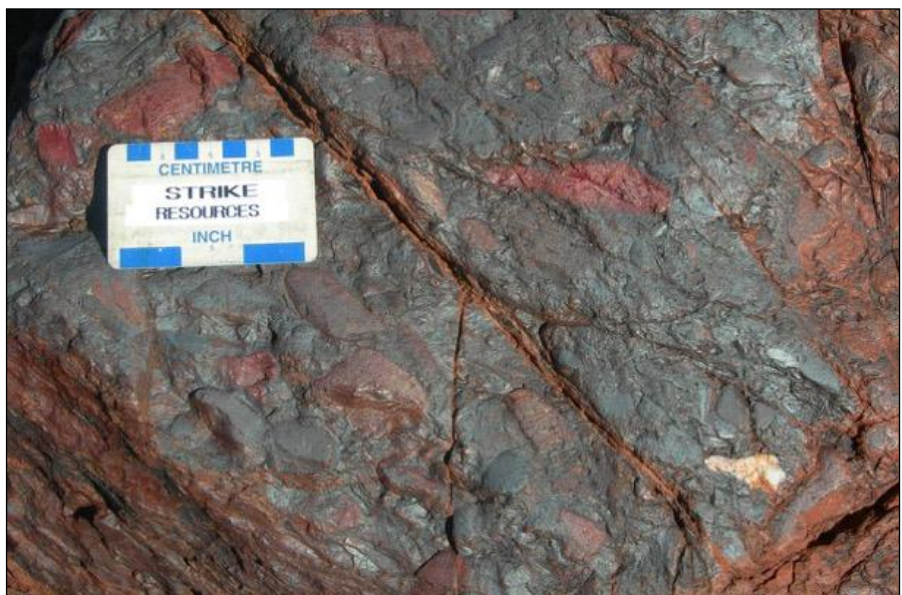


Figure 2: Paulsens East Hematite Conglomerate



Figure 3: Paulsens East Rock Chip Sample

### Significant Progress with Studies and Approvals Process

With a recent strong iron ore price, Strike is examining the potential for undertaking a Direct Shipping Ore (DSO) mining operation at Paulsens East using contract mining, crushing and transportation by truck to port then ship to customers in China.

In this regard, Strike is now undertaking an economic study which will focus on the potential to, in the first instance, target the approximately 3 million tonnes of outcropping 61% Fe hematite material, which in places extends up to 60 metres above surrounding terrain and presents as a 3 kilometre long ridge of outcropping hematite conglomerate.

Strike envisages that such an operation could be undertaken relatively simply using shovels and trucks, with minimal overburden. Excavated material would then be crushed and screened on site prior to transport by road to a suitable port facility for export.

An outline of recent Project activity (in addition to the surveying and sampling work relating to upgrading the resource category) is summarised below:

#### Licensing

Strike has completed a survey of the boundaries to the tenement and now lodged a formal application with the DMIS to convert the current Retention License R47/07 to a Mining Lease.

#### Mine Planning

With the resource now upgraded to an Indicated category, detailed mine planning has now commenced. Figures 4 and 5 show conceptual plans for proposed development of the Project:

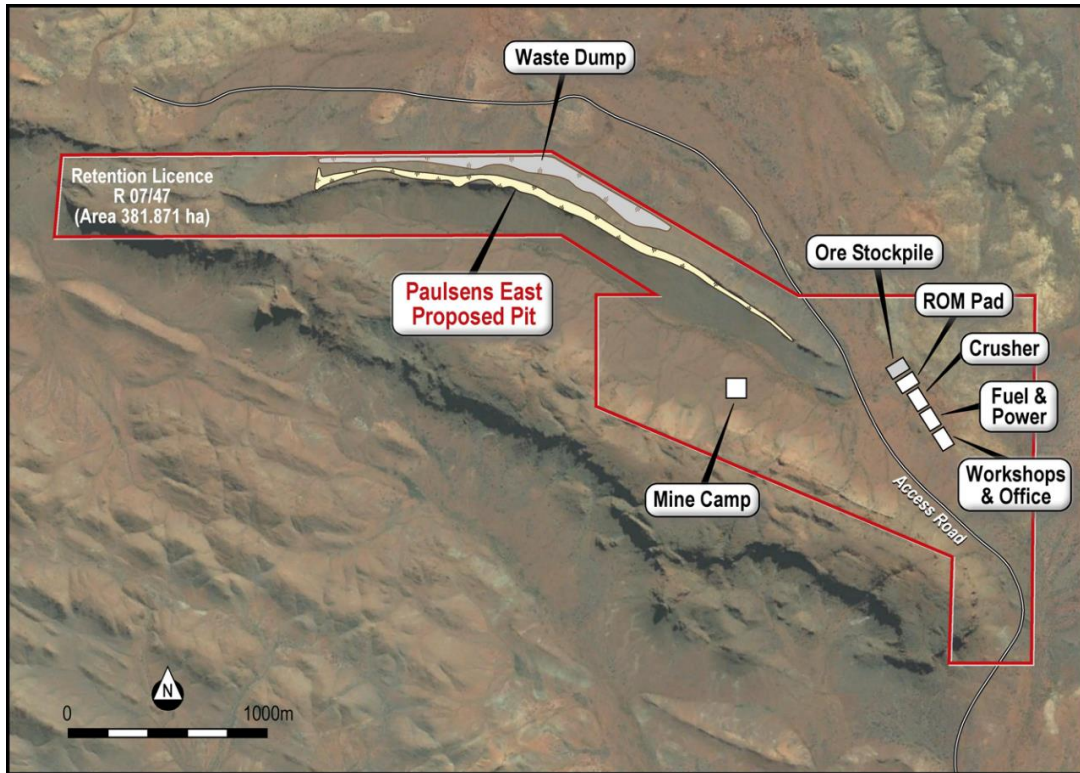


Figure 4: Conceptual Mine Layout of Paulsens East Project

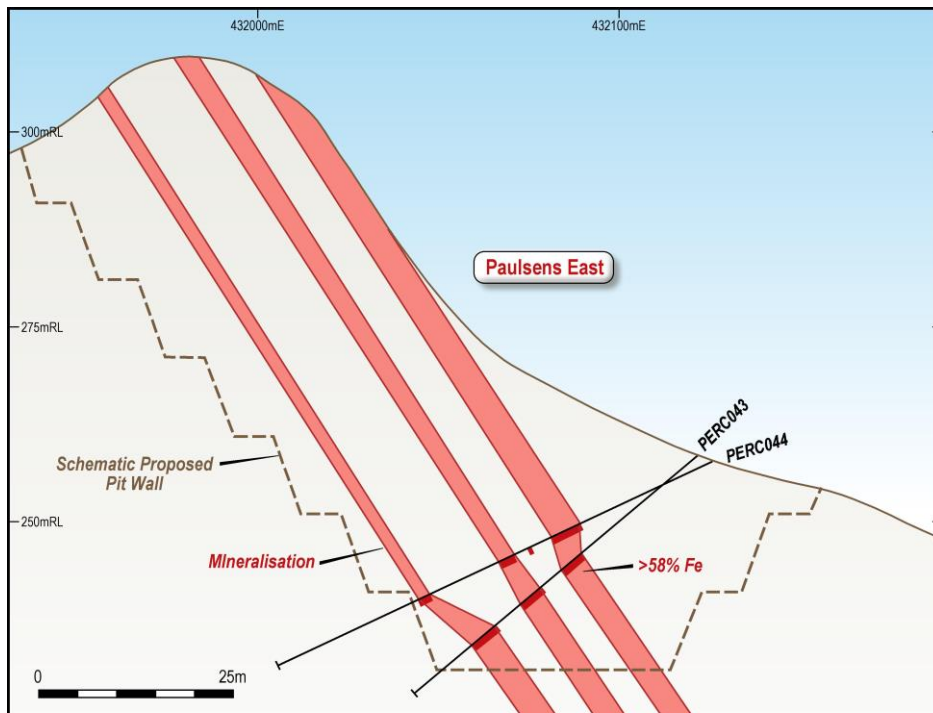


Figure 5: Schematic Cross Section of proposed pit at Paulsens East

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## Environmental Survey

The initial field work for a reconnaissance flora and vegetation survey and Level 1 fauna and fauna habitat assessment has been completed over the Project area. The results of this work are currently being assessed and will be incorporated into the preparation of a Mining Proposal for submission to the DMIRS.

## Native Title

Strike has recommenced work previously undertaken (in 2008) with the local Puutu Kuntjira & Pinikuras (PKPP) community. Strike has now engaged an experienced native title consultant to assist with the process of re-establishing dialogue with the community Elders in order to secure native title clearance, which process has now commenced.

Strike is planning to schedule a number of meetings with PKPP over the coming months, with the objective of securing an agreement with PKPP in relation to the Project.

## Mining, Crushing, Transport

Strike is continuing to advance discussions with various mining, crushing and transport contractors as well as the operators of port facilities between Onslow (233 km from the Project), Karratha or Port Hedland (600km). Strike envisages that mining of the outcropping portion of the deposit will be able to be undertaken relatively simply using shovels and trucks, with the material then to be crushed and screened on site prior to transport by road to a suitable port facility for export. Indicative prices have already been received from potential contractors and these will be fed into the Company's economic model.

## Metallurgical Testwork

Strike has commenced a programme of metallurgical testwork on 100kg of samples retrieved from the Project during the recent surveying and sampling programme. This testwork will include chemical analysis, specific gravity, work index and tumble index for lump and screen size analyses to determine the best configuration for crushing and screening to deliver high grade lump and low alumina fines for shipping.

## Offtake

Strike has held recent discussions with several parties interested in securing offtake arrangements for Paulsens East. Strike is encouraged by the strong interest shown in the Project by potential iron ore buyers and expects these discussions to lead towards one or more binding offtake agreements over the coming months. In this regard, Strike notes the significant iron ore experience on its Board including industry veteran, Malcolm Richmond, whose previous roles include: VP Strategy and Acquisition, Rio Tinto; Managing Director Research and Technology, Rio Tinto; and Managing Director, Iron ore Development at Hamersley Iron.

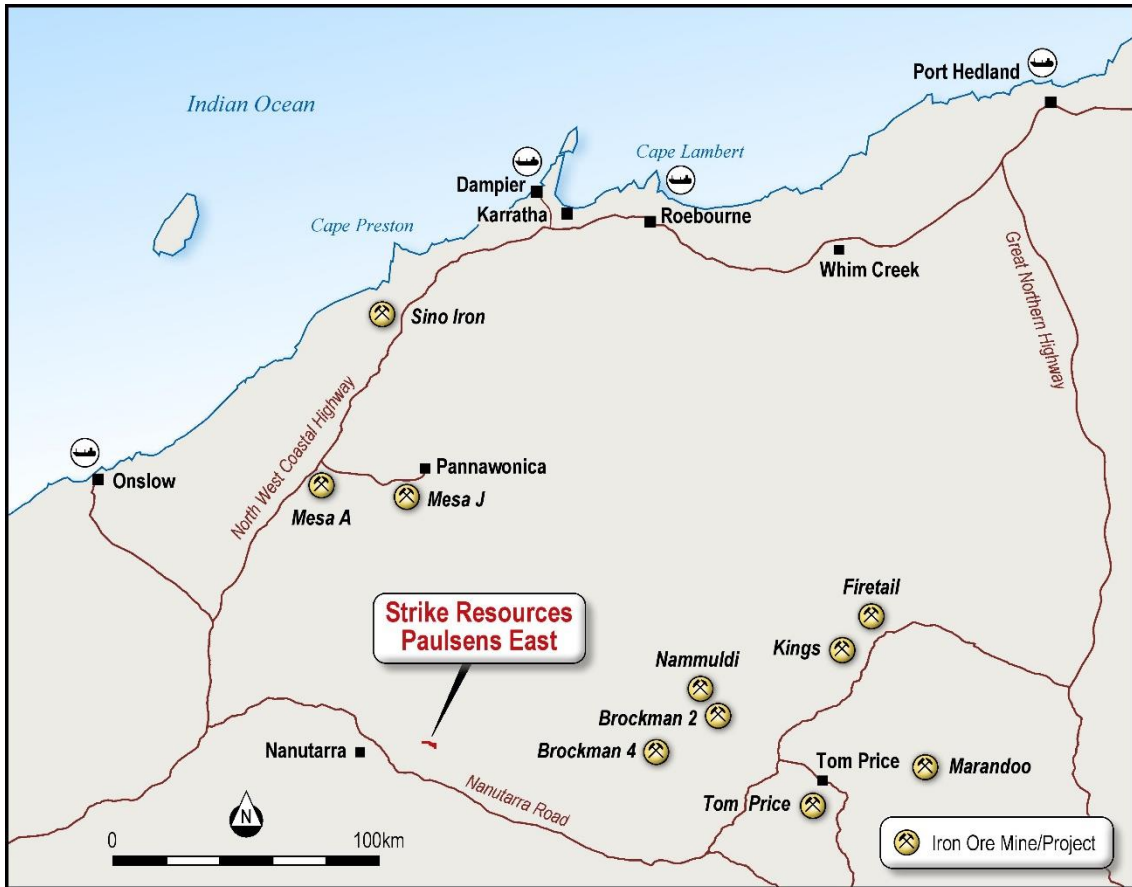
## Paulsens East Iron Ore Project (Pilbara, Western Australia) (Strike 100%)

The Paulsens East Iron Ore Project (**Paulsens East**) consists of a single Retention Licence R47/007, of which Strike is the 100% beneficial owner. The tenement is located approximately 140 kilometres west of Tom Price, 8 kilometres from the Paulsens Gold Mine and 233 kilometres by road (of which 210 kilometres is good quality paved roads) from the Port of Onslow and 380 kilometres from the Port of Dampier (refer Figure 6).

Tenement	Holder	Date Granted	Date Expiry	Approx. Area (Hectares)
Retention Licence R47/07	Orion Equities Limited	04/12/2014	03/12/2019	381.871

Table 2: Paulsens East Tenement Details

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**Paulsens East Iron Ore Project, Pilbara, Australia**



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Figure 6: Paulsens East Project Location, West Pilbara.

Paulsens East consists of hematite iron ore mineralisation occurring as a ridge rising to approximately 60 metres above the valley floor and extending for approximately 3,000 metres West to East (refer Figures 1, 7 to 9).

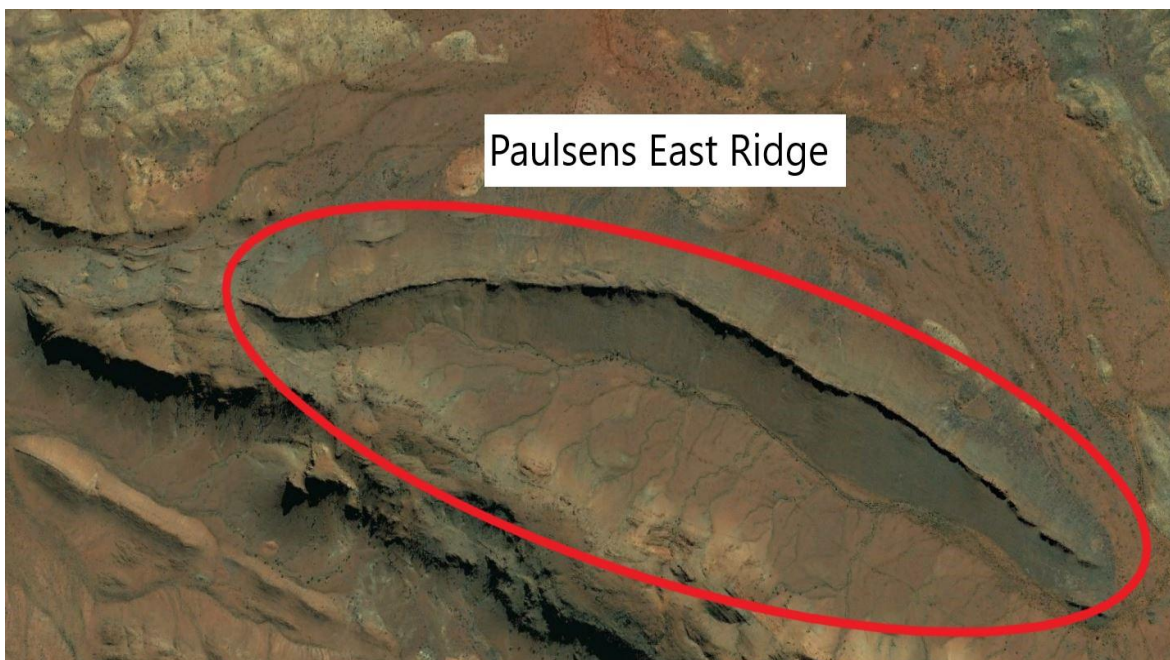


Figure 7: Paulsens East satellite image

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Figure 8: Paulsens East Ridge, facing East



Figure 9: Paulsens East Ridge, facing South



For further background information about Paulsens East, please refer to Strike's previous ASX market announcements as follows:

- 1 August 2019: Strong Progress at the Paulsens East Iron Ore Project
- 15 July 2019: Maiden JORC Resource of 9.1 Million Tonnes at 63.4% Fe - Paulsens East Iron Ore Project in the Pilbara
- 31 October 2008: 30 September 2008 Quarterly Report
- 11 August 2008: Acquisition of Outstanding Interests in Berau Coal and Paulsens East Iron Ore Projects
- 26 May 2008: High Iron Grades Averaging 64.7% Fe Confirmed Potential of Paulsens East Project
- 30 April 2007: 31 March 2007 Quarterly Report
- 15 February 2007: Iron Ore Projects Update
- 17 July 2006: Australian Iron-Ore Update – Paulsens East High-Grade Mineralisation
- 4 April 2006: Grant of WA Iron Ore Tenement – Paulsens East

The Strike ASX market announcements referred to above may be viewed and downloaded from the Company's website: [www.strikeresources.com.au](http://www.strikeresources.com.au) or the ASX website: [www.asx.com.au](http://www.asx.com.au) under ASX code "SRK".

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## FOR FURTHER INFORMATION

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## ABOUT STRIKE RESOURCES LIMITED (ASX:SRK)

Strike Resources is an ASX listed resource company which owns the high grade Apurimac Magnetite Iron Ore Project and Cusco Magnetite Iron Ore Project in Peru and the Paulsens East Iron Ore Project in Western Australia. Strike is also developing a number of battery minerals related projects around the world, including the highly prospective Solaroz Lithium Brine Project in Argentina, the Burke Graphite Project in Queensland and a lithium exploration tenement in Western Australia.

## JORC CODE COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Philip Jones, who is a Member of the Australian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Mr Jones is an independent contractor to Strike Resources Limited. Mr Jones has sufficient experience that 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' (the JORC Code). Mr Jones consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

## FORWARD LOOKING STATEMENTS

This announcement contains "forward-looking statements" and "forward-looking information", including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of Strike, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Strike and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns.

## APPENDIX A

## PAULSENS EAST IRON ORE PROJECT – TECHNICAL INFORMATION

## Geology

## Regional Geology

Paulsens East is located near the centre of the Wyloo Dome on the Wyloo 1:250,000 scale geology sheet within the crystalline basement (refer Figure 10).

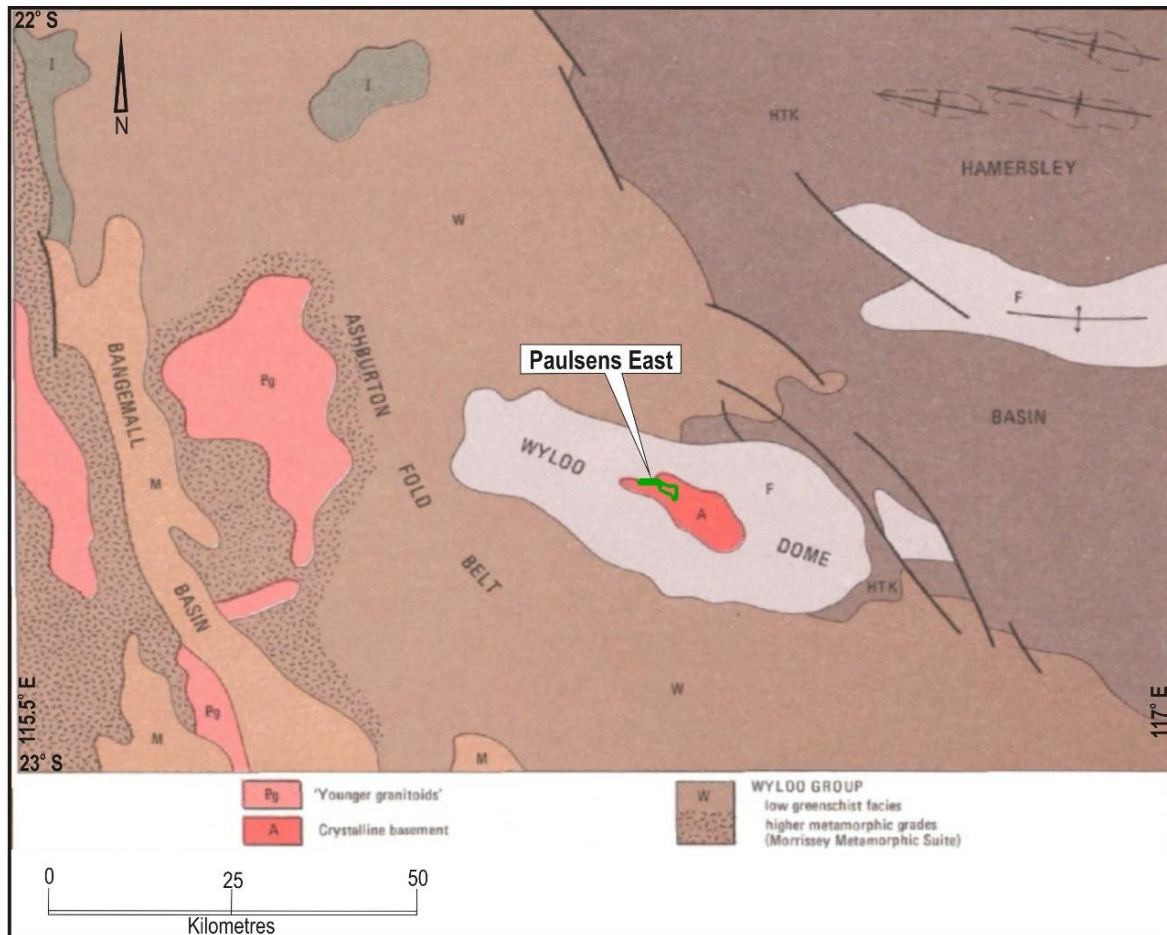


Figure 10: Regional geology (Wyloo geology sheet 1:250,000 SH5010)

## Pilbara Supergroup

The oldest rocks on the Wyloo 1:250,000 scale geological sheet SH50-10 are exposed in the core of the Wyloo Dome. They are a metamorphosed sequence of mafic volcanics, dolerite, gabbro, and minor chert, and are intruded by the Metawandy Granite. They are generally schistose and are unconformably overlain by rocks of the Fortescue Group.

The dolerite and gabbro occur either as individual sills and dykes or as sheeted-dyke complexes. Large enclaves of mafic schist occur in the Metawandy Granite. The mafic rocks are broadly correlated with the Pilbara Supergroup (Ap) of the northern Pilbara Block.

Within the Pilbara Supergroup is the Mount McGrath Formation, a sequence of conglomerate, arenite, wacke, mudstone, dolomitic mudstone and dolomite. This formation hosts the hematite mineralisation at Paulsens East.

## Local Geology and Mineralisation

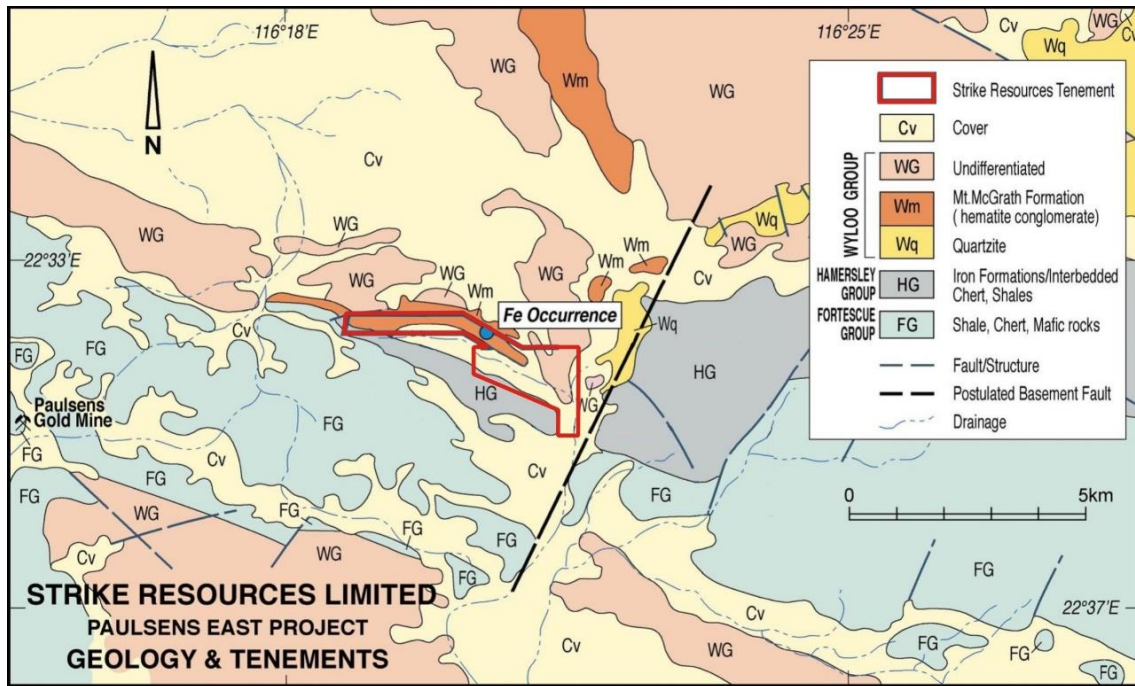


Figure 11: Paulsens East Geology Map

The Paulsens East tenement includes sediments of the Middle Proterozoic Wyloo Group which contain hematite mineralisation. The Wyloo Group rocks range from the continental Beasley River Quartzite to red beds of the Mt McGrath Formation that have been overlain by the shallow marine Duck Creek Dolomite.

The iron mineralisation found within the tenement occurs as a hematite conglomerate in the Mt McGrath Formation forming a prominent arcuate ridge up to 60 metres high, with cumulative average widths of ~6 metres and approximately 3,000 metres long. The conglomerate consists of hematite pebbles in a hematite rich matrix and cement.

The conglomerate, when it is fully mineralised, is composed of hematite clasts in a hematite matrix. When the conglomerate is “unmineralised” (i.e. below economic cut-off grade) the clasts are composed chert and often Weeli Wolli BIF (a distinctive banded red chert alternating with a siliceous hematite BIF – see clast just by point of pick in Figure 12). At least one of the conglomerate beds appears to grade fairly abruptly into a cherty siliceous bed along strike to the west. A “halfway” mineralised conglomerate was also found at a few locations where the silica in the clasts has been leached out leaving vughs (refer Figure 12).



Figure 12: Close up view of “unmineralised” conglomerate with chert and BIF clasts in hematite matrix as found at Paulsens East

Earlier exploration has been conducted in the nearby areas to look for the source of hematite pebbles without success.



Figure 13: Close up view of hematite conglomerate with hematite matrix as found at Paulsens East



Figure 14: Close up view of "halfway" hematite conglomerate with vugs after chert as found at Paulsens East

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Surface mapping and drilling has shown that the hematite conglomerate is usually found in three main beds of variable thickness up to approximately 10 metres, although up to five hematite beds of limited strike length have been identified along the mineralised ridge (refer Figure 15).



Figure 15: Looking east along Paulsens East ridge showing bedding

Mapping along the ridge indicates that to the west of the resource, the conglomerate clasts tend to become cherty and the matrix siliceous, with a consequent drop in Fe grade. The lower conglomerate bed also in part becomes more like a massive chert in sections to the west of the resource along the ridge.



Figure 16: Looking west along Paulsens East ridge showing bedding and massive blocky hematite conglomerate beds

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Figure 17: Looking west along Paulsens East ridge showing dip slopes of hematite conglomerate beds

### Drilling and Rock Sampling Programmes

Between 2006 and 2008, Strike conducted an extensive rock chip sampling programme across the ridge and two drilling campaigns comprising 66 holes for 3,537 metres of reverse circulation (RC) drilling, to determine the extent and quality of the Paulsens East mineralisation.



Figure 18: Drilling at Paulsens East (North side), 2008

A summary of the drill holes comprising the database used in the Mineral Resource estimate is included in Table 3.

Type	IDs	Number	Total Drilled (m)
RC (2006)	PERC001 to PERC008	8	813
RC (2008)	PERC009 to PERC064 Includes PERC029A & PERC063A	58	2,724
<b>TOTAL</b>		<b>66</b>	<b>3,537</b>

Table 3: Summary of holes used in resource estimation

The drill hole spacing is semi-regular along the north side of the target ridge as shown in Figure 13. The drill hole spacing was controlled by drill access along the ridge. Most holes were drilled between 30 and 60 degrees from horizontal with an approximate south azimuth from sites near the base of the ridge. On most cross sections there is only one drill hole.



Figure 19 - Drill hole location plan showing semi-regular spacing of holes

Sample recovery using a face sampling hammer for all the samples collected is reported to be excellent. All samples were split, mostly at 0.5m intervals with some at 1m, using a drill rig mounted rotary cone splitter with the laboratory split bagged in a pre-labelled calico bag. Proper procedures were followed when splitting and bagging the drilling samples prior to being dispatched to Ultra Trace Laboratories for chemical analysis. All drilling and field sampling was continually monitored by a site geologist who also logged the chips for each sample interval to produce geological lithology logs.

## Topography

The topography was surveyed using drone photogrammetry between 29th July – 2nd August 2019. Parameters for the survey are as follows:

<b>Collection Drone:</b>	DJI Mavic 2 Pro
<b>Nominal Ground Clearance:</b>	60-70m
<b>Drone Flight Speed:</b>	8m/s
<b>Photo interval:</b>	18m
<b>Total Flight Distance:</b>	approximately 125 line kilometres
<b>Area Surveyed:</b>	454 Hectares

The Mavic 2 Pro utilises GNSS GPS/Glonass satellite control and for the duration of the survey, 12-18 satellites were visible to the drones. Accuracy in this configuration of +/- 2-4m E-W can be expected, with elevation control not as reliable. Further accuracy can be gained by using Ground Control Points, although none were available for this survey.

Normally, the final DC Levelled DEM (Digital Elevation Model) Grid would be DC levelled against a ground control elevation, to link it into either WGS84 MASL elevation or an Australian Height Datum (AHD). This was not available for the Paulsens East area at the time of processing although may be considered at a later date. An alternative, the DC Levelled DEM Grid was referenced against the Space Shuttle Radar data (SRTM), which has a nominal ground pixel size of 30m and is the default DEM for the Google Earth Application.

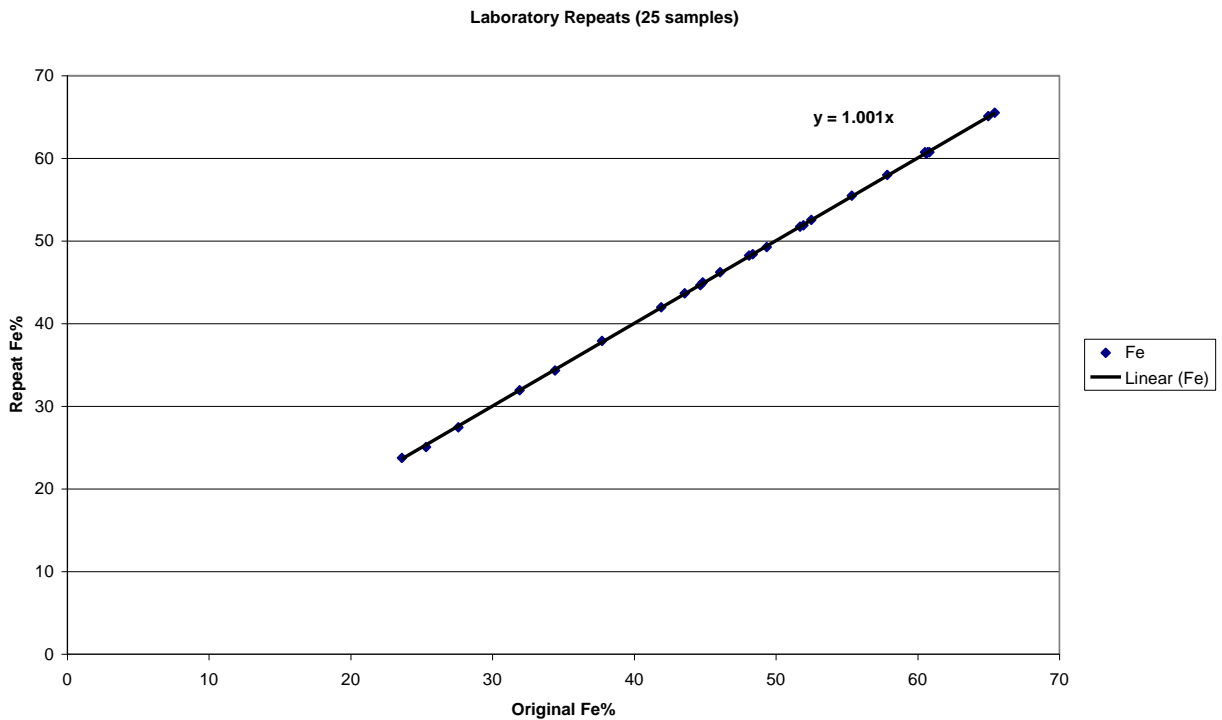
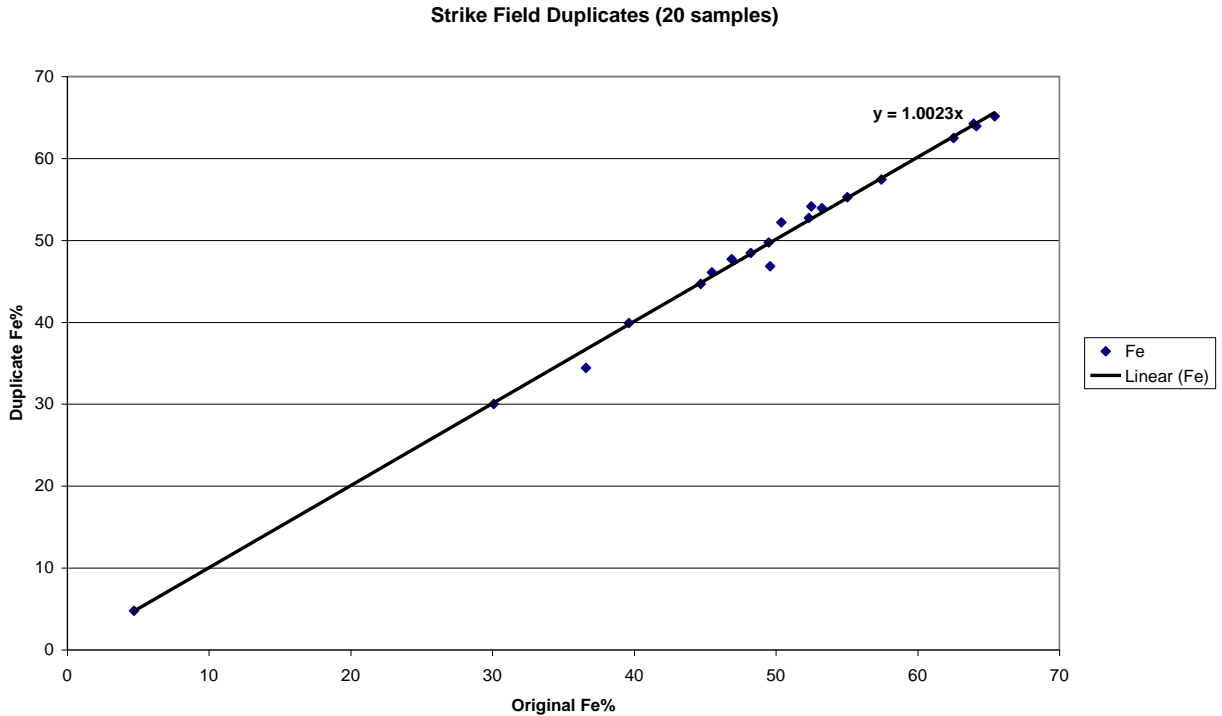
All the drill collars were projected to the photogrammetry surface to generate standardised elevations.



## Sampling Method and Approach

In the 2006 drilling programme, all the drill samples were dispatched for chemical analysis. In 2008, only samples logged with a high iron content were analysed.

Regular laboratory repeats and approximately 10% field sample duplicates were processed and showed very good correlation (refer Figure 20 and Figure 21).



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The hole collars were surveyed using a hand-held GPS. The accuracy of drill hole collar surveys cannot be fully verified but were found to lie where expected on drill pads shown on the georeferenced images. Considering the large dimensions of the mineralisation, the accuracy of the collar data is sufficiently accurate for an Indicated Mineral Resource estimate.

## Bulk Density

A standard bulk density of 4.2 t/m<sup>3</sup> was used for this estimate. This bulk density is typical for hematite ore (hematite mineral = 5.26 in Australian Field Geologists' Manual – Monograph 9, **AusIMM**). The hematite conglomerate beds are low in goethite/ limonite and shale and as such this is reflected in low LOI (loss on ignition). The standard bulk density assumed for the estimation reflects absence of goethite, limonite and shale material commonly found in Hamersley iron ores.

## Resource Modelling Methodology

The Paulsens East resources were modelled using MineMap IMS® software. A polygon was created on each variably spaced drilling section, approximately perpendicular to the strike of the ridge, using a 58% Fe lower cut off with a minimum drill intersection width of 1.0 m, however a few intersections less than 1.0 m were included to maintain continuity between cross sections. Some intersections of lower than cut-off material were included in the polygons as “included waste” to maintain continuity between higher-grade intersections. The 58% Fe lower cut-off grade was chosen to reflect the iron mineralisation as it produced coherent intersections on the drill holes.

The average drill intersection width is 6.26 metres. Note that since most of the drill holes were designed to intersect the mineralisation approximately orthogonally, the drill intersection width in most drill holes would be only slightly longer than the true width of the mineralisation. Where the azimuth of a hole or the dip of a hole is not orthogonal to the mineralisation the drill intersection width will be longer than the true width of the mineralisation.

	Unit 1		Unit 2		Unit 3		Unit 4		Unit 5		Total	
	Drill Interval	Fe%	Drill Interval	Fe%	Drill Interval	Fe%	Drill Interval	Fe%	Drill Interval	Fe%	Drill Interval	Fe%
Count	51		52		41		11		4		54	
Minimum	1.00		0.50		0.50		0.50		0.50		1.00	
Maximum	6.00		8.50		10.00		2.50		4.00		16.00	
Average	2.08	61.26	2.40	62.03	2.05	59.71	1.45	60.90	1.75	62.33	6.26	61.53
Width average		61.77		62.16		61.29		61.61		63.13		61.82

Table 4: Mineralisation width statistics

Since there was usually only one drill hole per cross section, the few sections with multiple holes were interpreted first to get a sense of the dip. Then the rest of the sections were interpreted by linking the main mineralised drill intersection with the crest of the ridge, corresponding with the geological mapping of the mineralisation (refer Figure 22). On most sections there are three iron units separated by shales and quartzites.

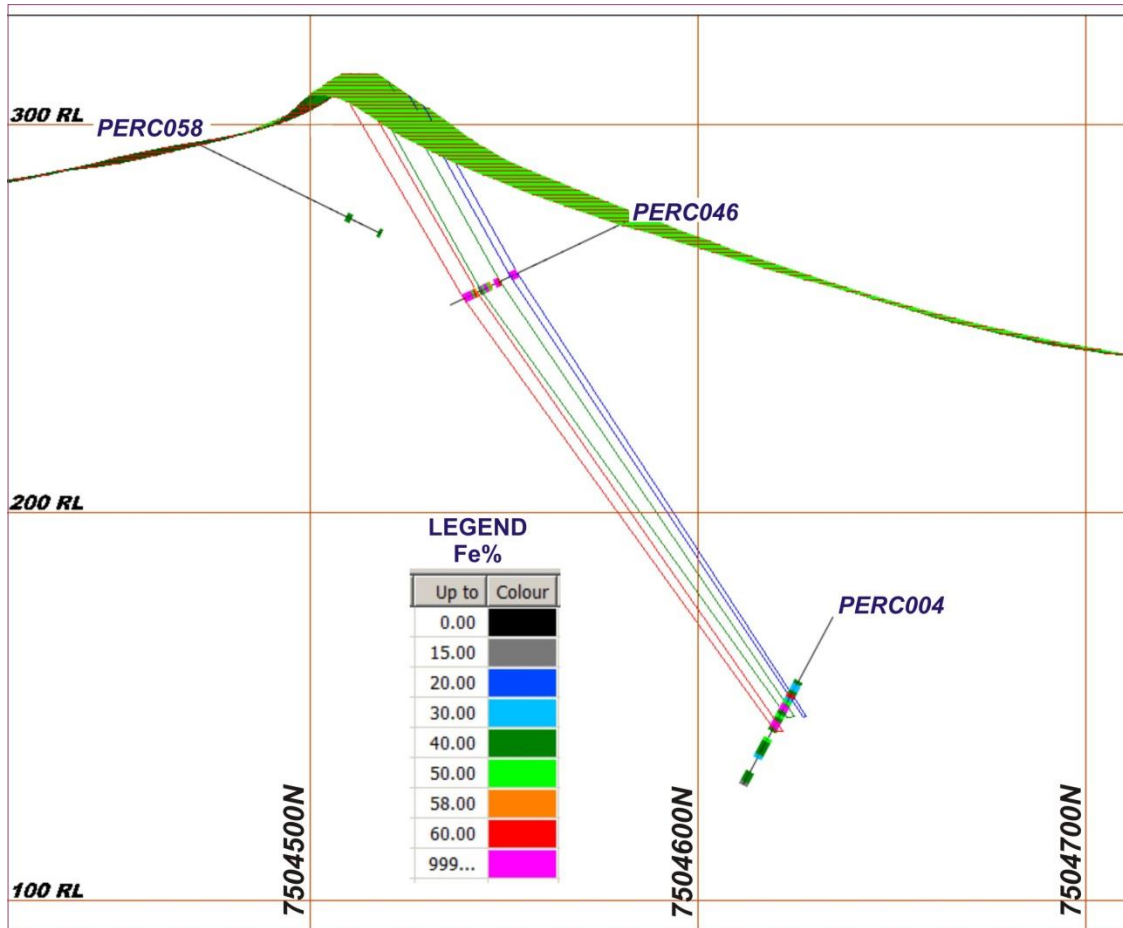


Figure 22: Typical cross section (432285E) showing three main mineralised units

The sections were then linked by wireframes to produce a 3D model. The interpreted mineralised zones on each section generally showed good continuity between sections.

The grades were interpolated using Inverse Distance Cubed (ID3) into the model blocks using a 100 m along-strike search ellipse. The parameters used in the modelling are outlined in Table 5.

Parameters	
East/West limits	430,350E – 433,350E
North/South limits	7,503,850N - 7,505,150N
Block dimensions (metres) X (strike), Y (across strike), Z (depth)	5.0m x 5.0m x 2.0m
Algorithm	3D Ellipsoidal
Inverse Distance Weighting Power	2
Upper RL	340.0m RL
Base RL	150.0m RL
Search Ellipse Along strike	100m
Search Ellipse Across strike (to fill model, mineralised bodies only several metres thick)	100m
Search Ellipse Depth	100m
Rotation Z (dip off vertical)	0°
Rotation Y (strike)	0°
Rotation X (plunge)	0°

Table 5: Modelling parameters used to model the Paulsens East Mineral Resource

## APPENDIX B

## JORC CODE (2012 EDITION)

## TABLE 1 – CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA

## Section 1 Sampling Techniques and Data

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

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>The only samples used in the resource estimate are splits of chips collected during Reverse Circulation (RC) drilling.</li> <li>Most of the drilling was designed to penetrate the whole width of the mineralised zone approximately orthogonally. All the drilling samples were split with a cyclonic splitter.</li> <li>All drilling met industry standards and used to obtain usually 0.5 m samples from which 3 kg was pulverised for XRF analysis.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>All the drilling used in the resource modelling was RC drilling.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>All the samples were logged by a qualified geologist and visually assessed for sample recovery. The logging indicates that the sample recoveries were excellent.</li> <li>The RC drilling was monitored by the site geologist and when sample recoveries were becoming a problem, drilling was stopped.</li> <li>There are no known relationships between grades and sample recovery.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>All the drill samples were logged by a qualified geologist at a sufficient level to support resource modelling.</li> <li>The logging was both qualitative and quantitative.</li> <li>Each hole was logged entirely.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>The RC sample chips were split using a rig mounted cyclonic splitter.</li> <li>The sample collection and sub-sampling was appropriate for the mineralisation being sampled.</li> <li>Field duplicates and laboratory standards were used for QAQC.</li> <li>To ensure the sampling is unbiased, the whole of the mineralised zone was drilled and drill holes spaced on a regular grid. The RC chips were collected and sub-sampled in a cyclonic splitter.</li> <li>The samples collected and submitted for assay are of an appropriate size for the grain size of the material being sampled.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The samples were analysed using XRF by an independent ISO accredited laboratory following international standard procedures to produce total assays.</li> <li>No geophysical results are reported.</li> <li>Field duplicates and laboratory standards were used for QAQC.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>No independent verification of the data was made by the Competent Person.</li> <li>No twinned holes have been drilled to check quality of original drilling.</li> <li>All data collection, data entry, data verification procedures and data storage protocols are properly documented.</li> <li>No adjustments were made to the assay data.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>The drill hole collars were surveyed using a hand-held GPS. The accuracy of drill hole collar surveys cannot be fully verified but were found to lie where expected on drill pads shown on the georeferenced images.</li> <li>The topography was surveyed using drone photogrammetry by Yoda Consulting Australia Pty Ltd between 29 July – 2 August 2019. An accuracy of +/- 2-4 m E-W/N-S can be expected, with elevation control not as reliable. The DC Levelled DEM Grid was referenced against the Space Shuttle Radar</li> </ul>

Criteria	Commentary
	data (SRTM), which has a nominal ground pixel size of 30m.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>The Competent Person believes that the spacing of the drilling on sections at approximately 50 - 150m spacing along with an accurate topographic photogrammetry survey with high resolution photos and surface GPS mapping, is sufficient for a low order Indicated resource estimate.</li> <li>Since the bulk of the sampling used in the resource estimates, the RC drilling, is sampled at fixed 0.5 m intervals, there was no sample compositing.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>The intersection angle of the drilling with respect to the mineralisation was variable, but generally at approximately 60-80 degrees, making most drill intersections longer than the true width of the mineralisation. The resource modelling software uses the data in 3D and so compensates for the wider apparent thicknesses.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>All the samples submitted for chemical analysis were securely transported from the field to the laboratory.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>There have been no audits or reviews of the sampling techniques or data.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	Commentary																
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>The resource lies entirely within Retention Licence R47/07 which is registered with Orion Equities Limited and is due to expire on 3/12/2019.</li> </ul>																
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>No other parties have carried out significant iron ore exploration at Paulsens East.</li> </ul>																
<i>Geology</i>	<ul style="list-style-type: none"> <li>The iron mineralisation is a conglomerate within the Mount McGrath Formation composed of hematite clasts within a hematite matrix.</li> </ul>																
<i>Drill hole Information</i>	<table border="1"> <thead> <tr> <th>Type</th> <th>IDs</th> <th>Number</th> <th>Total Drilled (m)</th> </tr> </thead> <tbody> <tr> <td>RC (2006)</td> <td>PERC001 to PERC008</td> <td>8</td> <td>813</td> </tr> <tr> <td>RC (2008)</td> <td>PERC009 to PERC064 Includes PERC029A &amp; PERC063A</td> <td>58</td> <td>2,724</td> </tr> <tr> <td><b>TOTAL</b></td> <td></td> <td><b>66</b></td> <td><b>3,537</b></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>The drilling locations are discussed in the body of this document and collar details included as an Appendix [refer Appendix C].</li> </ul>	Type	IDs	Number	Total Drilled (m)	RC (2006)	PERC001 to PERC008	8	813	RC (2008)	PERC009 to PERC064 Includes PERC029A & PERC063A	58	2,724	<b>TOTAL</b>		<b>66</b>	<b>3,537</b>
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<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>All intersections quoted in text are length weighted averages and all resource estimates are tonnage weighted averages</li> <li>No metal equivalents have been reported.</li> </ul>																
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>The resource modelling was carried out in 3D and all apparent widths accounted for in the estimation method.</li> <li>Most of the drill holes were designed to intersect the mineralisation approximately orthogonally. The drill intersection width in most drill holes would be only slightly longer than the true width of the mineralisation. Where the azimuth of a hole or the dip of a hole is not orthogonal to the mineralisation the drill intersection width will be longer than the true width of the mineralisation.</li> </ul>																
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>All the diagrams necessary to describe the project are included in the body of this report.</li> </ul>																
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>The Competent Person believes that the reporting of the Exploration Results in this report is balanced.</li> </ul>																

Criteria	Commentary
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>No other exploration data other than local geology maps were considered in the resource estimate.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>Further in-fill drilling, metallurgical testwork and mining studies have been recommended.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section)

Criteria	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Data used as received but checked for Hole ID and sample interval errors by MineMap © software. Some RC sample assays in database were checked against laboratory spread sheets and no errors were found.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>The Competent Person visited the site on 17 August 2019 and inspected the mineralised outcrop at various points over the whole strike length of the deposit and instructed the field technician on where to take the GPS readings of the hematite outcrop.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>The mineralisation is a series of conglomerate beds with hematite clasts and matrix separated by thin shale and quartzite beds.</li> <li>The interpretation of the mineralisation and modelling wireframes is based on surface mapping and drilling.</li> <li>The hematite conglomerates are sedimentary.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The outcropping mineralised conglomerate has a strike length of approximately 3 km and is open at depth.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>The resource modelling was done with MineMap © software by interpolating grades into a digital block model using an Inverse Distance Cubed (ID3) algorithm confined by wire framing of the &gt;58% Fe mineralised zones with 100m search radii along and across strike and 100m up and down dip.</li> <li>The Competent Person considers that these modelling parameters are appropriate for an Indicated resource of the type and style of mineralisation being modelled.</li> <li>It is assumed that the mineralised conglomerate beds can be satisfactorily mined in an open cut to a minimum of 1 m width and beneficiation, if required, will produce a profitable and marketable product.</li> <li>The model cells of 5 m X 5 m 2 m are suitable for representing the style of mineralisation being modelled.</li> <li>No variable correlations were considered.</li> <li>The wireframes confining the resource model are based on drill intercept grades &gt;58% and correlated with the outcropping ridge.</li> <li>No grades were cut because the Fe grades had no high-grade outliers.</li> <li>The resource model was checked and validated visually against the drilling using colour coded grades.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>All tonnes and grades are on a dry basis.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>The resource modelling was confined by wire framing of the &gt;58% Fe mineralised zones. This grade represents an approximate economic cut-off and allows correlations of the mineralisation between cross sections.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>No mining factors were considered for the resource estimate although it was assumed that it is most likely that if the deposit is eventually mined it will be mined using the open pit mining method.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>No metallurgical tests have been carried out on representative samples of the mineralisation. Metallurgical testwork has been recommended to determine if beneficiation by screening and/or gravity separation and/or optical recognition can economically produce a high grade/value marketable product.</li> </ul>

Criteria	Commentary
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>No environmental factors were considered however the tenement has sufficient suitable area to accommodate a small mining and processing operation including provision for waste disposal.</li> <li>There are no obvious especially environmentally sensitive areas in the vicinity of the deposit although the usual impact studies and government environmental laws and regulations will need to be complied with.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>There have been no specific gravity measurements taken of the mineralisation modelled.</li> <li>A bulk density of 4.2 (based on the density of hematite mineral = 5.26 in Australian Field Geologists' Manual – Monograph 9 AusIMM) was used. This value is typical of high grade hematite mineralisation.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The resource was classified by the Competent Person as Indicated based on the spacing of the drilling and quality of the data used in the estimation.</li> <li>The Competent Person believes this classification to be appropriate.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>No audits or reviews of the Mineral Resource Estimates have been made.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>The drill hole spacing is too wide to provide sufficient confidence in the resource estimate for a higher-level resource category. The quality of the data is considered to be reasonable for an Inferred resource estimate.</li> <li>All quoted estimates are global for the deposit.</li> <li>No mine production has been recorded at the deposit.</li> </ul>

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## APPENDIX C

## DRILL COLLAR DETAILS

HOLE ID	EAST MGA94_Z50	NORTH MGA94_Z50	RL	DEPTH	Azimuth	Dip	START DATE	END DATE	Drill Company
PERC001	430,952	7,504,968	254	82	174	-60	6/12/2006	6/12/2006	Wallis
PERC002	431,382	7,504,939	241	64	167	-60	7/12/2006	7/12/2006	Wallis
PERC003	432,043	7,504,777	242	120	204	-63	7/12/2006	8/12/2006	Wallis
PERC004	432,322	7,504,674	238	148	202	-60	8/12/2006	8/12/2006	Wallis
PERC005	432,771	7,504,357	233	147	212	-60	9/12/2006	9/12/2006	Wallis
PERC006	432,901	7,504,228	250	100	221	-55	9/12/2006	9/12/2006	Wallis
PERC007	433,143	7,504,045	246	94	236	-55	10/12/2006	11/12/2006	Wallis
PERC008	434,149	7,502,753	229	58	160	-60	11/12/2006	11/12/2006	Wallis
PERC009	433,193	7,503,982	249	36	239	-45	31/05/2008	1/06/2008	Rock
PERC010	433,105	7,504,038	256	54	227	-29	1/06/2008	1/06/2008	Rock
PERC011	433,019	7,504,081	250	54	210	-25	2/06/2008	3/06/2008	Rock
PERC012	432,925	7,504,167	250	34.5	248	-23	3/06/2008	3/06/2008	Rock
PERC013	432,885	7,504,213	240	42.5	215	-17	4/06/2008	5/06/2008	Rock
PERC014	432,885	7,504,213	240	30.5	275	-40	5/06/2008	5/06/2008	Rock
PERC015	432,818	7,504,263	244	45.5	238	-19.5	6/06/2008	6/06/2008	Rock
PERC016	432,743	7,504,313	255	48.5	218	-15.5	6/06/2008	6/06/2008	Rock
PERC017	432,691	7,504,343	247	48.5	218	-23	11/06/2008	11/06/2008	Rock
PERC018	432,499	7,504,514	258	48.5	222	-20	11/06/2008	11/06/2008	Rock
PERC019	432,488	7,504,513	256	54.5	228	-40	12/06/2008	12/06/2008	Rock
PERC020	432,349	7,504,576	263	54.5	210	-24	13/06/2008	13/06/2008	Rock
PERC021	431,931	7,504,794	257	54.5	202	-20	14/06/2008	14/06/2008	Rock
PERC022	431,931	7,504,797	256	46.5	202	-40	14/06/2008	15/06/2008	Rock
PERC023	431,728	7,504,878	254	54.5	191	-25	16/06/2008	17/06/2008	Rock
PERC024	431,725	7,504,880	252	54.5	191	-40	17/06/2008	17/06/2008	Rock
PERC025	431,457	7,504,956	255	54.5	165	-25	19/06/2008	19/06/2008	Rock
PERC026	431,295	7,504,948	255	54.5	169	-25	19/06/2008	19/06/2008	Rock
PERC027	431,791	7,504,835	265	54.5	194	-25	23/06/2008	23/06/2008	Rock
PERC028	431,368	7,504,917	263	54.5	160	-25	24/06/2008	24/06/2008	Rock
PERC029	431,374	7,504,915	263	24.5	160	-40	24/06/2008	24/06/2008	Rock
PERC029A	431,374	7,504,915	263	54.5	160	-40	25/06/2008	25/06/2008	Rock
PERC030	431,846	7,504,816	272	54.5	219	-25	25/06/2008	25/06/2008	Rock
PERC031	430,955	7,504,964	240	54.5	142	-25	26/06/2008	26/06/2008	Rock
PERC032	430,861	7,504,942	249	42.5	166	-25	26/06/2008	26/06/2008	Rock
PERC033	430,781	7,504,939	263	48.5	174	-25	26/06/2008	26/06/2008	Rock
PERC034	430,707	7,504,942	260	54.5	170	-25	27/06/2008	27/06/2008	Rock
PERC035	430,630	7,504,931	258	54.5	168	-25	27/06/2008	27/06/2008	Rock
PERC036	431,228	7,504,936	257	54.5	178	-25	27/06/2008	27/06/2008	Rock
PERC037	431,654	7,504,883	265	45	187	-25	28/06/2008	28/06/2008	Rock
PERC038	431,585	7,504,902	258	54.5	176	-25	28/06/2008	28/06/2008	Rock
PERC039	431,523	7,504,918	258	47.5	191	-25	28/06/2008	28/06/2008	Rock
PERC040	431,075	7,504,945	257	54.5	181	-25	29/06/2008	29/06/2008	Rock
PERC041	431,131	7,504,940	256	48.5	183	-25	29/06/2008	29/06/2008	Rock
PERC042	432,036	7,504,739	255	54.5	190	-25	29/06/2008	29/06/2008	Rock
PERC043	432,122	7,504,649	255	46	198	-25	30/06/2008	30/06/2008	Rock
PERC044	432,124	7,504,650	254	35.5	198	-40	30/06/2008	30/06/2008	Rock
PERC045	432,186	7,504,620	257	42.5	201	-25	30/06/2008	30/06/2008	Rock
PERC046	432,284	7,504,580	261	51	190	-25	30/06/2008	30/06/2008	Rock
PERC047	432,380	7,504,524	269	54.5	209	-25	7/01/2008	7/01/2008	Rock
PERC048	432,535	7,504,457	262	54.5	213	-25	7/01/2008	7/01/2008	Rock
PERC049	433,197	7,503,941	233	24.5	350	-25	7/02/2008	7/02/2008	Rock
PERC050	433,190	7,503,848	249	34	190	-25	7/02/2008	7/02/2008	Rock
PERC051	433,130	7,503,952	230	48.5	24	-25	7/04/2008	7/05/2008	Rock
PERC052	433,018	7,504,029	244	38.5	40	-25	7/05/2008	7/05/2008	Rock
PERC053	432,900	7,504,126	256	38.5	40	-25	7/05/2008	7/05/2008	Rock
PERC054	432,803	7,504,206	265	39.5	25	-25	7/05/2008	7/06/2008	Rock
PERC055	432,687	7,504,296	271	27	18	-25	7/06/2008	7/06/2008	Rock
PERC056	432,614	7,504,327	276	54.5	27	-25	7/06/2008	7/07/2008	Rock
PERC057	432,438	7,504,428	282	54.5	15	-25	7/07/2008	7/07/2008	Rock
PERC058	432,279	7,504,474	285	54.5	18	-25	7/07/2008	7/07/2008	Rock
PERC059	432,102	7,504,576	262	54.5	35	-25	7/08/2008	7/08/2008	Rock
PERC060	431,360	7,504,806	287	54.5	350	-25	7/08/2008	7/08/2008	Rock
PERC061	433,312	7,503,931	235	54	196	-60	9/07/2008	9/07/2008	Rock
PERC062	433,297	7,503,881	235	54	194	-60	9/07/2008	9/07/2008	Rock
PERC063	433,245	7,503,964	244	38	195	-45	10/07/2008	10/07/2008	Rock
PERC063A	433,267	7,503,779	237	6	245	-60	10/07/2008	10/07/2008	Rock
PERC064	433,262	7,503,918	240	39	205	-45	10/07/2008	10/07/2008	Rock