

19 November 2020

ASX Code: AGS

## Maiden iron resource confirms DSO iron ore potential of Weednanna gold-iron Deposit

***1.150 Mt tonnes grading 59.4 % iron strengthens economic potential of 152,000 ounce gold resource<sup>1</sup> & feasibility study assessment of the deposit***

### Highlights

- **Maiden iron Mineral Resource of 1.150 Mt grading 59.4 % Fe has confirmed the DSO iron potential of the Weednanna gold and iron project and supports the recently announced gold mineral resource of 1.106 Mt grading 4.3 g/t Au for 152,000 ounces of gold<sup>1</sup>**

Classification	Tonnes	Fe %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	S %	P %	LOI %
Measured	284,000	60.7	2.5	6.4	0.08	0.021	2.08
Indicated	467,000	59.2	1.8	6.2	0.24	0.014	2.12
Inferred	400,000	58.8	1.8	6.7	0.18	0.012	1.67
<b>Total</b>	<b>1,150,000</b>	<b>59.4</b>	<b>2.0</b>	<b>6.4</b>	<b>0.18</b>	<b>0.015</b>	<b>1.95</b>

*Figures may not add up due to rounding*

- **The reported Mineral Resource is that proportion of >55% iron contained within A\$175/t for 62% Fe and A\$3,000oz Au pit shells (<0.5 g/t Au) and underground potential (<1.5 g/t Au)**
- **Iron mineral resource occurs adjacent to gold resource and is readily accessible using open pit and underground mining techniques**
- **62% of resource in Measured and Indicated categories to support feasibility study assessment of the Weednanna gold-iron deposit, currently in progress**

Alliance Resources Ltd (Alliance) is pleased to announce a revised iron Mineral Resource Estimate for the Weednanna gold-iron Deposit (Weednanna), located 40 km NNE of the township of Kimba, South Australia.

In 2013 Ironclad Mining Limited (Ironclad) estimated an iron mineral resource for Weednanna of 11.2 Mt grading 41.97 % Fe (refer to Ironclad 2014 Annual Report). Since that time Alliance has drilled 363 RC holes and 5 diamond holes, totalling 50,281 metres, in the same general area to test for economic concentrations of gold. As the gold is located adjacent to, and on the margins of an ironstone and magnetite-rich skarn, the drill samples were also analysed for an extended iron ore suite of elements and compounds (refer to Alliance ASX announcement dated 31 August 2020).

Mining One Pty Ltd was engaged by Alliance to prepare the maiden Weednanna iron mineral resource, incorporating the new drilling data and using a higher iron cut-off grade appropriate for direct shipping iron ore (DSO).

The Alliance maiden iron Mineral Resource has been estimated to a maximum depth of 220 metres below surface and totals 1,150,000 tonnes grading 59.4 % Fe (Table 1).

1. Refer to Alliance ASX announcement dated 9 November 2020

**Table 1. Weednanna Iron Mineral Resource Estimate<sup>1</sup>**

Classification	Tonnes	Fe %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	S %	P %	LOI %
<b>Above Pit Shells (A\$175/t for 62% Fe) &gt;55 % Fe &amp; &lt;0.5 g/t Au – Open Pit</b>							
Measured	284,000	60.7	2.5	6.4	0.08	0.021	2.08
Indicated	410,000	59.3	1.8	6.2	0.26	0.015	2.23
Inferred	238,000	59.1	1.9	6.5	0.23	0.016	1.72
<b>Sub-Total</b>	<b>932,000</b>	<b>59.7</b>	<b>2.0</b>	<b>6.3</b>	<b>0.20</b>	<b>0.017</b>	<b>2.05</b>
<b>Below Pit Shells (A\$175/t for 62% Fe) &gt;55 % Fe &amp; &lt;1.5 g/t Au – Underground</b>							
Measured	-	-	-	-	-	-	-
Indicated	57,000	58.0	1.6	6.2	0.10	0.007	1.37
Inferred	161,000	58.3	1.6	7.1	0.12	0.006	1.59
<b>Sub-Total</b>	<b>218,000</b>	<b>58.2</b>	<b>1.6</b>	<b>6.8</b>	<b>0.12</b>	<b>0.006</b>	<b>1.53</b>
<b>Total – Open Pit &amp; Underground</b>							
Measured	284,000	60.7	2.5	6.4	0.08	0.021	2.08
Indicated	467,000	59.2	1.8	6.2	0.24	0.014	2.12
Inferred	400,000	58.8	1.8	6.7	0.18	0.012	1.67
<b>Total</b>	<b>1,150,000</b>	<b>59.4</b>	<b>2.0</b>	<b>6.4</b>	<b>0.18</b>	<b>0.015</b>	<b>1.95</b>

1. Mineral Resource estimate contained within Whittle pit shells using an iron ore price of A\$175/t for 62% Fe, gold price of A\$3,000/oz, 55% iron lower cut-off grade and 0.5 g/t gold upper cut-off grade plus underground potential using a 55% iron lower cut-off grade and 1.5 g/t gold upper cut-off grade.

2. Figures may not add up due to rounding.

The 2013 iron mineral resource estimate used a 25% Fe lower cut-off grade and no gold upper cut-off grade because ore processing contemplated the production of iron only as DSO and magnetite concentrate produced using dry magnetic separation (DMS) and gravity separation (GS). The 2020 resource estimate uses a 55 % Fe lower cut-off grade and appropriate open pit and underground gold upper cut-off grades of 0.5 g/t Au and 1.5 g/t Au respectively because a gold mining operation is proposed with DSO produced as a bi-product. Ore mined above the upper gold cut-off grades would report to the gold processing plant proposed for the project.

The proximity of iron to gold in the deposit means that the cost of open pit and underground mining of high-grade iron is incidental or incremental to the proposed gold mining operation.

The dimensions of the iron mineral resource area, including the gold resource, are 1,300m (north-south), 600m (east-west) and from surface to a maximum depth of 220m.

Open pit optimisation studies were completed on the mineral resource using Whittle software, with mining assumptions provided by Mining One. For the purpose of reporting resources, the A\$175/t for 62% Fe iron price was selected as appropriate to meet the JORC Code (2012 Edition) requirement that there are reasonable prospects for eventual economic extraction given the average October 2020 62% Fe iron price range of US\$112 - \$119/t and AUS to USD exchange rate range of \$0.70 - \$0.72.

On 9 November 2020 Alliance announced a revised gold mineral resource for Weednanna of 1,106,000 tonnes grading 4.3 g/t Au for 152,000 ounces of gold (71 % classified as Measured and Indicated and 29 % classified as Inferred).

The revised gold and iron mineral resource estimates will support feasibility study level commercial assessment of the deposit.



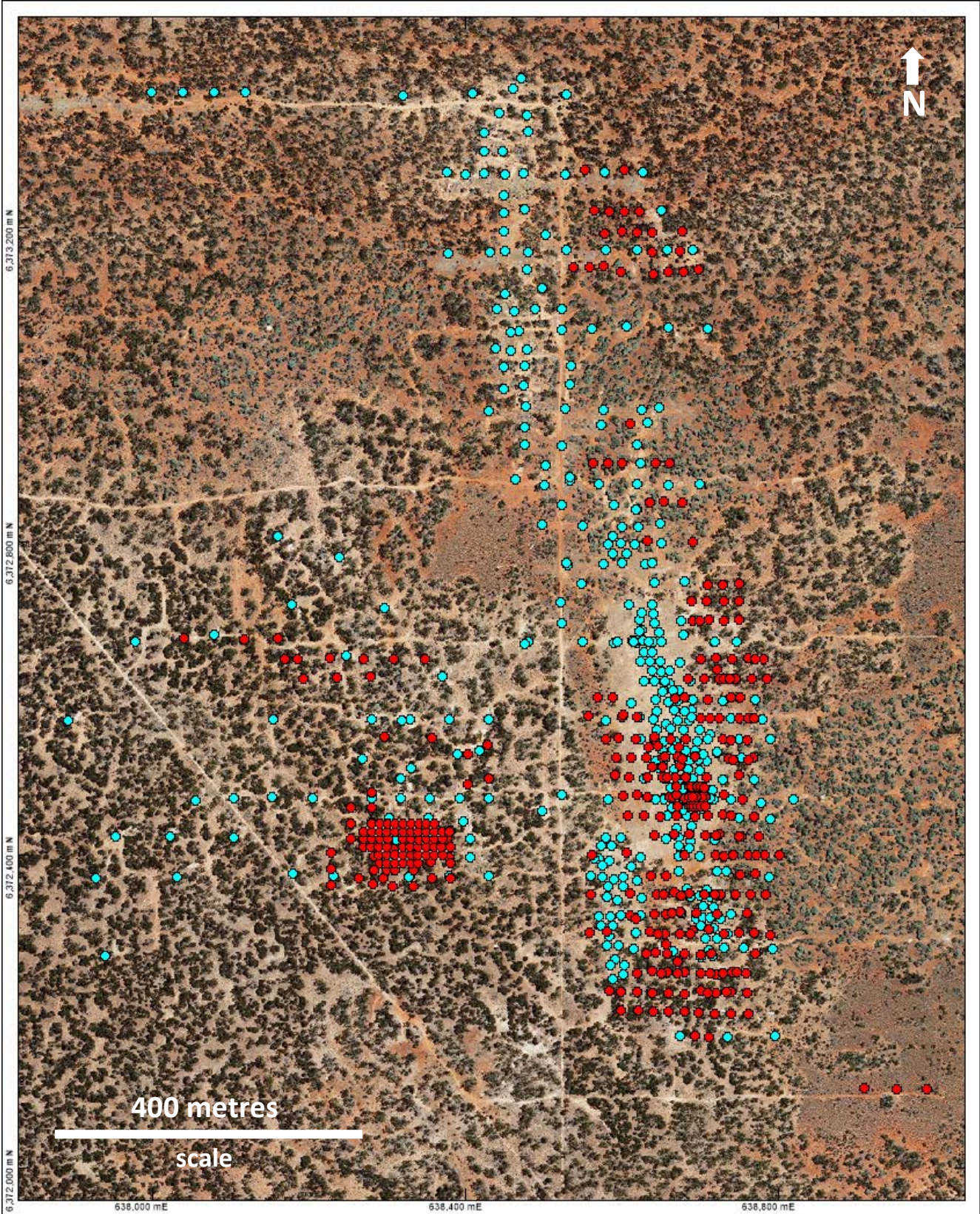


Figure 1. Collar location of holes used in the 2020 Iron Mineral Resource Estimate

Legend-  
Blue dots: all holes used in the 2013 Iron Mineral Resource Estimate  
Red dots: all holes drilled since the 2013 Iron Mineral Resource Estimate



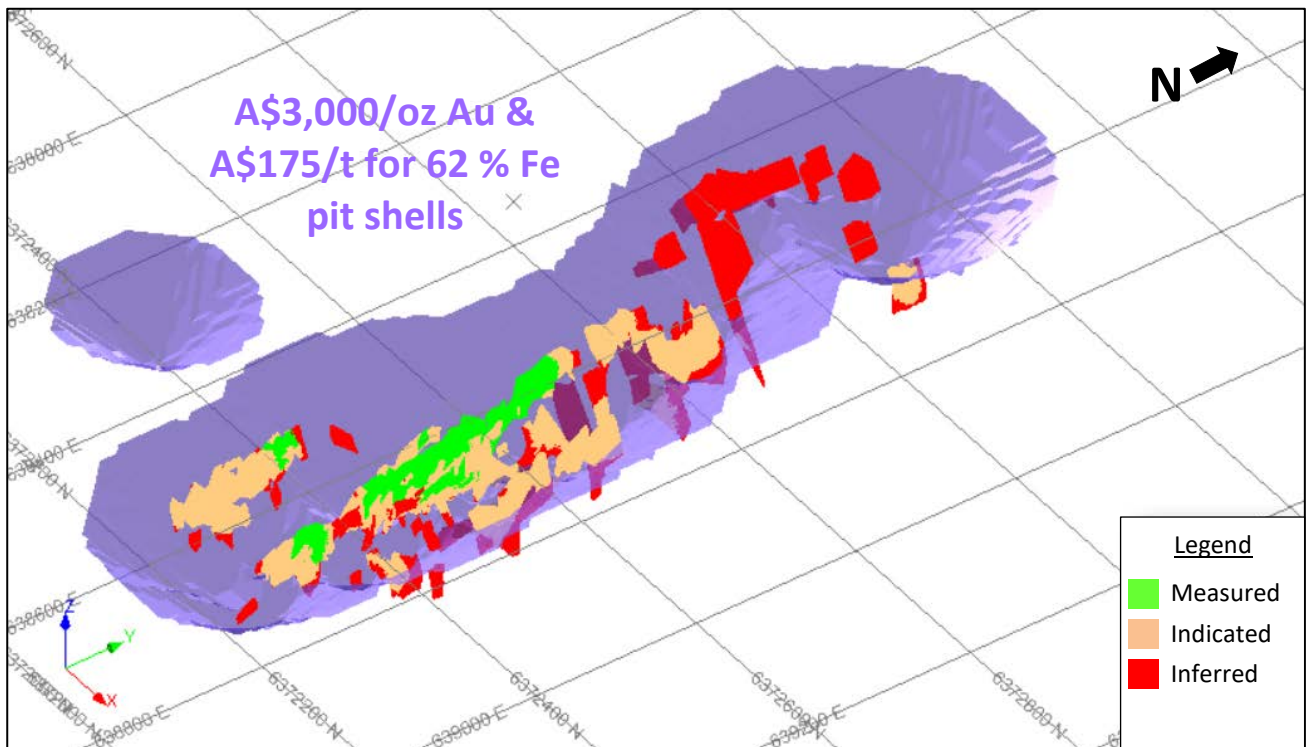


Figure 2. Iron Mineral Resource block model showing Measured, Indicated and Inferred classifications

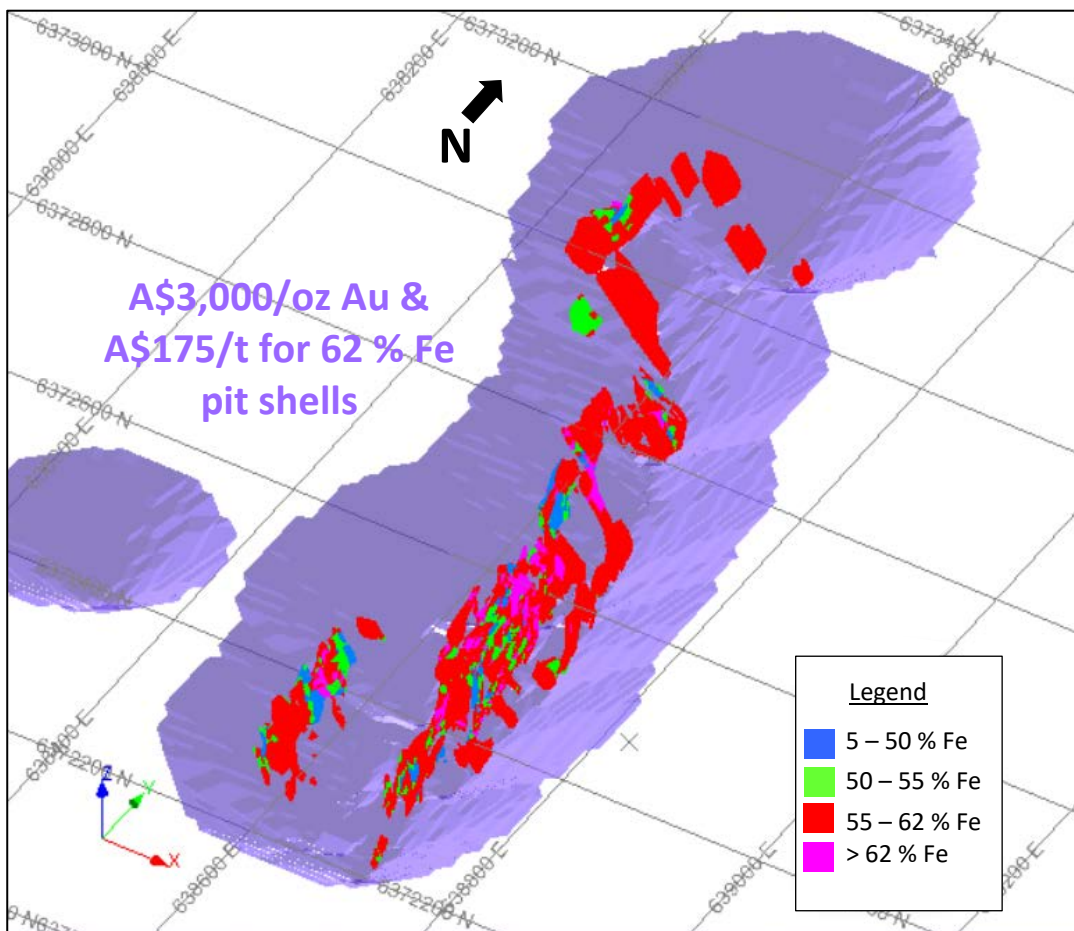


Figure 3. Iron Mineral Resource blocks within Fe/Au pit shell where Au < 0.5 g/t - Oblique View

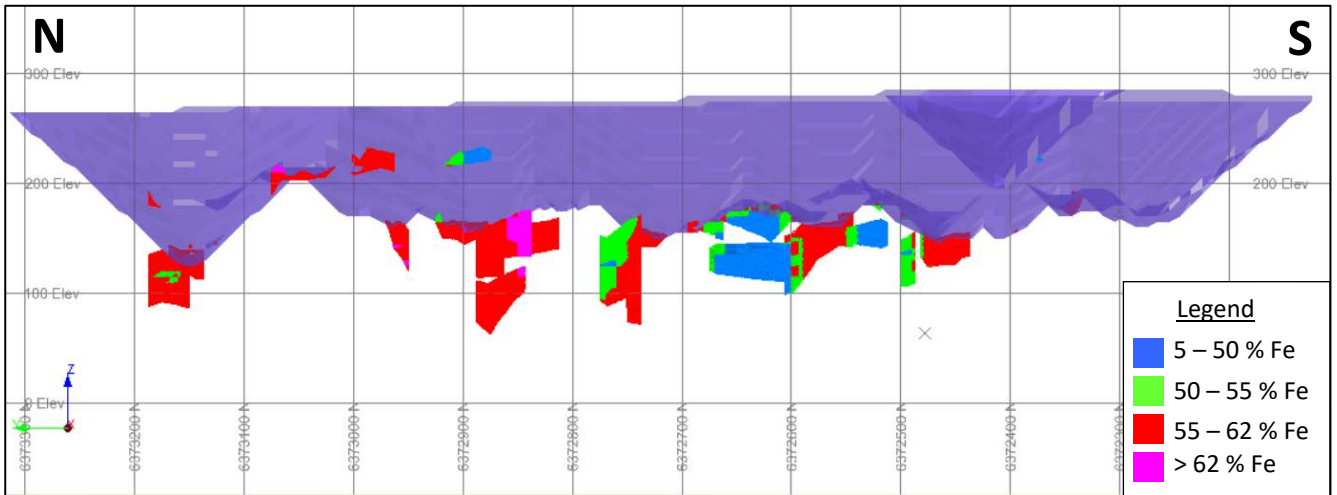


Figure 4. Iron Mineral Resource blocks below Fe/Au pit shell where Au <1.5 g/t - Looking East

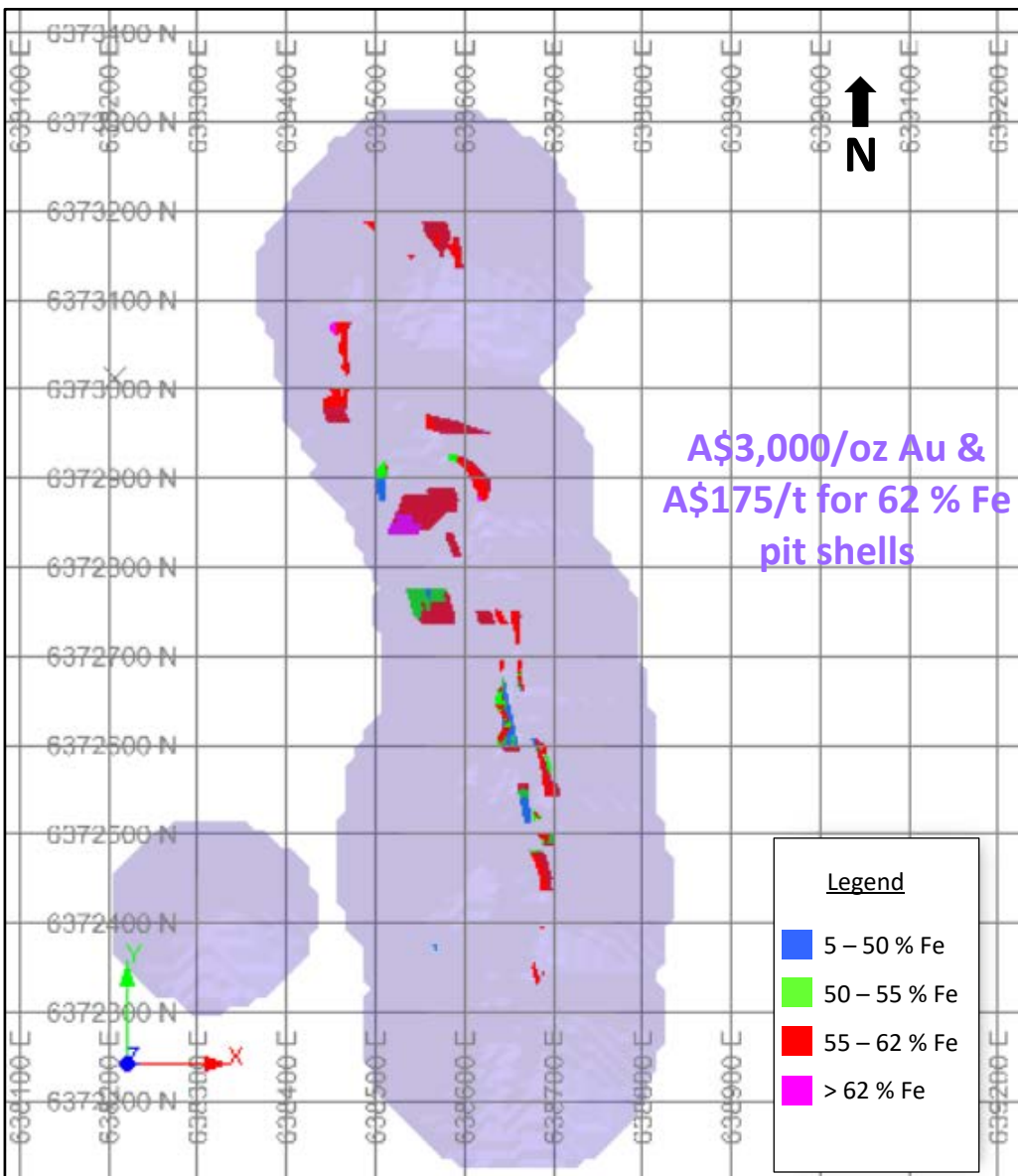


Figure 5. Iron Mineral Resource blocks below Fe/Au pit shell where Au <1.5 g/t - Plan View

## Weednanna Deposit

The Weednanna gold-iron Deposit (Weednanna) is located 105 km WNW of Whyalla and 40 km NNE of the township of Kimba, South Australia (Figure 6).

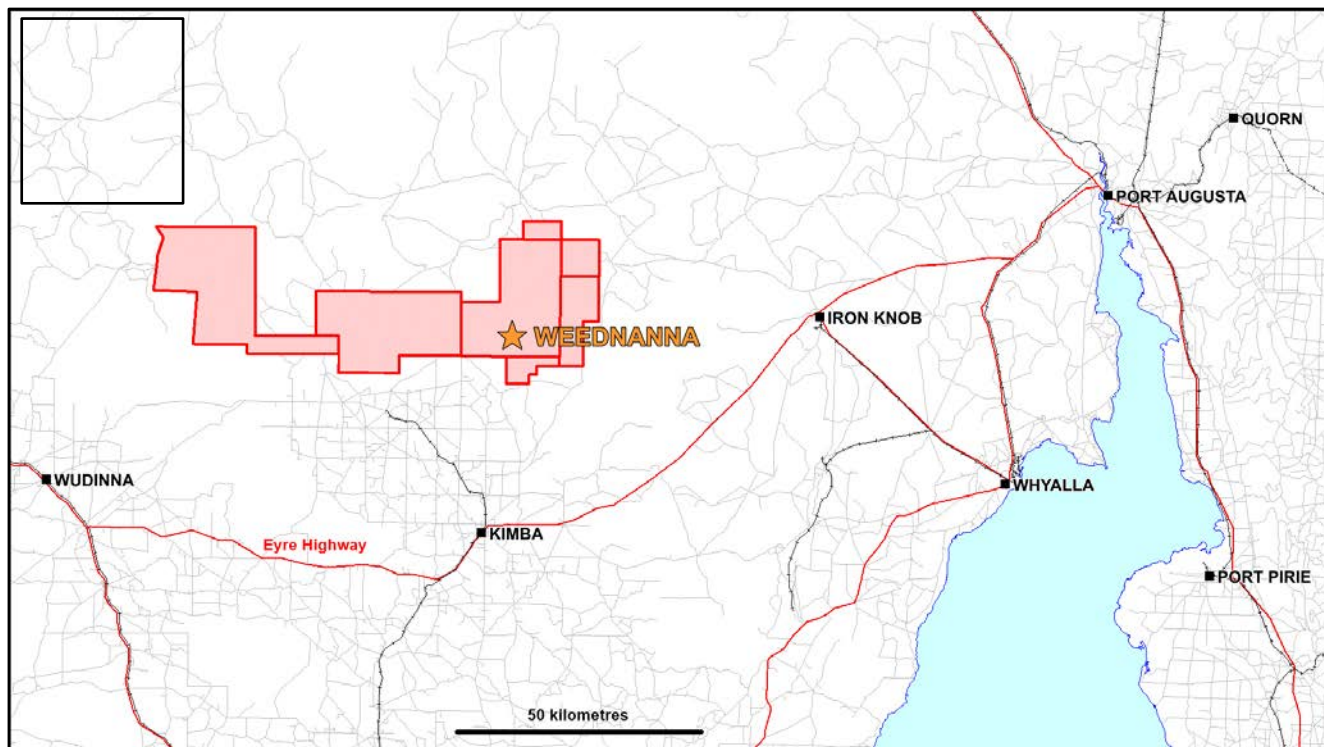
The Project area is accessible from Kimba via a combination of sealed and unsealed all weather roads to Wilcherry Hill, then 4 km of pastoral station tracks to Weednanna.

The deposit was discovered by Acacia Resources in 1997 when drilling of a gold-in-calcrete anomaly coincident with a magnetic high intersected gold mineralisation hosted in calc-silicate and magnetite-rich skarn. Since that time the deposit has been assessed by several explorers for economic concentrations of gold and iron.

Prior to Alliance acquiring the Wilcherry Project Ironclad had prepared to develop Weednanna as part of a larger iron mining operation designed to produce DSO and magnetite concentrate. The Ironclad iron mineral resource estimated for Weednanna in 2013 was 11.2 Mt grading 42.0 % Fe (refer to Ironclad 2014 Annual Report).

Since 2017 Alliance has drilled 363 RC holes and 5 diamond holes, totalling 50,281 metres, to test for economic concentrations of gold. As the gold is located adjacent to, and on the margins of an ironstone and magnetite-rich skarn, the drilling samples were also analysed for an extended iron ore suite of elements and compounds (refer to Alliance ASX Announcement dated 31 August 2020).

On 9 November 2020 Alliance announced a revised gold mineral resources estimate for Weednanna of 1.106 Mt grading 4.3 g/t gold for 152,000 oz gold (classified 71% Measured and Indicated and 29% Inferred).



**Figure 6. Project Location**

## Geology

Weednanna is characterised by a north striking and moderate to steep east-dipping unit of Paleo-Proterozoic Hutchinson Group sediments, consisting of marl and dolomite with lesser sandstone and possibly minor basalt, which have been metamorphosed under upper-amphibolite facies conditions and altered to produce interleaving calc-silicate and magnetite skarn with lesser gneiss and minor amphibolite.

The iron hosted by magnetite skarn occurs in significant concentrations that warrant commercial assessment.

The Hutchison Group meta-sedimentary package is bounded to the east and west by Archaean Sleaford Complex granite and gneiss. The Archaean rocks appear to truncate the meta-sediments at depth at the northern and southern ends of the deposit, with the meta-sediments extending below current drilling in the central area of the deposit.

The Archaean rocks display variable brecciation, chlorite alteration, and disseminated sulphide near the western (footwall contact), which generally dips moderately east. Strong chlorite alteration and disseminated pyrite is associated with a major structure that hosts a large quartz vein which strikes northwest and dips moderately northeast. This structure appears to truncate the southern end of the Hutchinson Group meta-sediments. It appears to have a long deformation and alteration history and is the most likely feeder-structure for skarn and mineralising fluids at the deposit.

The eastern (hanging wall) granite is not strongly altered and contains trace sulphides. This contact is generally steep east-dipping and has a sigmoidal geometry that suggests east over west reverse movement. A relatively discrete biotite schist zone occurs along much of the hanging wall contact and appears to represent a discrete unmineralised fault structure. In some places the biotite schist is replaced by a broader zone of gneiss where strain is taken up by a larger rock mass.

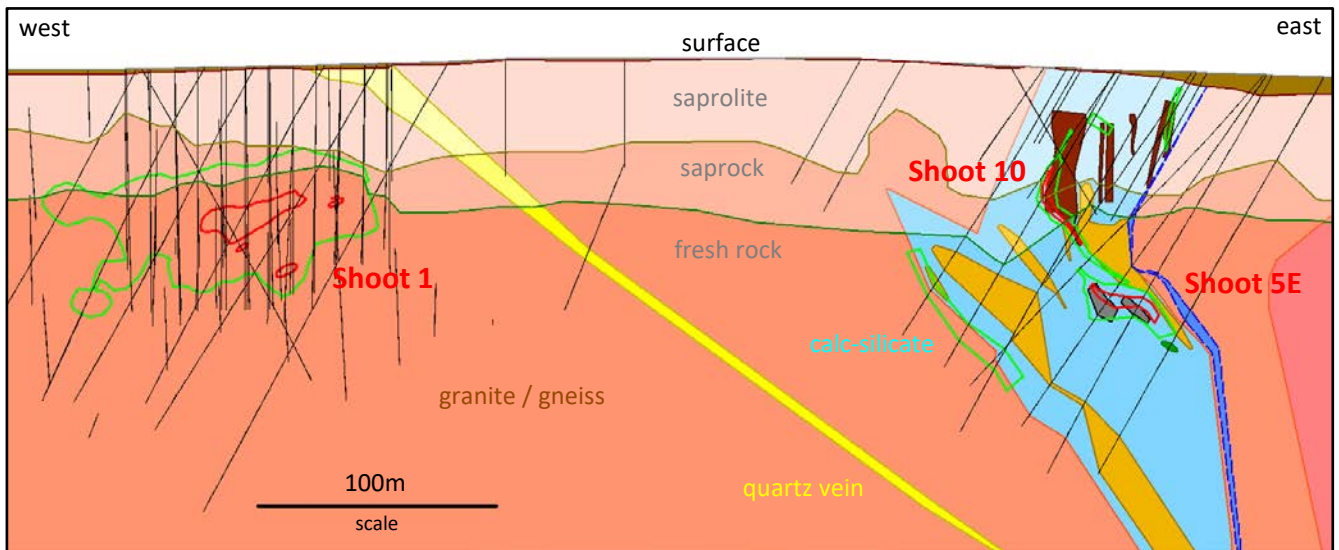
Aeromagnetic imagery shows northeast striking structures cross-cutting the magnetite skarn, with associated magnetite destruction. While these structures have not been traced with any confidence in cross-section interpretation they may have a significant control on the distribution of some high-grade gold shoots.

Pink potassium feldspar-rich granites, potentially of the Hiltaba Granite Suite, intrude the Sleaford Complex on the eastern side of the deposit area and minor granites and amphibolite, probably associated with the Kimban-aged Peter Pan Super Suite, cut the meta-sedimentary package. The amphibolite rocks that are hosted within the Hutchison Group have a discrete north-striking sub-horizontal rod-like geometry (sub-parallel to the hanging wall sigmoidal geometry and many of the high-grade gold shoots).

One deep diamond hole has been drilled beneath the Weednanna Deposit and intersected unmineralised Hiltaba-aged K-spar rich granite from 409.5 metres depth to the end of hole at 577.0 metres depth.

A keel of north-striking weathered granite of uncertain age occurs near-surface within the Hutchinson Group meta-sediments along most of the deposit area. If this granite is Archaean in age it is possible that the Hutchinson Group meta-sediments are hosted in an asymmetric synform.





**Figure 7. Weednanna 6372425mN representative geological cross-section**

*Legend-*

- Orange: Archaean Sleaford Complex granite / gneiss*
- Light blue: Paleo-Proterozoic calc-silicate altered Hutchison Group sediments*
- Brown: Paleo-Proterozoic ironstone after magnetite skarn altered Hutchison Group sediments (> 55 % Fe)*
- Grey: Paleo-Proterozoic magnetite skarn altered Hutchison Group sediments (> 55 % Fe)*
- Light orange: Kimban Peter Pan Super Suite? granites*
- Green: Kimban Peter Pan Super Suite? amphibolite*
- Pink: Hiltaba? K-spar granite*
- Dark blue: biotite-rich hanging wall shear*
- Yellow: quartz vein*
- Green contours: 0.2 – 2.5 g/t Au*
- Red contours: > 2.5 g/t Au*

## Iron Mineralisation

Iron mineralisation occurs within Paleo-Proterozoic Hutchinson Group meta-sediments and is associated with the intrusion of Hiltaba-aged granites and skarn alteration.

Magnetite-rich skarn formed during the peak metamorphic event by iron replacement of an impure dolomitic marble / marl host meta-sedimentary sequence interpreted as Katunga Dolomite.

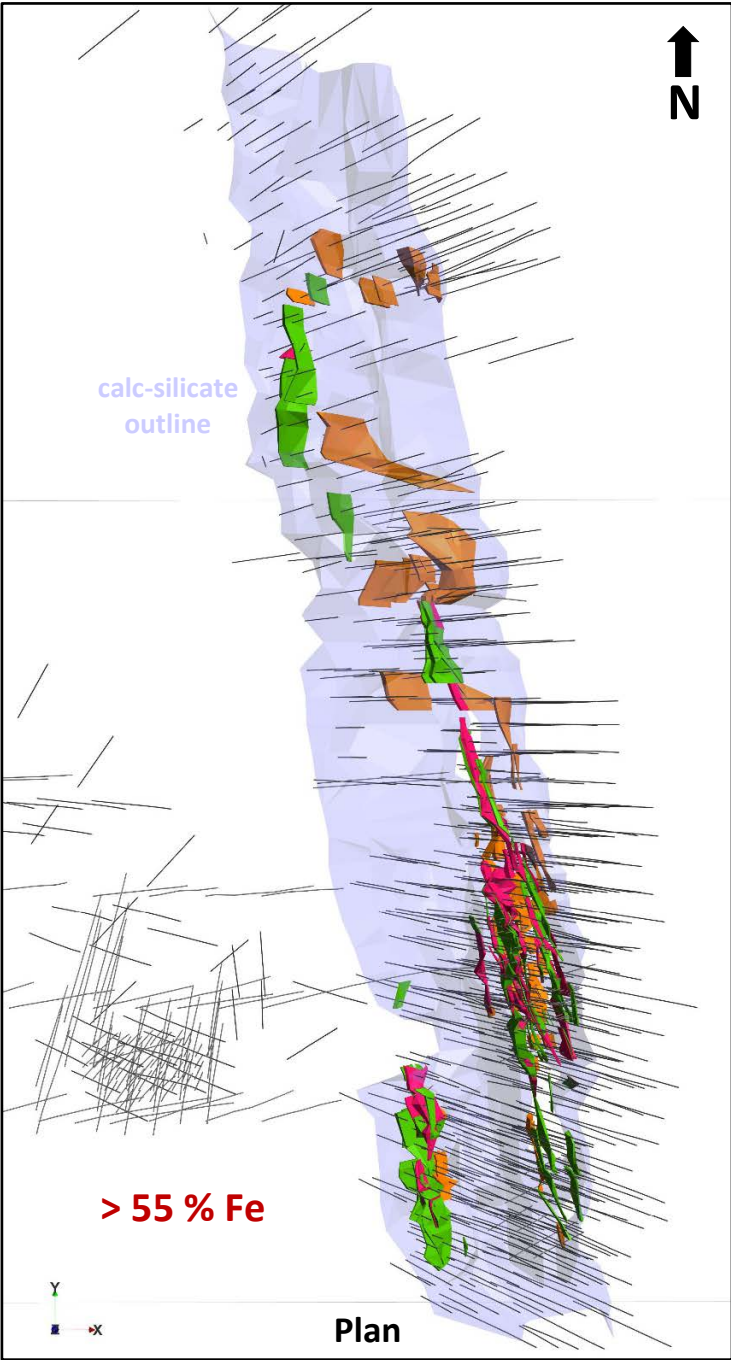
At Weednanna broad zones of magnetite skarn occur near-surface and are weathered to hematite- and goethite- rich ironstone. The weathering process increases the iron content and produces potential DSO that can be mined, crushed and transported to market.

High-grade fresh magnetite-rich skarn also occurs adjacent to, and on the margins of gold mineralisation and may be exploited using underground mining techniques.

Iron mineralisation at Weednanna generally contains low deleterious elements (Si, Al, P, S, LOI) and presents a readily marketable product. Elevated sulphur occurs in discrete areas of the deposit and can be managed to meet market specifications.

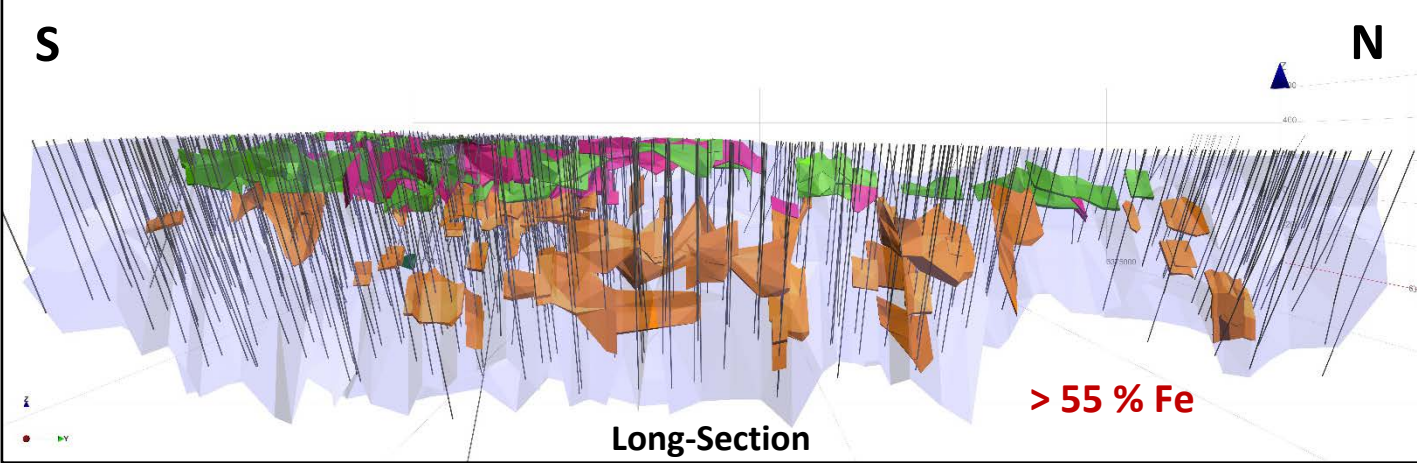
There are several ports located within 200km of the deposit that are capable of exporting iron ore.

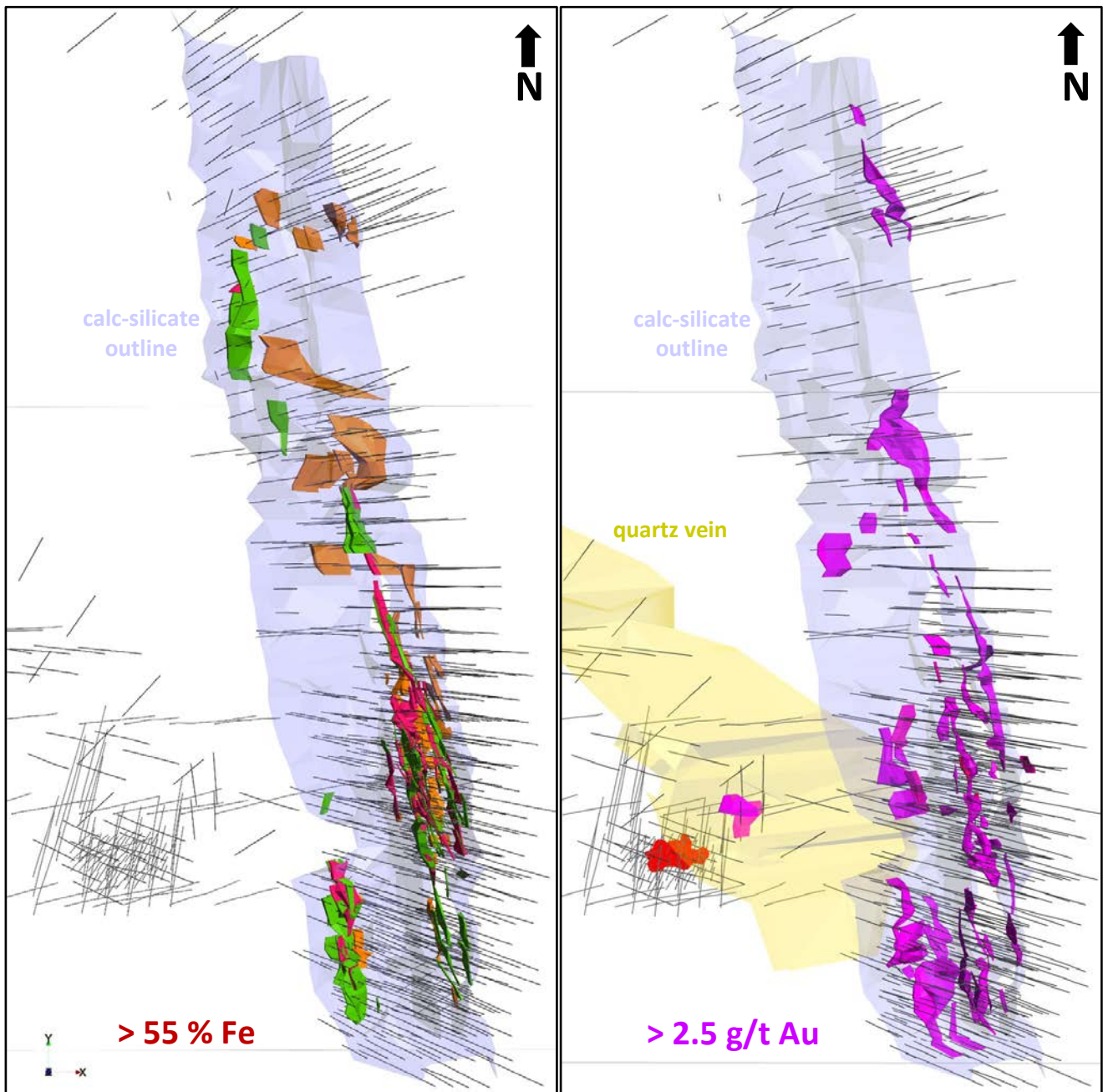




**Figure 8. Weednanna: 3D plan and long-section views of iron domains with calc-silicate outline and drill hole traces**

*Legend-*  
Orange: Fresh magnetite  
Magenta: Oxidized magnetite  
Green: Weathered magnetite





**Figure 9. Weednanna: 3D plan view of iron and high-grade gold domains with geology and drill hole traces**  
(view down, north at top of page)

### Drilling, Sampling and Assaying

Details of the drilling, sampling and assaying techniques are provided in the JORC Code (2012 Edition) Tables (Appendix 1).

### Geological and 3D Modelling

Interpretation of weathering, geology, and iron mineralisation was undertaken on regular spaced cross-sections throughout the deposit by Alliance personnel using Mapinfo and imported into Micromine for 3D wireframe modelling.

The weathering surfaces were sub-divided into cover, saprolite, saprock, and fresh rock domains. The geology was broadly modelled into four main lithological units; calc-silicate, ironstone / magnetite skarn, amphibolite, and granite / gneiss.

Iron domains were sub-divided using the same method and nomenclature used in the 2013 mineral resource estimate. The iron domains modelled were:

- Fresh magnetite
- Oxidised magnetite
- Weathered magnetite +/- hematite/goethite grading to hematite/goethite +/- weathered magnetite

In 2013 a lower iron cut-off grade of 25% Fe was used because ore processing contemplated the production of DSO and magnetite concentrate produced by both DMS and GS. The Alliance mineral resource estimate has used a lower iron cut-off grade of 55 % Fe because production of DSO is contemplated.

The new iron domain wireframes generally conform with the 2013 model, but volumes are significantly lower, with multiple smaller bodies defined by closer-spaced drilling.

The wireframes of various weathering and geology domains were intersected to create sub-domains of waste rock.

The mineral resource area, including the gold mineral resource, has overall dimensions of 1,300m (north) by 600m (east) and had been interpreted to a maximum of 220m depth below surface.

## Grade Estimation

The resource block model was constructed using Studio RM (Datamine) mining software and Isatis v2018 (Geostatistics) geostatistical software after importing the DXF files of the three interpreted iron domains, lithology, and oxidation surfaces.

The model parent block size was 10m(X), 10m(Y) and 5m(Z) and chosen based on a factor of the drill spacing and overall potential open pit and underground mining methods for the deposit. Sub-blocking was also used to ensure appropriate block definition on the boundaries of the modelled domains and was 0.5m(X), 0.5m(Y) and 0.5m(Z).

A composite file was created using a composite length of 1m. The median sample length within the assay dataset is also 1m.

Fe%, Al<sub>2</sub>O<sub>3</sub>%, SiO<sub>2</sub>%, P% and LOI% were estimated using Ordinary Kriging (OK) within the three iron domains. S% was also estimated using OK, but domains were split by oxidation surfaces, matching noticeable changes in grade. Top-cutting was used within each estimation domain to limit the influence of grades during estimation.

Variogram analysis was generated in each of the domains for Fe% and used for Al<sub>2</sub>O<sub>3</sub>%, SiO<sub>2</sub>%, P% and LOI% estimation. Separate variograms were generated for S% within respective domains. The search anisotropy employed was based on both the ranges of the variogram and the drill spacing.

Block model validation was conducted by the following processes – no material issues were identified:

- Visual comparison of block model grades against composite sample grades.
- Global statistical comparison of the estimated block model grades against the de-clustered composite statistics.
- Swath plots were generated to verify local estimation against input data.

The validation steps undertaken indicate that the block estimates are a realistic representation of the source assay data and that the block model volumes are valid in comparison to the modelled interpretation.



## Tonnes Estimation

The Weednanna drill density database consists of 9,715 specific gravity measurements collected from all weathering, geology and iron domains. The data has been collected using the immersion wet/dry, immersion wax coated, pycnometer, and wireline methods (Table 2). A significant drill density database is required for Weednanna because the skarn-altered Hutchison Group meta-sediments are heterogeneous and vary greatly in mineralogy and density.

The 2013 Ironclad iron mineral resource used density data from the Wilcherry Project acquired using the wireline method and pycnometer data (nominally adjusted for porosity) to derive a polynomial equation that used the iron grade (Fe %) to calculate a density (SG) value. This method was considered for use in the current mineral resource however it was not used because there is significant variability in the data likely caused by porosity and cavities.

Average bulk densities were assigned to each weathering, geological and iron domain and coded into the block model.

**Table 2. Summary of Weednanna drill density measurements**

Method	Sample Type	Number of Holes	Number of Measurements
Immersion wet/dry	Core	36	746
Immersion wax coated	Core	1	66
Pycnometer	Pulp	100	497
Wire Line	In Hole	120	8,406

## Resource Classification

The Mineral Resource has been classified into Measured, Indicated and Inferred categories in accordance with the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the 'JORC Code 2012 Edition'). Wireframes were used for Mineral Resource classification and are based on a combination of confidence in assayed grade, geological continuity, and Kriging output (Kriging variance, mean distance of estimated samples and slope of regression). In general, the following metrics were used;

- Measured is defined as mean sample distance <15m with the slope regression of the Kriging estimation greater than 0.8.
- Indicated is defined as mean sample distance 15-30m with the slope regression of Kriging estimation at 0.60 to 0.8.
- Inferred has a slope regression less than 0.65 and within the defined mineralised shoots.

## Metallurgical Factors or Assumptions

This mineral resource estimate uses a 55 % Fe lower cut-off grade because DSO production is contemplated.

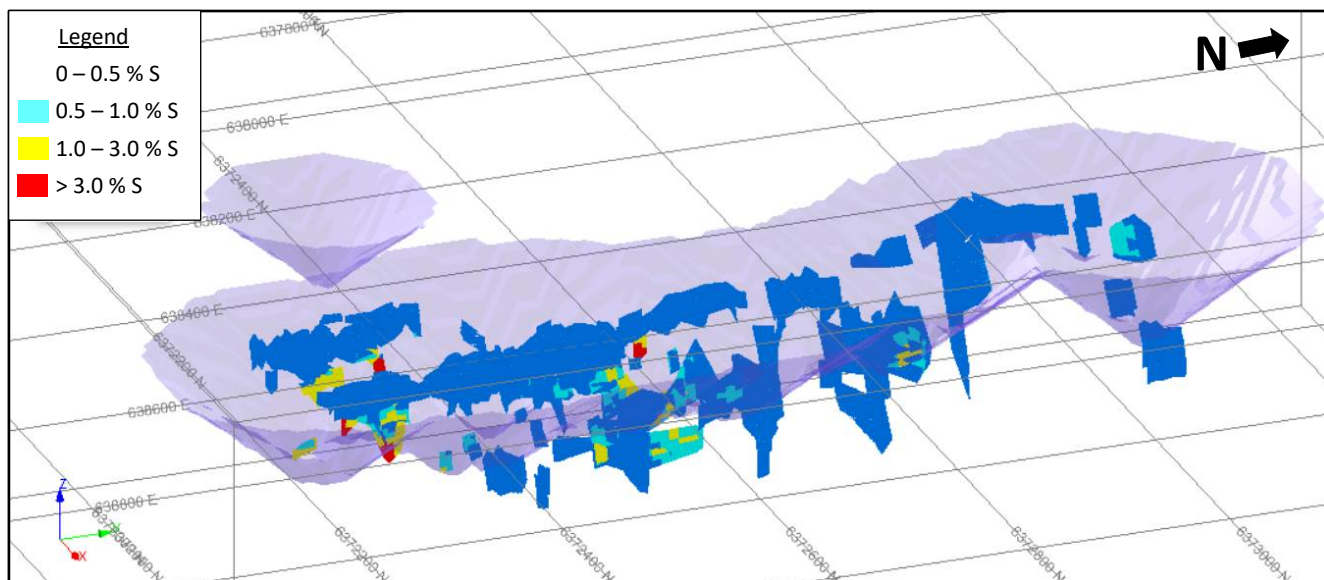
Potential deleterious elements and compounds including Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, S, P, and LOI have been included in the mineral resource estimate. Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, P, and LOI and are within the ranges accepted for DSO products. Elevated sulphur occurs in discrete areas of the deposit (Figure 10) and can be managed to meet market specifications.

Iron will be mined as an accessory mineral to the Weednanna gold mineral resource and consequently iron production costs are incidental or incremental to the overall cost of the operation.

Iron mined by open pit will be crushed and screened prior to transport, whereas underground magnetite may also require DMS to remove waste rock introduced by stope dilution.

Extensive feasibility study level metallurgical test work to concentrate iron using DMS and GS has been completed by Ironclad, with grade recovery relationships established.

Weednanna is located within viable trucking distance of several ports capable of exporting iron ore.



**Figure 10. Weednanna: 3D plan view of sulphur distribution in iron resource**  
(view down to the northwest)

## Reporting

The Mineral Resource reported by Alliance is that proportion of iron contained within A\$175/t for 62% Fe and A\$3,000/oz Au pit shells (>55 % iron & <0.5 g/t Au) and underground potential (>55% iron & <1.5 g/t Au). This satisfies the “reasonable prospect of eventual economic extraction criteria” in accordance with the JORC Code.

For further information on Alliance Resources Ltd please visit the Company’s website at [www.allianceresources.com.au](http://www.allianceresources.com.au) or contact:

This announcement has been authorised for release by the Board.

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## Competent Persons Statements

The information in this report that relates to the Mineral Resource Estimate is based on information compiled by Mr Stuart Hutchin. Mr Hutchin is a Member of the Australian Institute of Geoscientists and is a full-time employee of Mining One Pty Limited. Mr Hutchin has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hutchin consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Exploration Results is based on information compiled by Mr Anthony Gray. Mr Gray is a Member of the Australian Institute of Geoscientists and is a full-time employee of Alliance Resources Ltd. Mr Gray has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gray consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



# Appendix 1

## Weednanna Deposit – JORC 2012 Tables

Section 1 – Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (eg. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	<ul style="list-style-type: none"> <li>Reverse circulation (RC) and diamond drilling programs have been completed at Weednanna since 1997.</li> <li>Weednanna drill hole naming convention is: ddWDttnnn where dd = last two digits of the year, tt = Drilling Method, and nnn = hole number.</li> <li>Drilling Method codes are: DH = diamond hole, RC = RC hole, GC = iron ore grade control RC hole.</li> <li>Sample type for RC holes is drill cuttings.</li> <li>Sample type for diamond holes is NQ to PQ sized drill core.</li> </ul>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<ul style="list-style-type: none"> <li>Industry standard practice has been applied on site to ensure sample representivity. The laboratories have applied appropriate QA-QC to sample preparation and appropriate calibration/QA-QC to analytical instruments.</li> </ul>
	<i>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 (eg. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay')</i>	<ul style="list-style-type: none"> <li>RC drilling was used to obtain 1m samples from which approximately 3kg was pulverised to produce a 40g or 50g charge (depending on laboratory) for fire assay and 10g charge for XRF analysis.</li> <li>Diamond core was cut using fillet, 1/16, 1/8, 1/4, 1/2, or hole core as appropriate to obtain 0.1 to 3.8m samples (average ~1m) from which ~3kg was pulverised to produce a 40g or 50g charge (depending on laboratory) for fire assay and 10g charge for XRF analysis.</li> </ul>
Drilling techniques	<i>Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg. 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.).</i>	<ul style="list-style-type: none"> <li>Reverse circulation drilling was completed using 4", 4 1/2" and 5 3/4" sized hammers with face sampling bit. All RC drilling completed since January 2017 uses a 5 3/4" sized hammer.</li> <li>Diamond drilling was completed using NQ to PQ sized core.</li> </ul>
Drill sample recovery	<i>Method recording and assessing core and chip sample recoveries and results assessed.</i>	<ul style="list-style-type: none"> <li>Sample recovery and quality was logged for all RC holes drilled since 1 January 2017. Sample recovery and quality is recorded for some RC holes drilled between 1997 and 2017.</li> <li>Lost core in diamond holes is recorded during geological logging.</li> </ul>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<ul style="list-style-type: none"> <li>Ground conditions at Weednanna for drilling is generally good.</li> <li>RC drilling is undertaken using auxiliary compressors and boosters to keep the hole dry and maximise sample lift to maintain their representivity.</li> <li>Diamond holes may be drilled using rotary mud or RC pre-collars or triple tube to ensure good sample recovery of poorly or semi-consolidated rock.</li> </ul>
	<i>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.</i>	<ul style="list-style-type: none"> <li>There is no known relationship between sample recovery and grade.</li> </ul>
Logging	<i>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.</i>	<ul style="list-style-type: none"> <li>Since January 2017 all RC and diamond holes drilled by Alliance have been logged by a geologist for recovery, weathering, moisture, colour, lithology, alteration, texture, mineralogy and mineralisation.</li> <li>Between 2017 and 2019 Alliance has systematically completed re-logging of all available RC chips and diamond core to provide detailed data for geological interpretation and 3D modelling. Where drill chips or diamond core were not available for re-logging historic geological logging sheets were re-digitised to ensure the capture of all available geological data.</li> <li>During 2010 five diamond holes were drilled at Weednanna for geotechnical analysis to support an iron open pit. A further nine existing diamond holes were also geotechnically logged. In 2010 MiningOne completed geotechnical definitive feasibility studies based on pit shells up to 150m deep. This report was reviewed by Mining Plus in 2012 and confirmed a comprehensive analysis process had been completed. In 2019 Alliance drilled five diamond holes that have also been geotechnically logged to support mining studies.</li> </ul>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	<ul style="list-style-type: none"> <li>Sample logging is qualitative (e.g. colour) and quantitative (e.g. % minerals) in nature depending on the feature being logged.</li> </ul>

Section 1 – Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
	<i>The total length and percentage of the relevant intersections logged.</i>	<ul style="list-style-type: none"> <li>All holes were logged from start to finish.</li> </ul>
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<ul style="list-style-type: none"> <li>Diamond core was cut with using fillet, 1/16, 1/8, 1/4, 1/2 and hole core samples as appropriate for the core size and length sampled to obtain ~3kg for analysis. 1/4 core sampling is the preferred technique over ~1m intervals for NQ sized core.</li> </ul>
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<ul style="list-style-type: none"> <li>One metre RC samples were split on the drilling rig to produce ~3kg sub-samples for submission to an analytical laboratory. Most samples are dry.</li> </ul>
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<ul style="list-style-type: none"> <li>The sample preparation techniques described above are appropriate to provide representative samples to a laboratory for drying, crushing, pulverising, and subsampling for gold analysis using the fire assay technique or iron analysis using the XRF technique.</li> </ul>
	<i>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</i>	<ul style="list-style-type: none"> <li>Company submitted standards, blanks, and duplicates were inserted for the 2006 –2012 drilling programs.</li> <li>For all drilling programs since 1 January 2017 6% of analysed samples were in the form of Company submitted standards, blanks, or duplicates.</li> </ul>
	<i>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.</i>	<ul style="list-style-type: none"> <li>The sampling measures described above ensured the sampling was representative of the in-situ material.</li> </ul>
Quality of assay data and laboratory tests	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<ul style="list-style-type: none"> <li>The samples sizes are considered appropriate to the grain size of the material being sampled.</li> </ul>
	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<ul style="list-style-type: none"> <li>The analytical laboratory used for gold analysis of the 1997 drilling program is uncertain, but thought to be AMDEL at Thebarton, SA. AMDEL was used for gold analysis of all other historical drilling programs to 2017. Iron analysis was completed by either SGS, AMDEL, or UltraTrace prior to 2017.</li> <li>Between 1 January 2017 and 30 June 2018 Alliance used ALS in Pooraka, SA for all sample preparation and ALS in Perth, WA for all gold analysis (no iron analysis was completed during this period). Since 1 July 2018 Alliance has used Bureau Veritas in Wingfield, SA for all sample preparation and gold and iron analysis. Sample preparation of historic iron ore pulps later used for gold re-assay by Tyranna at AMDEL and Alliance at ALS were prepared by SGS laboratory in Perth, WA.</li> <li>Sample preparation consisted of drying, crushing and pulverising &lt;3kg samples to 85-90% passing -75µm.</li> <li>Gold analysis was completed using the fire assay technique with AAS finish. Most analyses used a 40g charge (AMDEL and Bureau Veritas) or 50g charge (ALS), however some historic iron ore sample pulps were analysed using a 30g charge due to sample size.</li> <li>While the use of a larger charge is preferred metallurgical test work suggests that this is unlikely to have a significant effect on assay results as the gold is fine grained and relatively homogeneous.</li> <li>Fire assay is considered to be a total digestion technique for gold.</li> <li>Iron analysis was completed using the XRF technique. Samples analysed prior to 2017 were tested at either SGS, AMDEL, or UltraTrace for an iron ore suite of elements consisting of Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, CaO, MgO, Mn, P, S, K<sub>2</sub>O, Na<sub>2</sub>O, TiO<sub>2</sub> and LOI. Between 2017 and 1 July 2018 exploration focussed onto gold and no samples were analysed for iron. Since 1 July 2018 Alliance has analysed all iron samples for an extended iron ore suite of elements consisting of Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, CaO, MgO, MnO, P, S, K<sub>2</sub>O, Na<sub>2</sub>O, TiO<sub>2</sub>, Cu, Ni, Co, Cr, Pb, Zn, As, Sn, Sr, Zr, Ba, V, Cl and LOI.</li> <li>XRF is the standard analysis technique used by the iron ore industry and is considered to measure total iron.</li> </ul>
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their deviation, etc.</i>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>



Section 1 – Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
	<i>Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.</i>	<ul style="list-style-type: none"> <li>At AMDEL standard QC procedures include routine analysis of blanks, standards, and duplicate samples with each batch and re-assay of anomalous results.</li> <li>At ALS each fire (usually 84 pots) contains one blank and a minimum of two standards and three replicates to monitor accuracy and precision of results from the individual fire.</li> <li>Bureau Veritas work to documented procedures in accordance ISO 9001 Quality Management Systems. A nominal one in twenty (5%) of all samples are analysed in duplicate. Blanks and reference materials are randomly inserted into every rack of samples.</li> <li>During 2010 Tyranna completed repeat analysis at AMDEL on 1,195 sample pulps from 2007, 2010 and 2012 drilling programs and during 2017 Alliance completed repeat analysis at ALS on 199 (~3%) of RC sample pulps from the 1997 and 1998 drilling programs.</li> <li>Both programs of repeat analyses confirmed the accuracy and precision in the original results.</li> </ul>
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<ul style="list-style-type: none"> <li>Alternative Company geologists have verified the significant results that are tabled in this report.</li> </ul>
	<i>The use of twinned holes.</i>	<ul style="list-style-type: none"> <li>During iron resource definition drilling some RC holes were twinned by diamond holes (PQ and HQ size) when targeting metallurgical samples only. Subsequent comparisons verified accurate sampling and iron laboratory analysis.</li> </ul>
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<ul style="list-style-type: none"> <li>Each sample bag is labelled with a unique sample number assigned at the point of sampling in the field. Sample numbers are used to match analyses from the laboratory to the in-house database containing down hole drill hole data.</li> </ul>
	<i>Discuss any adjustment to assay data.</i>	<ul style="list-style-type: none"> <li>No assay data has been adjusted.</li> </ul>
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other location used in Mineral Resource estimation.</i>	<ul style="list-style-type: none"> <li>All holes drilled since January 2006 have been surveyed by registered surveyors using a DGPS. Expected horizontal and vertical accuracy is +/- 25cm.</li> <li>The survey method of holes drilled prior to 2006 is unknown, however in 2007 the collar location of 19 holes drilled between 1997 and 1999 were located and surveyed by a registered surveyor. These holes returned an average error between the original and surveyed data of less than 1m in the northing and easting supporting the accuracy of the 1997-1999 collar locations.</li> <li>The elevation of historic drill hole collars whose survey method is uncertain and cannot be located for re-survey was determined by a registered surveyor in 2017.</li> <li>All holes drilled between 1997 and 2000 and RC holes 06WDRC001-007 and 07WDRC001-008 were down hole surveyed using a single shot camera.</li> <li>Holes 06WDDH001-002, 06WDRC008-009 &amp; 021, 07WDDH002, and all holes drilled during 2008, 2010, and since 2017 have been accurately down hole surveyed using a gyroscope.</li> <li>Holes 06WDRC010-019 &amp; 022-027, 07WDDH001, and all holes drilled during 2002, 2009, and 2012 were not down hole surveyed.</li> <li>The holes drilled during 2002 will not contribute to a Mineral Resource Estimate. The holes drilled during 2009 and 2012 are relatively short or intersect gold at a relatively shallow depth and shouldn't have a significant impact on the accuracy of a Mineral Resource Estimate.</li> </ul>
	<i>Specification of the grid system used.</i>	<ul style="list-style-type: none"> <li>GDA2020, MGA Zone 53.</li> </ul>
	<i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none"> <li>The elevation (mRL) of all hole locations, including historic holes for which survey accuracy is uncertain and collars cannot be located, have been accurately surveyed by a registered surveyor using a DGPS.</li> </ul>
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	<ul style="list-style-type: none"> <li>Data spacing is listed in the body of the report.</li> </ul>
	<i>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 procedures(s) and classifications applied.</i>	<ul style="list-style-type: none"> <li>The data spacing and distribution is considered sufficient to establish geological and grade continuity appropriate for a Mineral Resource Estimate.</li> </ul>

Section 1 – Sampling Techniques and Data		
Criteria	JORC Code explanation	Commentary
	<i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none"> <li>Where possible 1m split samples were analysed. In some cases 1m split sample pulps were not available and 2m or 4m composite scoop samples were analysed. 13% of samples containing &gt;55% Fe were derived from 2m or 4m composite scoop samples. These samples were collected from 68 holes drilled during 1997, 2009, 2010, 2018, or 2019.</li> <li>No sample compositing has been applied since the start of 2020.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	<ul style="list-style-type: none"> <li>The orientation of sampling has been planned with a view to achieving minimal sampling bias of gold and iron shoots.</li> <li>Gold mineralisation at Weednanna is fine-grained and should not be biased by drilling orientation.</li> <li>Due to the varying geometry of multiple gold and iron shoots at Weednanna some shoots will be intersected by drilling at a steeper angle than others.</li> <li>Most drilling was completed using 60° east and west dipping drill holes with the objective of achieving unbiased sampling of the mineralised shoots.</li> </ul>
	<i>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.</i>	<ul style="list-style-type: none"> <li>The main rock fabric at Weednanna, indicated by high magnetism, strikes broadly north-south and hence most drilling is oriented east-west. As drilling has progressed it has become apparent that most of the calc-silicate stratigraphy dips moderately to steeply east and hence most holes are oriented - 60 degrees towards the west. The near-surface eastern side of the calc-silicate stratigraphy dips steeply west and is tested by east-dipping drill holes.</li> <li>Early drilling at Shoot 1 was oriented east-west and then towards the north. Once the mineralisation was determined to strike east-west and plunge moderately to the west 10m x 10m spaced vertical holes were drilled to best test the mineralised structures.</li> </ul>
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> <li>RC and diamond sub-samples are stored on-site prior to being transported to the laboratory for analysis. Sample pulps are returned to the Company and stored in a secure location.</li> <li>All diamond drilling core is stored either by the Company in a secure location or at the Adelaide Drill Core Reference Library in Tonsley.</li> </ul>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>In May 2018, Mining One completed a site visit to review site protocols; discuss technical aspects with site team and JORC Code requirements; review the technical dataset that will support the mineral resource, including but not limited to, drilling and sampling QAQC, density measurements and assaying methodologies. Mining One's report indicated that all activities associated with the inputs to the mineral resource were conducted to a standard that allows Mining One to report the mineral resource in accordance with the JORC Code 2012.</li> <li>External review or audits conducted by Golders (31/07/2008 and 17/12/2008), SKM (14/09/2010) and Runge (31/07/2012) verify iron sampling techniques, data and QA/QC methods meet JORC standards.</li> </ul>

Section 2 – Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	<ul style="list-style-type: none"> <li>The Weednanna Deposit is part of the Wilcherry Project (Project), comprising EL's 5875, 5931, 6072, 6188, 6379 and 6475, owned by Alliance (100%). The Project is located within the Gawler Craton in the northern Eyre Peninsula, South Australia. There is a royalty of 2% of the NSR payable to Aquila Resources Ltd.</li> </ul>
	<i>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.</i>	<ul style="list-style-type: none"> <li>The tenements are in good standing with no known impediments to obtaining a licence to operate in the area.</li> </ul>

Section 2 – Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties.	<ul style="list-style-type: none"> <li>The area has been explored since the 1970's by companies including Pan Continental Mining, Asarco, Murumba Minerals, Shell Co. of Australia Ltd (later Acacia Resources Ltd), WMC Resources Ltd, AngloGold Australia Ltd, Aquila Resources Ltd, Trafford Resources Ltd, Ironclad Mining Ltd (later Tyranna Resources Ltd).</li> <li>RC and diamond drilling has been completed at Weednanna by the following exploration companies-                             <ul style="list-style-type: none"> <li>1997-1998: Acacia Resources</li> <li>1999: Acacia Resources and AngloGold</li> <li>2000: AngloGold</li> <li>2002: Aquila Resources</li> <li>2006: Trafford Resources</li> <li>2007: Ironclad Mining and Trafford Resources</li> <li>2008-2010: Ironclad Mining</li> <li>2012-2017: Ironclad Mining and Trafford Resources</li> <li>2017-present: Alliance</li> </ul> </li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul style="list-style-type: none"> <li>The geology at Weednanna is characterised by a north striking and moderate to steep east-dipping unit of Paleo-Proterozoic Hutchinson Group sediments, consisting of marl and dolomite with lesser sandstone and minor basalt, which have been metamorphosed under upper amphibolite facies conditions and altered to produce interleaving calc-silicate and magnetite skarn with lesser gneiss.</li> <li>This altered meta-sedimentary package is bounded to the east and west by Archaean Sleaford Complex granite and gneiss. The Archaean rocks appear to truncate the meta-sediments at depth at the northern and southern ends of the deposit, with the meta-sediments extending below current drilling in the central area of the deposit.</li> <li>A keel of north-striking weathered granite of uncertain age occurs near-surface within the Hutchinson Group sediments along most of the deposit area. Granites and minor amphibolite intrude the meta-sedimentary package and are probably associated with the Kimbian Peter Pan Supersuite. Pink potassium feldspar-rich granites, potentially of the Hiltaba Granite suite, intrude the Sleaford Complex on the eastern side of the deposit.</li> <li>Gold mineralisation occurs within both the Archaean Sleaford Complex granite and gneiss and Paleo-Proterozoic Hutchinson Group meta-sediments and is associated with the intrusion of Hiltaba Granites and skarn alteration.</li> <li>Gold was deposited in favourable structural and lithological areas during both the peak metamorphic event and as the host rocks have cooled.</li> <li>Due to the high regional metamorphic temperate during gold emplacement, gold shoots are relatively discrete and high grade.</li> <li>The deposit was assessed for economic concentrations of iron ore by Ironclad Mining (2007-2012) and also contains sub-economic concentrations of silver, bismuth, tin, uranium, lead, and zinc.</li> <li>Iron mineralisation occurs within Paleo-Proterozoic Hutchinson Group meta-sediments as primary magnetite formed by skarn alteration of dolomite, and as secondary hematite, ilmenite, and goethite derived from weathered of magnetite.</li> </ul>
Drill hole Information	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar;</li> <li>elevation or RL (reduced Level - elevation above sea level in metres) of the drill hole collar;</li> <li>dip and azimuth of the hole;</li> <li>down hole length and interception depth;</li> </ul>	<ul style="list-style-type: none"> <li>It is not practical to summarise all of the exploration results used for the Weednanna iron mineral resource estimate.</li> <li>All material drilling and assay result information acquired by Alliance has previously been reported in ASX announcements dated:                             <ul style="list-style-type: none"> <li>3 April 2017</li> <li>10 April 2017</li> <li>28 August 2017</li> <li>30 November 2017</li> </ul> </li> </ul>

Section 2 – Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>hole length.</li> </ul> <p>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.</p>	<ul style="list-style-type: none"> <li>17 January 2018</li> <li>4 April 2018</li> <li>23 April 2018</li> <li>16 July 2018</li> <li>29 November 2018</li> <li>4 March 2019</li> <li>2 April 2019</li> <li>12 June 2019</li> <li>8 July 2019</li> <li>11 October 2019</li> <li>15 April 2020</li> <li>8 May 2020</li> <li>6 August 2020</li> <li>31 August 2020</li> </ul>
Data aggregation methods	In reporting Exploration results, weighting averaging techniques, maximum and/or minimum grade truncation (eg. cutting of high grades) and cut-off grades are usually material and should be stated.	<ul style="list-style-type: none"> <li>The results are weighted averages by sample length. No high-grade cuts have been applied. Results are reported for all intervals of iron greater than 55 % Fe. The mineralised intervals for all material drill holes completed by Alliance may be found in the ASX announcement dated 31 August 2020.</li> </ul>
	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 aggregation should be shown in detail.	<ul style="list-style-type: none"> <li>Lengths of low grade results have been incorporated where the adjacent higher grade results are of sufficient tenor such that the weighted average remains close to or above the lower cut-off grade.</li> </ul>
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	<ul style="list-style-type: none"> <li>No metal equivalents are reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg. 'down hole length, true width not known').</p>	<ul style="list-style-type: none"> <li>The gold and iron shoots at Weednanna vary greatly in geometry due to the skarn-style of mineralisation and remobilisation by weathering. The interpretation of the geometry of these shoots is shown in the figures in the body of this report. Assay results are reported as down hole lengths because the true width is not always known.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul style="list-style-type: none"> <li>Refer to figures in the body of this report.</li> </ul>
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.	<ul style="list-style-type: none"> <li>The mineralised intervals for all material drill holes have been reported in previous ASX announcements.</li> </ul>
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density; groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul style="list-style-type: none"> <li>Metallurgical test work at the Weednanna Gold Deposit is nearing completion. This test work has revealed that gold at Weednanna is fine grained and evenly distributed across all size fractions. The mineralisation contains minor deleterious elements and is not refractory across most of the deposit. At Shoot 1 a mild-refractory component of ore appears to be associated with elevated arsenopyrite. Good gold recoveries in excess of 85-90% should be achievable for most of the deposit by processing through a conventional cyanide leach circuit, however recoveries from Shoot 1 ore may be lower.</li> <li>Iron processing methods considered at Weednanna by Ironclad include direct shipping ore (DSO), gravity separation (GS), and dry magnetic separation (DMS). Extensive test work was completed to determine grade recovery relationships for the DMS and GS processing methods to feasibility study level.</li> <li>Alliance and previous explorers have compiled a comprehensive density database for the Wilcherry Project. This database consists of more than 15,000 measurements collected across all rock types relevant for a Mineral Resource Estimate.</li> <li>The water table at Weednanna is between approximately 40-50 vertical metres depth.</li> </ul>
Further work	The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling	<ul style="list-style-type: none"> <li>Commence feasibility studies to assess the commercial viability of establishing a gold and iron producing operation at Weednanna.</li> </ul>



Section 2 – Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
	<i>areas, provided this information is not commercially sensitive.</i>	

Section 3– Estimation and Reporting of Mineral Resources		
Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<i>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. Data validation procedures used.</i>	<ul style="list-style-type: none"> <li>The survey, sampling and logging data was electronically imported into the resource database. A visual check was also made of the drill traces, assays and logging data in Datamine to ensure that results correlated between drill holes and were in line with the geological interpretation and mineralisation continuity.</li> </ul>
<i>Site visits</i>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.</i>	<ul style="list-style-type: none"> <li>A site visit was completed by Stuart Hutchin between the 1st May and 3rd May 2018 where the Weednanna site and core samples located within the core storage facility were inspected.</li> </ul>
<i>Geological interpretation</i>	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.</i>	<ul style="list-style-type: none"> <li>The confidence in the overall geological interpretation is moderate given the often-irregular distribution of the skarn style of mineralisation, this is normal for this type of deposit. The interpretation on section does however generally show good continuity between the average 20m x 25m drill spacing coverage.</li> <li>Mineralisation occurs within a skarn-altered meta-sedimentary package consisting of marl and dolomite with lesser sandstone. Magnetite-rich skarn formed by iron replacement of the impure dolomitic marble and marl. Where magnetite skarn occurs near-surface it is weathered to hematite- and goethite- rich ironstone. Geological logging of ironstone and magnetite skarn, together with magnetic susceptibility measurements (Magnetism), and iron assay grade were used in the interpretation of the iron domains for Mineral Resource estimation.</li> <li>The composition and variability of the meta-sedimentary protolith, intensity of skarn alteration, and weathering affect the continuity of iron and distribution of iron domains.</li> </ul>
<i>Dimensions</i>	<i>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.</i>	<ul style="list-style-type: none"> <li>The mineralised domains modelled extent over 1,300m strike length, occur within a 300m wide zone, and have an average thickness of approximately 5-10m. The resource domain is located from near the surface topography and extends to a depth of 220m below surface.</li> </ul>
<i>Estimation and modelling techniques</i>	<i>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 availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	<ul style="list-style-type: none"> <li>Mineral Resources estimation was undertaken in Studio RM (Datamine) mining software for the sub-celled volume model and grade estimation was completed with Isatis v2018 (Geovariances) geostatistical software with the following key assumptions and parameters:</li> <li>Ordinary Kriging (OK) interpolation has been applied for the estimation of Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, S and LOI.</li> <li>Extreme values were managed by upper grade capping based on statistical assessment evaluated for all variables and domains. Consideration was also given to the metal content above the top cap value.</li> <li>All elements were estimated into the three iron mineralisation domains within the identified lithologies. The S estimate was sub-divided into obvious oxidation domains. The boundaries between each orientation domain were treated as hard boundaries.</li> <li>Data compositing for estimation was set to 1m, which matches the majority of drill hole sample lengths (1m).</li> <li>Variogram analysis was generated for Fe and S within the respective domains.</li> <li>Block sizes of 10m x 10m x 5m with sub-blocks of 0.5m x 0.5m x 0.5m. The search anisotropy employed was based on both the ranges of the variogram and the drill spacing.</li> <li>No assumptions have been made about the correlation between variables. All variables are comparably informed and</li> </ul>

Section 3– Estimation and Reporting of Mineral Resources		
Criteria	JORC Code explanation	Commentary
		<p>independently estimated.</p> <ul style="list-style-type: none"> <li>Block model validation was conducted by the following processes – no material issues were identified:                             <ul style="list-style-type: none"> <li>Visual comparison of block model grades against composite sample grades.</li> <li>Global statistical comparison of the estimated block model grades against the declustered composite statistics.</li> <li>Swath plots were generated, by northing and RL.</li> </ul> </li> <li>This is considered appropriate for the estimation of the Mineral Resource.</li> </ul>
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	<ul style="list-style-type: none"> <li>The resource tonnages have been reported on a dry basis.</li> </ul>
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<ul style="list-style-type: none"> <li>The resources were reported above a 55% Fe cut-off and within A\$175/t for 62% Fe pit shell for the upper sections of the resource and above a 55% Fe below the pit shell for the deeper resources. This is assessed as reasonable given the proposed combination of open pit and underground mining methods.</li> </ul>
Mining factors or assumptions	<i>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.</i>	<ul style="list-style-type: none"> <li>Mining selection has been considered in the calculation of the cut-off grade parameters and in the constraint of the mineral resource within the pit shell.</li> <li>No mining factors have been applied to the Mineral Resource.</li> </ul>
Metallurgical factors or assumptions	<i>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.</i>	<ul style="list-style-type: none"> <li>This mineral resource estimate uses a 55 % Fe lower cut-off grade because DSO production is contemplated.</li> <li>Potential deleterious elements and compounds Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, S, P, and LOI have been included in the mineral resource estimate. Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, P, and LOI are within the ranges accepted for DSO products. Elevated sulphur occurs in discrete areas of the deposit and can be managed to meet market specifications.</li> <li>Iron mined by open pit will be crushed and screened prior to transport, whereas underground magnetite may also require DMS to remove waste rock introduced by stope dilution.</li> <li>Extensive feasibility study level metallurgical test work to concentrate iron using DMS and GS has been completed by Ironclad, with grade recovery relationships established.</li> <li>Weednanna is located within viable trucking distance of several ports capable of exporting iron ore.</li> </ul>
Environmental factors or assumptions	<i>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.</i>	<ul style="list-style-type: none"> <li>A mining license approval will need to be granted prior to mining activities taking place that would include the positioning of a waste dump, tailings storage facility and other infrastructure.</li> </ul>
Bulk density	<i>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. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials</i>	<ul style="list-style-type: none"> <li>A total of 9,715 bulk densities for the ore and waste rock types were estimated using a combination of the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight)), waxed and non-waxed, pycnometer and downhole geophysical methods. Density values were coded into the block model based on lithology, mineralised domain and oxidation state types.</li> </ul>

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Classification	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (ie 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).</i></p> <p><i>Whether the result appropriately reflects the Competent Person’s view of the deposit.</i></p>	<ul style="list-style-type: none"> <li>• Wireframes used for Mineral Resource classification are based on a combination of confidence in assayed grade, geological continuity, and Kriging output (Kriging variance, mean distance of estimated samples and slope of regression).</li> <li>• In general,                             <ul style="list-style-type: none"> <li>▪ Measured is defined as mean sample distance &lt;15m with the slope regression of the kriging estimation greater than 0.8.</li> <li>▪ Indicated is defined as mean sample distance 15-30m with the slope regression of kriging estimation at 0.60 to 0.8.</li> <li>▪ Inferred has a slope regression less than 0.65 and within the defined mineralised shoots.</li> </ul> </li> <li>• The Mineral Resource classification reflects the Competent Persons view on the confidence and uncertainty of the Mineral Resource.</li> </ul>
Audits or reviews	<p><i>The results of any audits or reviews of Mineral Resource estimates.</i></p>	<ul style="list-style-type: none"> <li>• No audits or reviews are available for the Weednanna iron deposit.</li> </ul>
Discussion of relative accuracy/ confidence	<p><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate 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.</i></p> <p><i>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.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<ul style="list-style-type: none"> <li>• There is high geological confidence of the spatial location, continuity, and estimated grades of the modelled domains within the Mineral Resources. Minor, local variations are expected to occur on a sub-25m scale that is not detectable by the current drill spacing.</li> <li>• Global declustered statistics of the composite databases on a domain basis were compared against the block model. Block model estimates were within 5% of the composite database.</li> <li>• Local swath plots were undertaken for each deposit. All plots showed appropriate smoothing of composite samples with respect to estimated block grades.</li> </ul>