

2 December 2019

ASSAYS AND EM SURVEYS CONFIRM MASSIVE SULPHIDE SYSTEM AT CHIANTI-RUFINA

HIGHLIGHTS

- **Assays confirm massive sulphide mineralisation:**
Upper Plate: CHDD001: 61.4m-61.9m: 6.0% Zn, 0.7% Pb, 0.2% Cu, 14.1 g/t Ag
Lower Plate: CHDD002: 79.8m-80.3m: 1.9% Cu, 2.2% Zn, 1.0% Pb, 37.6 g/t Ag
CHDD002: 116.4m-120m: 1.0% Cu, 4.9 g/t Ag
- **Down Hole EM (“DHEM”) indicates that only the fringe of the upper plate was intersected and that the upper plate is part of a stacked lode above the lower plate**
- **The lower plate remains open and is providing a much stronger EM response (10k siemens DHEM vs 2k siemens Fixed Loop EM (“FLEM”)) indicating higher pyrrhotite-chalcopyrite Cu mineralisation**
- **There is potential for further stacked lodes beneath the lower plate**
- **Six larger FLEM plates have been generated nearby to Chianti associated with outcropping gossans, magnetic anomalies and Versatile Time EM (“VTEM”) anomalies – indicating potential for a number of VMS deposits**

Dreadnought Resources Limited (“Dreadnought” or “the Company”) is pleased to announce that assay results have confirmed significant VMS mineralisation at Chianti. In addition, DHEM results indicate Chianti is comprised of stacked lodes. The lower plate is showing a much stronger EM response and has the potential for further stacked loads below it. The DHEM survey also shows that the upper plate is located further to the south than expected.

At Rufina, FLEM surveys generated an additional six plates, all larger than Chianti. The Rufina plates are associated with gossans and/or strong magnetic anomalies. This further highlights the potential of Chianti-Rufina to host a number of VMS deposits.

Dreadnought Managing Director, Dean Tuck, commented *“Our VMS work in 2019 has been a success. At Chianti, we have already identified significant VMS mineralisation in multiple stacked lodes. Assay results confirm the tenor of historical ACM intercepts at Chianti and are aligned with the previously reported massive sulphide intervals. Our targeting approach has also been validated leading to six additional large drill targets being identified. It is clear that the area could host a number of VMS deposits and we look forward to follow up drilling at Chianti and the nearby targets in 2020.”*

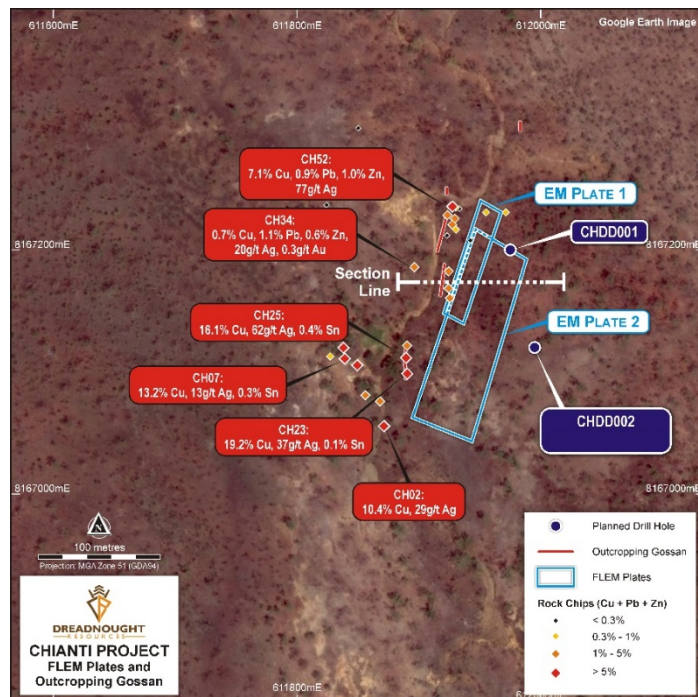


Figure 1: Massive sulphide from CHDD001 61.4m-61.9m grading 6.0% Zn, 0.7% Pb, 0.2% Cu, 14.1 g/t Ag.

Background on the Chianti VMS Target

Chianti was originally defined by Australian Consolidated Minerals (“ACM”) in 1972. An airborne VTEM survey flown in 2015 highlighted a conductor beneath the 1972 ACM drilling.

A ground FLEM survey was completed over the outcropping gossans and historical drilling covering ~20% of the VTEM conductor and identified two strong EM plates. The upper plate (EM Plate 1) was modelled at ~100m x 40m with a moderate to high conductivity of 900 siemens. The top of the upper plate was modelled at ~25m below surface and lined up with the historical ACM drilling (see Figure 3).



The lower EM plate (EM Plate 2) was modelled at ~160m x 80m with a high conductivity of 2,050 siemens and appears to be fault offset in section view extending to a depth of ~150m (See Figures 3 and 4).

The plates were diamond drilled (CHDD001 and CHDD002 respectively) as designed. Both holes intersected massive sulphide mineralisation within a sequence of bimodal volcanics, potential minor mafic intrusives and minor siliciclastic lithologies and showed classic VMS textures and alteration.

A DHEM survey was carried out over each hole.

In addition, three FLEM surveys were conducted over several anomalies within the interpreted VMS horizon as identified by outcropping gossans, magnetic anomalies and VTEM anomalies.

Figure 2 (Top): Plan view of the rock chips with assays, EM Plates 1 and 2 (blue) and outcropping gossans (bright red).

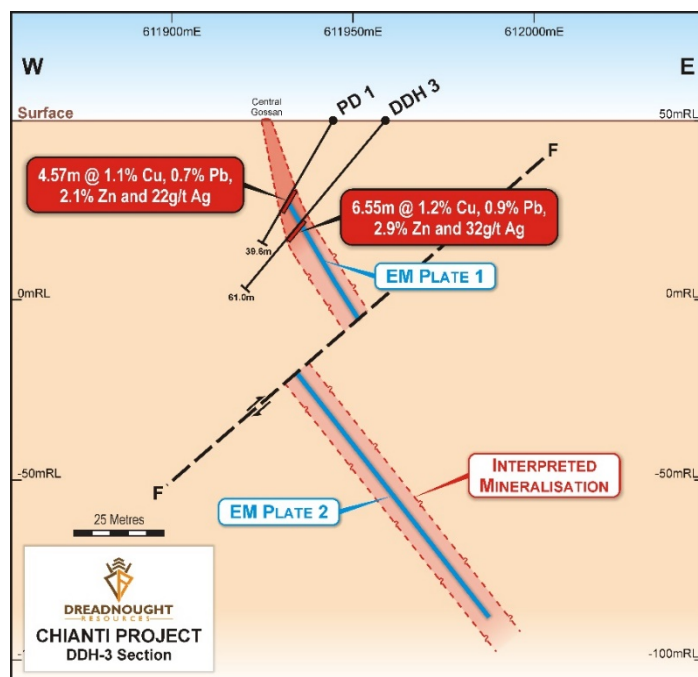


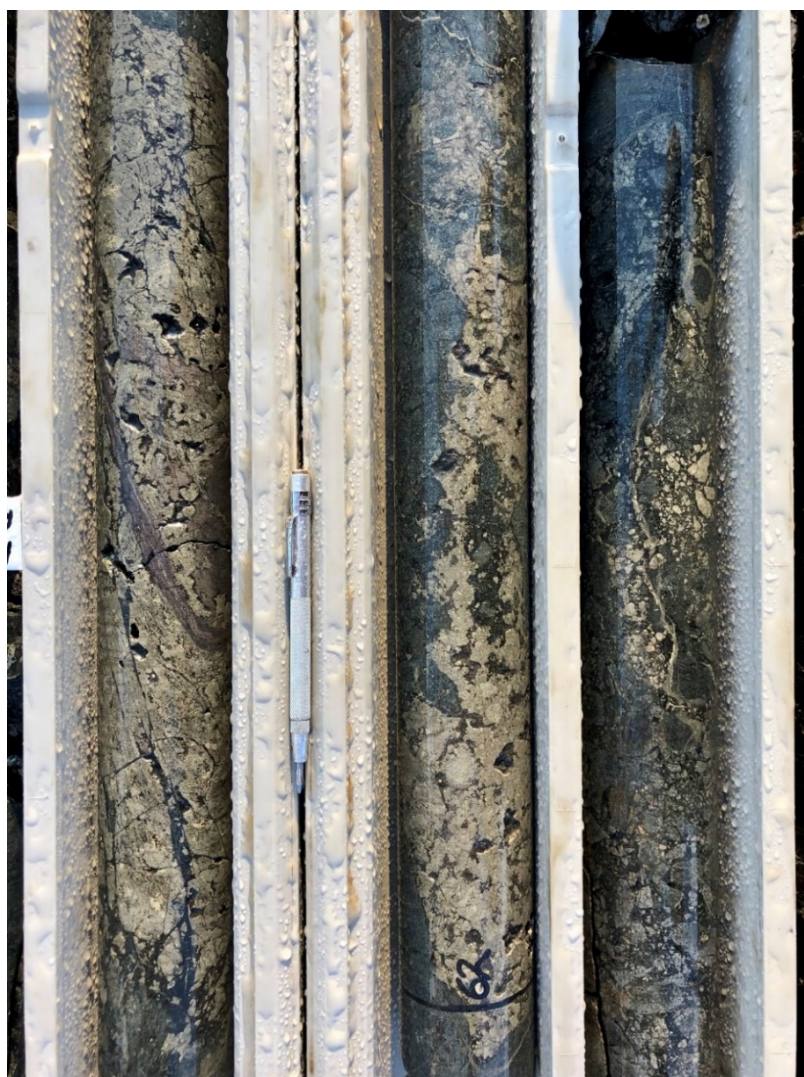
Figure 3 (bottom): Cross Section through Chianti showing EM Plates 1 and 2, historical drilling and outcropping gossan.

Chianti Diamond Drilling Assays: Diamond Drill Hole CHDD001 (Upper Plate)

CHDD001 Description	From (m)	To (m)	Interval (m)	Zn %	Pb %	Cu %	Au g/t	Ag g/t
Stringer Zone	55.0	57.0	2.0	-	-	0.1	-	1.0
	59.0	60.5	1.5	-	-	-	0.4	-
	61.0	61.4	0.4	-	-	0.2	-	1.2
Massive/Semi Massive*	61.4	62.4	1.0	3.3	0.3	0.2	-	7.8
Collapse Breccia	62.4	63.5	1.1	0.1	-	-	-	1.0
*including	61.4	61.9	0.5	6.0	0.7	0.2	-	14.1

Table 1: Table showing the previously released geological intervals and resulting assay results.

Diamond drill hole CHDD001 was drilled into the upper plate at a -60 degree angle with an azimuth of 270 degrees to a depth of ~75m. The hole intersected a sequence of bimodal volcanics, potential minor mafic intrusives and minor siliciclastic lithologies. Mineralisation consisted of an intensely altered stockwork zone with stringers and disseminated sulphides. Alteration consisted of intense



chlorite silica alteration with locally significant bleaching potentially indicating clay alteration. Below the stockwork zone was massive to semi-massive sulphide mineralisation comprised of pyrite, sphalerite, galena, minor chalcopyrite and pyrrhotite.

Above the massive to semi-massive sulphide zone was a zone of sulphide replacement breccia consisting of subrounded to subangular clasts of massive sulphide, rhyolite and intermediate volcanics. This sequence of lithology, mineralisation and alteration is a classic VMS sequence.

Figure 4: Massive, semi-massive and sulphide replacement breccia from CHDD001 61.5m - 63.5m.

Chianti Diamond Drilling Assays: Diamond Drill Hole CHDD002 (Lower Plate)

CHDD002 Description	From (m)	To (m)	Interval (m)	Zn %	Pb %	Cu %	Au g/t	Ag g/t
Massive	79.8	80.3	0.5	2.2	1.0	1.9	0.1	37.6
Semi Massive	80.3	82.5	2.2	0.6	0.2	0.3	0.1	8.8
Sulphidic sediments	113.0	116.4	3.4	0.1	-	0.2	-	2.4
Massive	116.4	120.0	3.6	-	-	1.0	-	4.9
Stringer Zone	120.0	122.0	2.0	-	-	0.1	-	-

Table 2: Table showing the previously released geological intervals and resulting assay results.

Diamond drill hole CHDD002 was drilled into the lower plate at a -60 degree angle with an azimuth of 270 degrees to a depth of 135.8m. The hole intersected two sulphide zones. An Upper Zone (79.8m to 82.8m) consisting of massive and semi massive sulphides within a black, fine grained, sulphide



bearing sediment; and a Lower Zone (108.0m to 122.0m) consisting of a fine grained, sulphide bearing sediment which transitioned into massive sulphides and finished in an altered footwall stringer zone.

CHDD002 intersected similar lithologies to CHDD001, with a series of bimodal volcanics, siliclastic sediments and minor late stage mafic intrusives intersected. Both mineralised zones were closely associated with intensely altered stockwork zones in their footwall positions with stringers and disseminations of various sulphides. Alteration consisted of intense chlorite and silica alteration with localised bleaching. Black, fine grained, sulphide bearing sediments were also intersected within the mineralised sequence and these sediments showed evidence of folding and thrusting.

Figure 5: Massive and semi massive sulphides from the Upper Zone of CHDD002 with 79.8m-80.3m grading 1.9% Cu, 2.2% Zn, 1.0% Pb, 37.6 g/t Ag and 0.1 g/t Au



Figure 7: Massive sulphides in the Lower Zone of CHDD002 with 116.4m-120m grading 1.0% Cu, 4.9 g/t Ag

DHEM Results

Modelling of the DHEM data from CHDD001 and CHDD002 indicates the following key points:

- CHDD001 intersected the fringe of the upper plate, which now appears to sit further south;
- The upper zone in CHDD002 is connected to the upper plate drilled by CHDD001, forming a stacked lode;
- Logging and DHEM indicate that the pyrrhotite-chalcopyrite Cu rich zones are more conductive, while Zn-Pb produces a weaker EM anomaly;
- The upper plate had an original FLEM response of 900 siemens (Zn-Pb response) and the lower plate 2,050 siemens. The DHEM is now showing the lower plate with 10,000 siemens

(pyrrhotite-chalcopyrite Cu response).

Accordingly, the lower plate remains open, has a strong Cu response, has a stacked lode above it and potentially has additional stacked lodes below it.

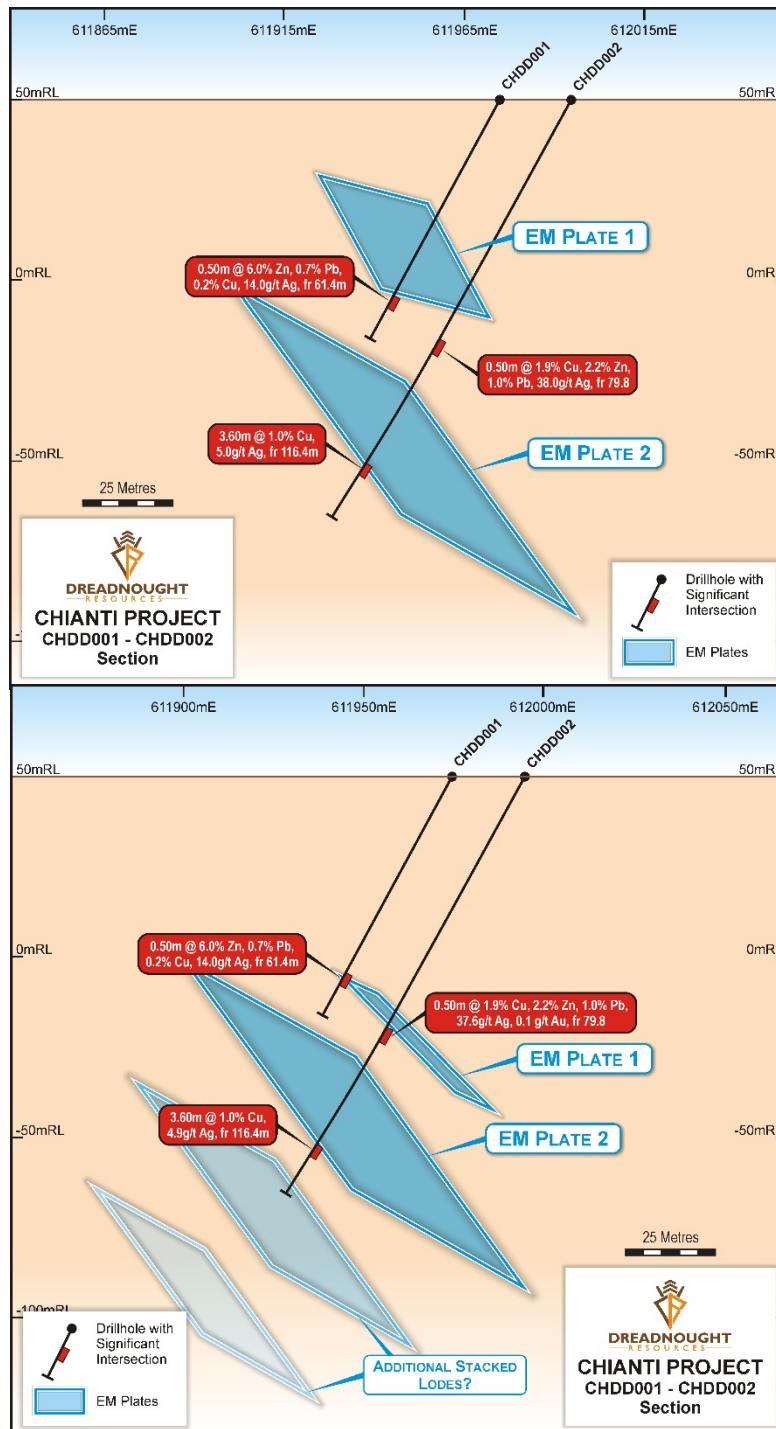


Figure 7: Section view of the original FLEM plates (top) and remodelled plates (bottom) showing both holes piercing the original plates as designed (top) and the remodelled upper plate aligning with the upper massive sulphide intercepts (bottom). This highlights the potential for further stacked lodes and that CHDD001 did not pierce the lower plate horizon (bottom).

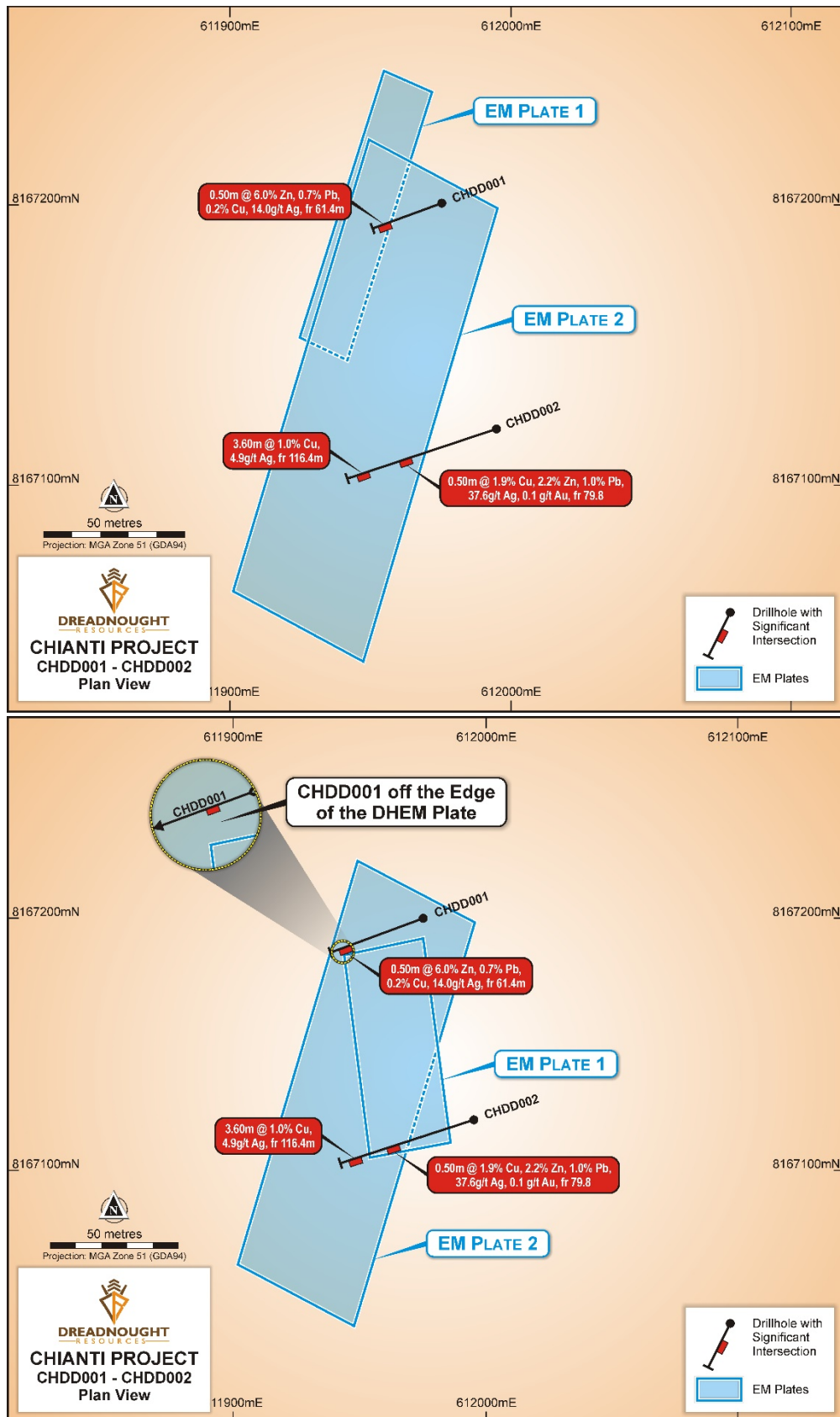


Figure 8: Plan view of the original FLEM plates (top) and remodelled plates (bottom) showing that both holes pierced the original plates as designed (top) but that CHDD001 clipped the edge of the remodelled upper plate, CHDD002 intersected both the upper and lower plates and the upper plate shifting south (bottom).

Chianti-Rufina FLEM Results

Diamond drilling at Chianti confirmed both the VMS style of mineralisation and the approach on how to target massive sulphide bodies within the area. Key learnings include:

1. The massive sulphide mineralisation is comprised of significant amounts of highly magnetic pyrrhotite;
2. The VMS horizon is expressed as a sulphide replacement within a reduced sediment package;
3. The VMS horizon is located between turbiditic sediments and a dominantly mafic to bi-modal volcanic sequence.

In order to maximise our use of the available field season, FLEM surveys were conducted over approximately 40% of the Chianti-Rufina area targeting outcropping gossans, magnetic anomalies and or existing VTEM anomalies within the interpreted VMS horizon.

Six discrete late time FLEM conductors were identified associated with outcropping gossans and magnetic anomalies. Several of the plates are larger than Chianti, further highlighting the potential of this area to host multiple VMS deposits. All FLEM anomalies present priority drill targets in addition to the follow up drilling required at Chianti.

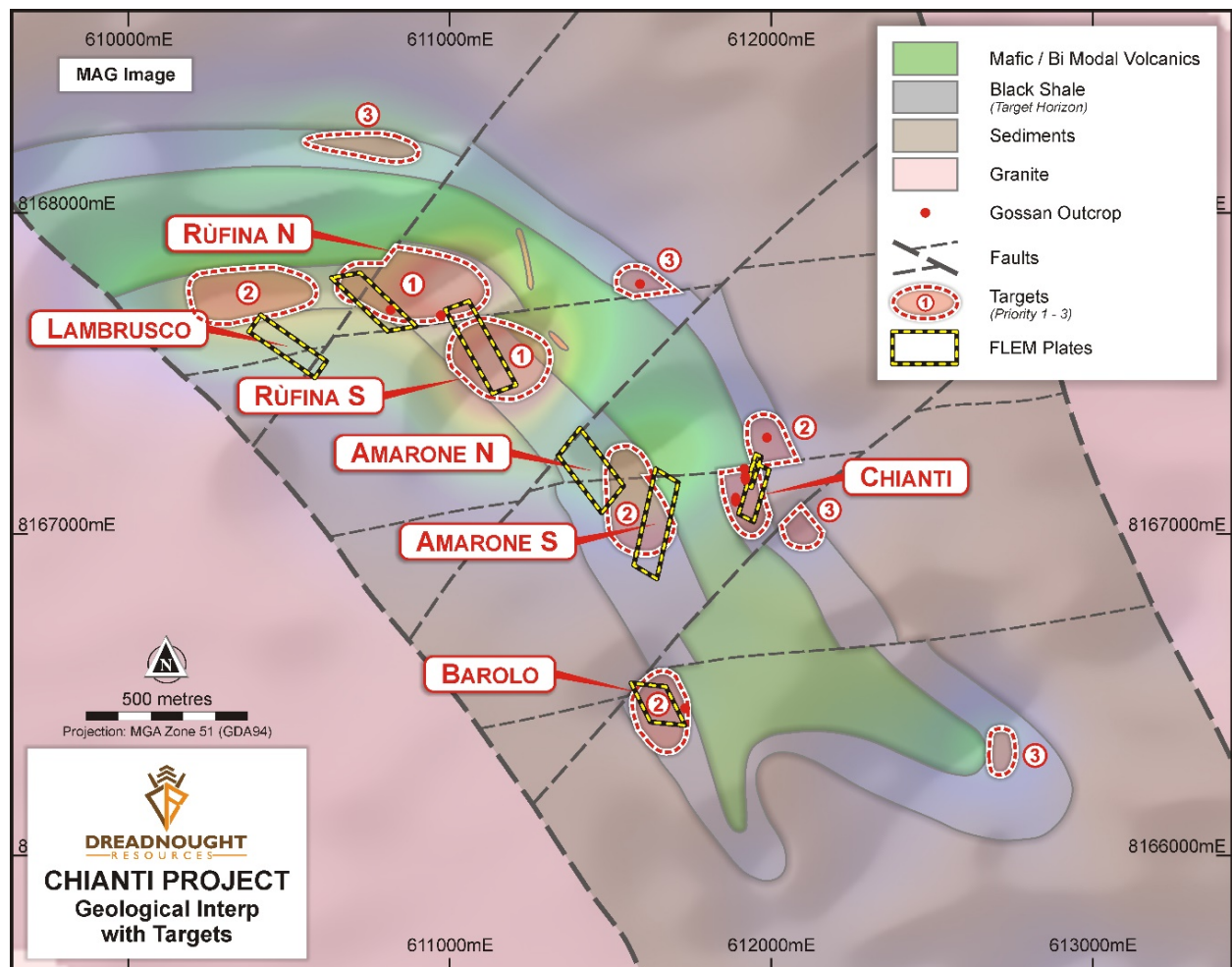


Figure 9: Map highlighting the FLEM plates and anomalies identified within the prospective VMS horizon over a background image of geological interpretation and magnetics.



Chianti-Rufina Geochemical Survey

The results from soil sampling at the Chianti-Rufina area are expected in December 2019.

For further information please refer to previous ASX announcements:

- 13 June 2019 *High grade Cu-Ag-Sn results from the Chianti VMS target*
- 16 August 2019 *Further high-grade rock chip results from Chianti VMS target*
- 18 September 2019 *Tarraj-Yampi drilling to commence in September 2019*
- 10 October 2019 *Massive Sulphides Confirmed in Upper EM Plate at Chianti VMS Target*
- 15 October 2019 *Massive Sulphides Confirmed in Lower EM Plate at Chianti VMS Target*
- 25 October 2019 *Emerging VMS Camp around the Chianti VMS Prospect*

RECENT AND UPCOMING NEWSFLOW

Late November/December: Drilling at Illaara – Lawrence's and CRA Homestead

December: Receive assay and down hole EM results from drilling at Grants

December: Receive surface geochemical results from Chianti-Rufina

December: Receive surface geochemical and geophysical results from Grants and Tarraji

23 December: General Meeting

Late December: Issue of shares to directors and management if approved by shareholders

January/February: Receive assay results from Illaara drilling – Lawrence's and CRA Homestead

February: Illaara VMS drill target generation work including surface geochemistry and geophysics

February: Commence drilling at Rocky Dam

March: Commence drilling at Illaara Central

Dreadnought looks forward to reporting a strong news flow for the remainder of 2019 and into 2020.

~Ends~

For further information please contact:

Dean Tuck

Managing Director

Dreadnought Resources Limited

E:dtuck@dreadnoughtresources.com.au

Nick Day

Company Secretary

Dreadnought Resources Limited

E:info@dreadnoughtresources.com.au

Competent Person's Statement

The information in this announcement that relates to geology and exploration results and planning was compiled by Mr. Dean Tuck, who is a Member of the AIG and a director and shareholder of the Company. Mr. Tuck has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Tuck consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

INVESTMENT HIGHLIGHTS

Tarraji-Yampi Ni-Cu-Au Project

Dreadnought controls the second largest land holding in the highly prospective West Kimberley located only 85kms from Derby, Western Australia. The project area has been locked up as a Defence reserve since 1978 and was only recently opened under the Commonwealth Government's coexistence regime that balances Defence needs with the requirements of others including Aboriginal groups, the resources industry, pastoralists and State Governments.

The Tarraji-Yampi Ni-Cu-Au Project presents a rare first mover opportunity in Western Australia with known outcropping mineralisation and historic workings from the early 1900s which have seen no modern exploration.

Three styles of mineralisation occur at Tarraji including: volcanogenic massive sulphide ("VMS"); Proterozoic Cu-Au ("IOCG"); and magmatic sulphide Ni-Cu-PGE. Numerous high priority nickel, copper and gold drill targets have been identified from recent VTEM surveys, historical drilling and surface sampling of outcropping mineralisation.

Illaara Au-Cu-Zn Project:

The Illaara Au-Cu-Zn Project is located 160km northwest of Kalgoorlie-Boulder in the Yilgarn Craton and covers 75kms of strike along the Illaara Greenstone Belt. Illaara is prospective for typical Archean mesothermal lode gold deposits and Cu-Zn VMS mineralisation.

The project was acquired from Newmont Goldcorp who defined several camp-scale targets which were undrilled due to a change in corporate focus. Prior to Newmont Goldcorp, the Illaara greenstone belt was held predominantly by iron ore explorers and has seen minimal gold and base metal exploration since the 1990s. Illaara contains several drill ready gold targets and known VMS horizons which could produce exciting drill targets with the efficient and effective application of modern exploration technology.

Rocky Dam Au-Cu-Zn Project:

The Rocky Dam Au Project is located 45kms east of Kalgoorlie-Boulder in the Eastern Goldfields Superterrane of Western Australia. Rocky Dam is prospective for typical Archean mesothermal lode gold deposits and Cu-Zn VMS mineralisation.

The project has known gold and VMS occurrences with drill ready gold targets based on 1990s mineralised gold intercepts which have not been followed up.



Hole ID	Easting	Northing	RL	Dip	Azimuth	EOH	Status
CHDD001	611975	8167200	50	-60	270	75.3m	Completed
CHDD002	611995	8167120	50	-60	270	135.8m	Completed

Table 3: Drill holes completed and underway at the Chianti Prospect. Coordinates are UTMz51, GDA 94

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

JORC TABLE 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Diamond core sampling intervals were nominally 1m, but within the mineralised horizons they ranged from 0.4 to 1.4 depending on lithological contacts. At Chianti, HQ quarter core was submitted for analysis. At Grants, HQ and NQ half core was submitted for analysis. All core was systematically cut slightly offset of the orientation line All drilled intervals were metre marked with any core loss recorded. Over 95% of core was recovered with most loss in the upper regolith. QAQC measures included duplicates and inserting blanks and appropriate OREAS standards within the mineralised zones. Samples were submitted to ALS in Perth for cutting, sample prep, analysis and over range analysis where required. Fixed Loop EM (FLEM) surveyed at 25m and 50m station spacing with 50m and 100m spaced lines. FLEM stations were planned perpendicular to geological strike of target horizons. Down Hole EM (DHEM) surveyed at 1m to 10m intervals. <p>Historical Exploration</p> <ul style="list-style-type: none"> WMC completed diamond drilling at Yampi in the 1950s. The drilling intersected copper mineralisation, but sampling techniques are not known. ACM completed percussion and diamond drilling at Chianti in the 1970s. The drilling intersected base metal mineralisation, but sampling techniques are not known. Versatile time domain electromagnetic (VTEM) and aeromagnetic data acquired for Rio Tinto Exploration in October 2015 were flown by UTS Geophysics using an A-star 350 B3 helicopter with

Criteria	JORC Code explanation	Commentary
		a VTEM max receiver and transmitter and Geometrics caesium vapour magnetic sensor.
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	<p>Current Exploration</p> <ul style="list-style-type: none"> Triple tube HQ Diamond Drilling Down hole survey was completed by an Axis Mining Technology Champ Discoverer every 30m down hole. <p>Historical Exploration</p> <ul style="list-style-type: none"> Diamond drilling at Grants and Wilsons, percussion and diamond drilling at Chianti.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Diamond core recoveries are recorded during drilling and reconciled during core processing. The core length recovered is measured for each run and recorded which is used to calculate core recovery as a percentage. Measures taken to maximise core recovery include using appropriate core diameter and shorter barrel length through the weathered zone. Core recoveries averaged over 95%. Core loss generally occurred in the regolith and weathered bedrock and should have no material impact on the assay results. <p>Historical Exploration</p> <ul style="list-style-type: none"> Not known.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Geological logging is carried out on all drill holes with lithology, alteration, mineralisation, structure and veining recorded. All logging is qualitative in nature, even when attempting to approximate sulphide percentages. All drill holes are logged in their entirety <p>Historical Exploration</p> <ul style="list-style-type: none"> Not known.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the 	<p>Current Exploration</p> <ul style="list-style-type: none"> HQ core was cut into quarters for analysis with half core and quarter core preserved except where the duplicate quarter core was submitted in the mineralised zones where only half core remains. For first pass base metals exploration, quarter core is considered appropriate and preserves material for further testing and analysis. Core through the mineralised zones was cut and sampled on site and then put into sample bags as a precaution in core transport. All mineralised zones had a duplicate (second quarter core) sample submitted to ensure representivity. Duplicate performance was acceptable and supported the appropriateness of

Criteria	JORC Code explanation	Commentary
	<i>grain size of the material being sampled.</i>	<p>the sampling technique.</p> <p>Historical Exploration</p> <ul style="list-style-type: none"> Not known.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i> 	<p>Current Exploration</p> <ul style="list-style-type: none"> All samples were submitted to an industry leading accredited laboratory – ALS Laboratories in Perth. One or more duplicate (second quarter core) were taken in all mineralised intervals, blanks were inserted after high grade intervals to test the quality sample preparation and suitable OREAS standards (nearest to marginal grades of an equivalent style of mineralisation) to test the quality of instrument calibration. The above are in addition to ALS standard QAQC procedures. All QAQC results were within acceptable thresholds. FLEM Parameters: <ul style="list-style-type: none"> Contractor SGC Niche Acquisition Configuration Fixed-Loop EM (FLEM) Tx Loop size 200 x 300 m, 200 x 350 m and 200 x 400 m Transmitter TTX2 Receiver Smartem24 Sensor Smart Fluxgate Line spacing 50 and 100 m Line bearing E/W and NE/SW Station spacing 25 and 50 m Tx Freq. 2.0833 Hz Duty cycle 50% Current 16-24 Amp stacks 64 Reading minimum 2 repeatable readings per station DHEM Parameters: <ul style="list-style-type: none"> Contractor SGC Niche Acquisition Configuration Down-hole EM (DHEM) Tx Loop size 180 x 250 m and 200 x 400 m Transmitter TTX2 Receiver Smartem24 Sensor DigiAtlantis Station spacing 1 to 10 m Tx Freq. 1 Hz Duty cycle 50% Current 29 Amp stacks 64 Reading minimum 2 repeatable readings per station <p>Historical Exploration</p> <ul style="list-style-type: none"> Not known.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> 	<p>Current Exploration</p> <ul style="list-style-type: none"> All significant mineralised intervals have been inspected by the Exploration Manager and Managing Director.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> No twinned holes at this time, although these holes themselves tested historical drilling results, but without knowing the exact locations of the historical intercepts can not be considered twin holes. All data is entered into electronic data entry templates on site and uploaded to a database once reception is available. No adjustments have been made to assay data. <p>Historical Exploration</p> <ul style="list-style-type: none"> No verification of historical drilling has been made at this time. There is no core or samples preserved on site or in any known storage facility. Data procedures are unknown.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Drill hole and FLEM station locations were recorded with a Garmin handheld GPS which has an accuracy of +/- 5m. GDA94 MGAz51. Downhole surveys are run at the EOH and every ~30m down hole with a multishot camera to monitor deviations of the hole from the planned dip and azimuth. <p>Historical Exploration</p> <ul style="list-style-type: none"> Not known.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<p>Current Exploration</p> <ul style="list-style-type: none"> The spacing and distribution of holes is not relevant to the drilling programs which are at the exploration stage rather than definition drilling. <p>Historical Exploration</p> <ul style="list-style-type: none"> Historical drilling is not sufficient to establish the degree of geological and grade continuity appropriate for a Mineral Resource.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<p>Current Exploration</p> <ul style="list-style-type: none"> The drill holes are drilled to intersect the modelled mineralised zones at a near perpendicular orientation. However, the orientation of key structures may be locally variable and any relationship to mineralisation has yet to be identified. FLEM survey was orientated perpendicular to the interpreted lithological strike of the prospective VMS horizon. <p>Historical Exploration</p> <ul style="list-style-type: none"> 2015 VTEM data was acquired in three blocks on lines orientated 137° (Block A), 164° (Block B) and 000° (Block C), slightly oblique to the strike of the predominant structural/geological trend. Drilling at Chianti was drilled at 60 degrees to the west into a N-S trending and east dipping mineralised lode, this drilling is believed to be largely perpendicular, but reported thicknesses are down hole thicknesses and cannot be converted to true thickness based on current knowledge.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Grants and Wilsons were drilled at 60 degrees to the west into a N-S trending and near vertical dipping mineralised lode. This drilling is believed to be largely perpendicular, but reported thicknesses are down hole thicknesses and cannot be converted to true thickness based on current knowledge.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Mineralised samples were cut and sampled on site and put into sealed polyweave bags to protect from core transport. Samples were delivered by company staff to a reputable transport company in Derby and dispatched to ALS laboratories in Perth. <p>Historical Exploration</p> <ul style="list-style-type: none"> Not known.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Geophysical data has been audited and reviewed by Southern Geoscience Consultants No audits or reviews have been undertaken for drilling <p>Historical Exploration</p> <ul style="list-style-type: none"> No external audits or reviews of sampling techniques and data collection have been undertaken.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Tarraji-Yampi Project consists of 4 granted (E04/2315, E04/2508, E04/2557, E04/2572) and 1 pending exploration Licenses (E04/2608) The Tarraji tenement (E04/2315) is an 80/20 JV between IronRinger (Tarraji) Pty Ltd and Whitewater Resources Pty Ltd. The Yampi Tenements (E04/2508, E04/2572, E04/2557, E04/2608) are 100% owned by IronRinger (Tarraji) Pty Ltd IronRinger (Tarraji) Pty Ltd is a wholly owned subsidiary of Dreadnought E04/2315, E04/2508, E04/2572, E04/2557 are located within the Yampi Sound Training Area (YSTA) which is freehold land owned by the Commonwealth Government and administered by the Department of Defence. Being freehold Commonwealth Land, there is no Native Title over these tenements. E04/2608 is partly located within the YSTA and partly on Vacant Crown Land which has Native Title claim by the Warra Combined (NNTT

Criteria	JORC Code explanation	Commentary
		Number 2901)
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Regional mapping, basic stream sediment, soil sampling and limited diamond drilling was completed by WMC in the 1950s. Shallow percussion and diamond drilling were undertaken by ACM at Chianti in the 1970s. The YSTA was off limits to exploration from 1978 until 2013.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Tarraji-Yampi Project is located within the Hooper Complex which is a Proterozoic Mobile Belt in the West Kimberley. The Hooper Complex has known occurrences of Cu-Zn-Pb-Ag VMS mineralisation within the Marboo Formation, magmatic Ni-Cu-PGE mineralisation in the Ruins Dolerite and later stage Proterozoic Cu-Au mineralisation associated with significant structures and late stage intrusions.
Drill hole information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Refer to table in the report. <p>Historical Exploration</p> <ul style="list-style-type: none"> Drilling was completed in the 1950s and 1970s and limited information is available. Drill collar locations are not visible on the surface and have not been verified. Locations have been georeferenced from historical mapping and drill plans.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>Current Exploration</p> <ul style="list-style-type: none"> Exploration assay results are reported where the assays are >0.1% Cu, Pb or Zn or >0.1g/t Au over a geological interval. No top cutting was used Length weighted averages are used for any non-uniform intersection sample lengths. Length weighted average is (sum produce of interval x corresponding interval grade %) divided by the sum of interval length. No metal equivalents values are used for reporting exploration results. <p>Historical Exploration</p> <ul style="list-style-type: none"> Reported mineralised intercepts are from historical reports and sections. Historical intercepts appear to be weighted averages, but no information is known regarding techniques or cut offs used.

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<p>Current Exploration</p> <ul style="list-style-type: none"> Intervals reported are downhole intervals. At this stage true widths are unknown; however, drilling was designed to test near perpendicular to mineralisation. <p>Historical Exploration</p> <ul style="list-style-type: none"> Chianti was drilled at 60 degrees to the west into a N-S trending and east dipping mineralised lode. This drilling is believed to be largely perpendicular, but reported thicknesses are down hole thicknesses and cannot be converted to true thickness based on current knowledge. Grants and Wilsons were drilled at 60 degrees to the west into a N-S trending and near vertical dipping mineralised lode. This drilling is believed to be largely perpendicular and with some bias, but reported thicknesses are down hole thicknesses and cannot be converted to true thickness based on current knowledge.
<i>Diagrams</i>	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Refer to figures within this report.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<p>Current Exploration</p> <ul style="list-style-type: none"> All copper, lead zinc values >0.1% and all gold values >0.1g/t are reported in the tables in this announcement. <p>Historical Exploration</p> <ul style="list-style-type: none"> All collar locations have been shown in plan view. Further information can be found in WAMEX in reports WMC: A405, A407, A413, A415, A417 ACM: 7506.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> Rio Tinto Exploration completed a versatile time domain electromagnetic (VTEM) and aeromagnetic survey covering 206 sq km of the Yampi tenements for 901 line kilometres of data using 125 and 250 m line spacing. Targets from the VTEM survey are shown in Figure 3 in this report. Whitewater Resources Pty Ltd completed rock chip sampling of copper gossans in 2013. Maldron Minerals NL completed rock chip sampling of gossans in 1993.
<i>Further work</i>	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Additional FLEM surveys will be carried out over the remaining prospective VMS horizon Surface geochemical orientation surveys are pending to assess the suitability of soil sampling to assist in targeting mineralisation All targets will be ranked and priority targets drill tested in 2020.

