



28 January 2020

Assays Confirm More High Grade Magnetite at Yerbas Buenas

Highlights

- **Significant intersections of magnetite encountered in the first two holes assayed:**
 - **YB-031 202m @ 25.6% Fe (from 38 metres)**
 - *Including 56m @ 49.1% Fe (from 88 metres)*
 - *Including 14.6m @ 64.6% Fe (from 108 metres)*
 - **YB-028 160m @ 22.1% Fe (from 82 metres)**
 - *Including 20m @ 42.1% Fe (from 181 metres)*
 - *Including 5.9m @ 63.7% Fe (from 188 metres)*

Freehill Mining Limited (ASX: FHS 'Freehill' or 'the Company') is pleased to announce that the diamond drilling campaign carried out at the Company's 100%-owned Yerbas Buenas project was successfully completed in late December and early assays are indicating extremely encouraging iron results with more high grade magnetite encountered.

Twenty holes were drilled using two diamond drill rigs with 4,805 metres drilled. Eighteen of the holes targeting new magnetite mineralisation in the recently acquired Arenas XI tenement (see ASX announcement 2 September 2019).

To date, two of the 20 holes have been assayed and both holes have returned significant intersections of magnetite over long intervals (see Table 2 below and refer highlights above).

Ore preparation of the diamond core is being carried out at Australian Laboratory Services (ALS) in Coquimbo, Chile with the pulps sent to the ALS Iron Ore Technical Centre laboratory in Perth, Australia for analysis.

All samples will initially undergo XRF and Magnasat analyses with selected samples having Davis Tube analysis.

Due to the necessity of carrying out the analysis in Australia and the time for freighting samples, reporting all assay results is expected to take several more weeks however the company will endeavour to report batches of results as they become available.



Figure 1 - Core tray 52 from diamond drill hole YB028 showing typical high grade magnetite mineralisation – interval 190.3m to 193.8m shown



Figure 2 – Core tray 30 from diamond drill hole YB031 showing typical high grade magnetite mineralisation – interval 117.06m to 120.75m shown

Drilling Results

All holes were drilled at nominally 60° and inclined in an easterly direction and the collar information is listed in Table 1 below. All collar data is in the WGS84 zone 19s projection.

Hole ID	Hole Type	Northing	Easting	RL collar	Azimuth	Dip	Depth
YB028	DDH	6,723,000	279,550	164	89°	-60°	300
YB031	DDH	6,722,900	279,497	149	89°	-59°	300.5

Table 1: Drillhole Collar Information

Hole ID	From (m)	To (m)	Interval (m)	% Fe	Mass % Recovery
YB028	82	242	160	22.1	27.3
including	108	112	4	36.8	49.7
	181	201	20	42.1	53.5
	214	218	4	50.1	62.3
	223	226	3	44.3	61.2
	2331	236	5	38.7	56.9
YB031	38	240	202	25.6	32.6
including	88	144	56	49.5	63.6

Table 2: Significant Intersections

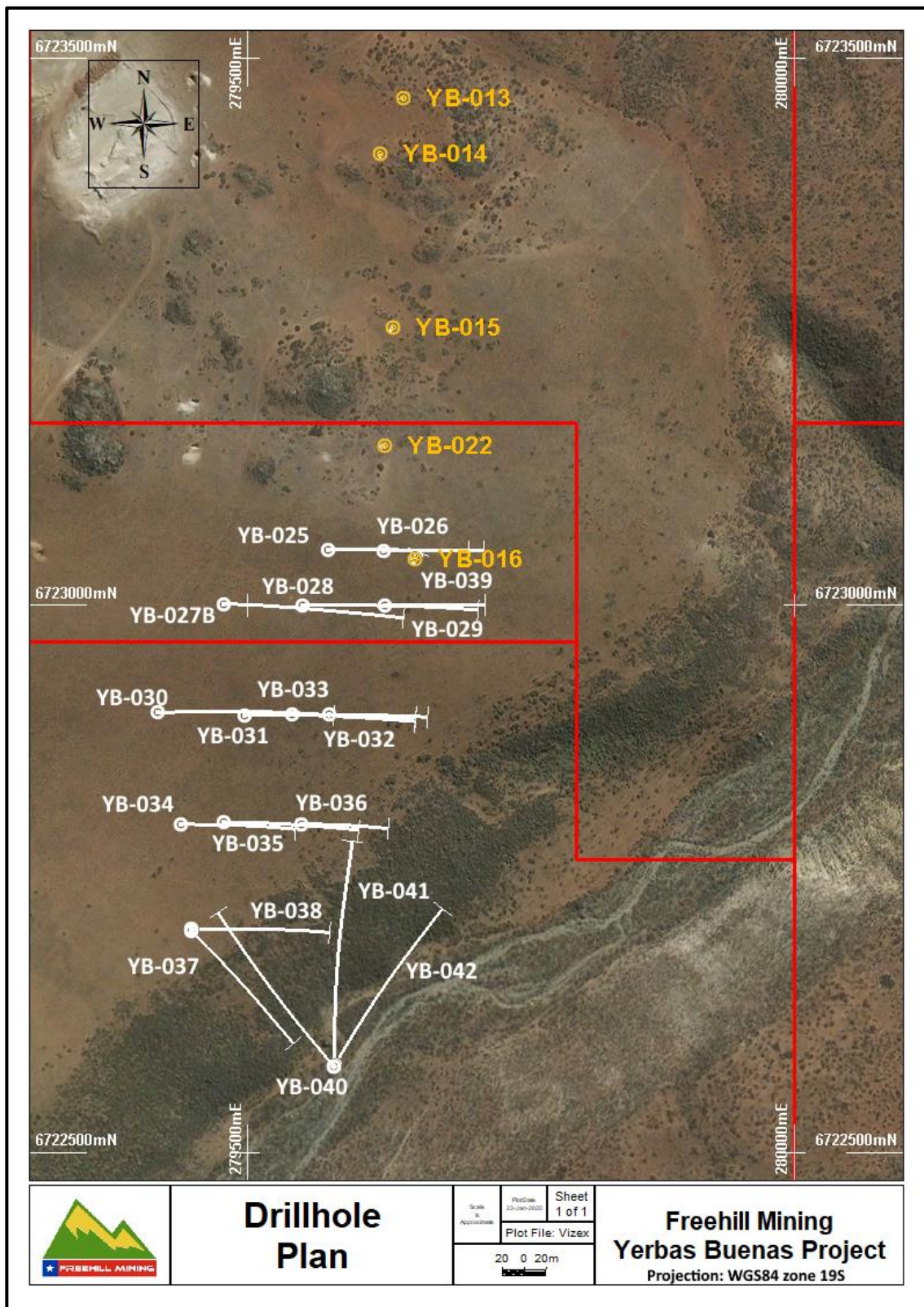


Figure 3 – Diamond drill hole locations for 2019 drilling program shown in white together with the more southerly 2018 RC drill holes shown in orange

Comment

Chief Executive Officer Peter Hinner said: *“These assay results clearly reaffirm our analysis that Yervas Buenas has excellent grade with thick intersections and we have clear line of sight to a much larger resource. With grades like we have reported today, it is evident that we will be able to easily produce a very high grade concentrate for supply to local industry. More assay results are pending and we have every confidence that we can report more of the same.”*

Competent Persons Statement

The information in this report that relates to exploration results is based on information compiled by Mr Peter Hinner, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hinner is a full-time employee of Freehill Mining Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (the JORC Code 2012). Peter Hinner consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About Freehill Mining Limited

Freehill Mining Limited (ASX: FHS) is a mineral exploration company focused on the development of its 100%-owned Yervas Buenas magnetite project in Chile. Yervas Buenas has proven magnetite mineralisation as well as being prospective for both gold and copper mineralisation. Drilling results to date have so far demonstrated that magnetite mineralisation extends along at least a 2km contiguous corridor of what is shown by geophysics to be a 3km long structure extending from the northern boundary to southern boundary of the property. The company has also identified copper and gold mineralisation testing has commenced with diamond drilling on two IP anomalies highlighted in earlier exploration.

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JORC Code, 2012 Edition – Table 1 report

Freehill Mining Limited

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Sampling techniques described apply only to the raw core. NQ diamond core drilling carried out by DV Drilling using two Cortech 1300G maxi track mounted drill rigs. Refer to Table 1 in Appendix of announcement. Holes were orientated as listed in Table 1, and were drilled at dips of 60° in a generally easterly direction. Core remained in the custody of the company after being picked up from the drilling site. Protocol set up and several magnetic susceptibility meter readings taken for each 1m of core. Meter readings then averaged for each 1m of core and recorded. Instrument calibrated against a magnetic standard regularly. The drill hole locations were located by survey differential GPS and checked against known government benchmarks. Down hole surveys were conducted on all holes during drilling for azimuth and orientation using Reflex Ezi-Gyro and Reflex-Ori
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> DDH drilling was the method chosen for all holes drilled. The core diameter was HQ triple tube (in weathered rock and surficial sands) and NQ size in competent rock.
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. 	<ul style="list-style-type: none"> Core recoveries were observed during the drilling and any core loss was noted in the geological logs. Samples were checked by for volume, moisture content, possible contamination and recoveries. Any issues are discussed with the drilling contractor. Some core loss was apparent and noted (generally <5%) in the weathered portion of the holes, however this was generally minor.
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. 	<ul style="list-style-type: none"> All core sample logged by a qualified geologist with experience in magnetite deposits in Chile to a level appropriate with the style of mineralization Logging was both qualitative and quantitative Lithology, alteration, mineralization level & magnetic susceptibility all logged All core remained as full core until fully logged and magnetic susceptibility measurements recorded. Four magnetic susceptibility readings taken of each metre of core prior to cutting and the averaged

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> recorded. All holes were logged in full.
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 grain size of the material being sampled. 	<ul style="list-style-type: none"> All core cut using a standard electric diamond saw. The preparation of samples follows industry practice. Following detailed logging and magnetic susceptibility measurements taken the core was marked for orientation and cut in half by diamond saw. Assay sample intervals were then marked by the geologist and ½ core samples bagged into plastic bags and dispatched to ALS Coquimbo, Chile for ore preparation. Ore preparation was a standard PREP-31 method which involved oven drying, crushing to -2mm and a 250g sub-sampled pulverized of 85% passing 75 micron using LM5 mills. Field QA_QC involved submitting blank material and also certified standard pulps. The laboratory also carried out internal standard QA_QC procedures. The sample sizes are considered appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> All assaying of sample pulps conducted at ALS Iron ore Technical Centre Perth which is an accredited assay laboratories. Assays on pulps include XRF of all samples, Magnasat testing of all samples and Davis Tube Recovery testing of a subset of samples Laboratory QA/QC samples involving the use of blanks, duplicates, standards (certified reference materials), replicates as part of in-house procedures.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Not applicable for magnetic susceptibility measurement reporting. No twinned holes have been completed to date Drill logs and geological logging has been done on hand written sheets which are converted to digital format each day
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. 	<ul style="list-style-type: none"> All drill hole locations have been done using differential GPS by a registered surveying company. Drill collar elevations and project area topography have been double checked by GeoAmbiente using a GPS GEODÉSICO V60 GNSS MARCA HI-TARGET drone with +/- 1.5mm accuracy All digital data, maps and data products associated with the drilling program are provided in coordinate system: datum WGS84 and projection UTM zone 19S.
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 	<ul style="list-style-type: none"> Drill holes at the Yervas Buenas project YB6 structure are shown in

Criteria	JORC Code explanation	Commentary
	<p><i>establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> • <i>Whether sample compositing has been applied.</i> 	<p>the appendix of the main report</p> <ul style="list-style-type: none"> • The drilling program line spacing, hole spacing and downhole sampling and assaying frequency is considered sufficient to establish a JORC compliant resource. • No sample compositing has been done. Assay intervals have been selected based on grades estimated by magnetic susceptibility meter and visual assessment and any single assay sample does not contain more than 2m of core.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <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> • <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"> • Drill lines run East-West • No orientation based sampling bias has been identified in the data to date. • The main structure is thought to dip to the west
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Chain of Custody from drilling through to delivery of samples to the laboratory is entirely the supervision of Freehill and its employees. From the ore preparation stage at ALS Coquimbo the samples are under the control of ALS until fully assayed in Perth.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • None completed to date

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <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> • <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"> • The Yerbas Buenas Project is located on licenses held through Chilean subsidiaries in which Freehill Investments currently has a 100% interest. Licenses are numbers 04102-2723-1, 04102-2714-2, 04102-2715-0, 04102-2755-K, 04102-2937-4 and total 398 hectares • Freehill Investments Pty Ltd has a 100% interest in these subsidiaries. The licences allow for the extraction of up to 5000 tonnes per month and application currently with Sernageomin, the Chilean mining authority.
Exploration done by other parties	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Two Reverse Circulation drill holes- SDHYB1101 & 1102- completed by previous tenement holder Compania Minería Pacifico (CAP) in 2011 and referred to in prospectus section 2.5 of IGR • Holes drilled to 101m & 150m, Dip 70 degrees, azimuth 119, E6,723,594 N279,725 & E6,723,564 N279,758 • Complete drill hole assays provided by Compania Minera del Pacifico, photographs of drilling activity and hole collars, geophysics by Geoexploraciones, • Samples assayed for Total %Fe and %

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		<ul style="list-style-type: none"> magnetics by Davis Tube. 50m line spaced ground magnetics survey completed over 800mx800m in 2010 by Geoexploraciones
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The deposit occurs within the El Tofo and Atacama Fault region with those projects lying along the El Tofo Fault being primarily iron bearing whilst those along the Atacama Fault tending to be predominantly copper bearing. The central area is characterised by three dominant intrusive structures. The structural setting is one of NE-SW trending subvertical tabular bodies with apatite the primary gangue. The primary intrusives unit is a diorite with veins of quartz-magnetite, disseminated magnetite. Andesitic porphyry occurs with abundant biotite, quartz with magnetite as well as hydrothermal breccia with magnetite. Yervas Buenas shows some evidence of IOCG mineralisation
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. 	<ul style="list-style-type: none"> Table of drill hole positions provided in report appendix
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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. 	<ul style="list-style-type: none"> Not applicable for currently reported magnetic susceptibility measurements.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Not applicable for currently reported magnetic susceptibility measurements. Geometry of mineralization not yet determined but will be determined as a result of the current drilling campaign
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> See Figure in Appendix following body of report
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> This document is considered to be a balanced report of the diamond core logging and magnetic susceptibility measurements taken to date.

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Not applicable for magnetic susceptibility measurements.
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Detailed mapping and rock-chip sampling of main geophysical targets are being undertaken together with sampling in a 0.5 Hec bulk sampling pit • Surface sampling, mapping and trenching/pitting of the IP anomaly is planned for Q4 2019 where it appears to be exposed at surface. • Followup RC 'in-fill' drilling of the YB6 magnetic structure is planned for Q2 2020 to upgrade the resource category