



31 January 2020

## Quarterly Report December 2019

### Highlights

- 4,805m diamond drilling program successfully carried out to test magnetite target extension
- Massive intersections of high grade magnetite intersected in many holes
- Geophysics modelling trebled the size of the YB6 magnetite structure
- Copper mineralisation identified during geochemical survey
- Completion of \$2.6 million Placement and arrangement of \$850,000 committed debt facility

Freehill Mining Limited (ASX: FHS 'Freehill' or 'the Company') is pleased to provide this Activities report for the quarter ended 31 December 2019. Activities focused on the ~4,800m diamond drilling program carried out mainly on the newly acquired Arenas XI tenement which contained a significant magnetite extension to the YB6 geophysics structure (Figure 4).

Drilling of the YB6 magnetite structure continued to encounter thick (massive) intersections of high grade magnetite that were measured on a continuous basis using a hand held magnetic susceptibility meter that had been calibrated during a previous drilling program. High grade magnetite is typically a deep matt black colour, an example of which is shown in Figure 2.

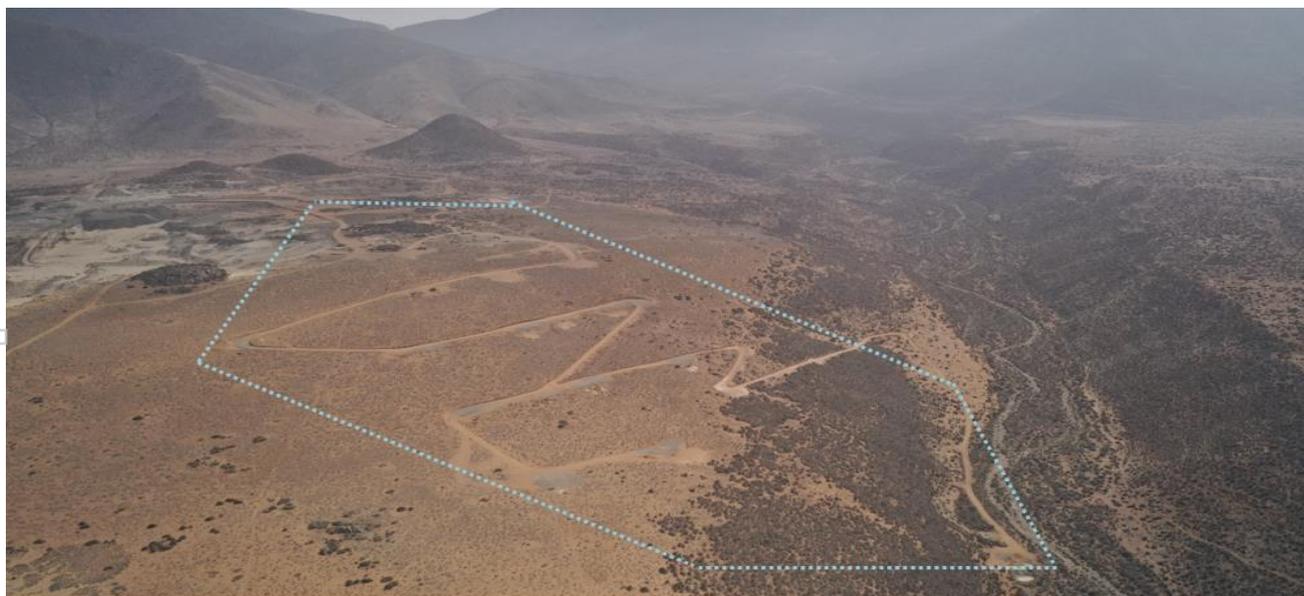


Figure 1 – Aerial photograph looking NNE showing drill lines within the YB6 magnetite project area.

Two diamond drill rigs were contracted through a local drilling company with the objective of completing the campaign by early December.

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The maiden drilling campaign in late 2018 identified a southern trending series of mineralised holes that included a high-grade hole (YB-016) in the northern portion of the YB6 structure. That hole contained 120m averaging 30% Fe, including 16m near surface at 61% Fe (See Table 1). A geophysical survey completed by Freehill provided the confidence to carry out the current drilling campaign on the Company's newly acquired Arenas XI tenement immediately to the south of YB-016.

Hole ID	Interval	Intersection	Significant High Grade intersections
Hole YB016	172m	14m-186m	<b>24.4%Fe</b>
<i>including</i>	38m	14m-52m	<b>41.7%Fe</b>
<i>including</i>	16m	20m-36m	<b>61.0 %Fe</b>
<i>including</i>	16m	36m-52m	<b>29.4%Fe</b>

Table 1 – RC hole YB016 drilled in the northern portion of the YB6 structure during the November 2018 drilling campaign showing exceptional grades and structure thickness.

Initial drilling has shown that high grade mineralisation extends deeper than initially indicated by the 3D inversion model. A significant number of drill core intersections show the distinct black colouration typical of high grade magnetite and verified by magnetic susceptibility readings that are providing indicative iron grade estimates (see ASX release *More High Grade Magnetite Intersected at Yerbas Buenas*, 2 December 2019). Given these developments, the total number of metres drilled scheduled for the campaign was increased.



Figure 2 – Drill core trays 28, 29 & 30 from Hole YB031 showing black colouration, typical of 'massive' high grade magnetite intersections. Core represents intervals 108-117m

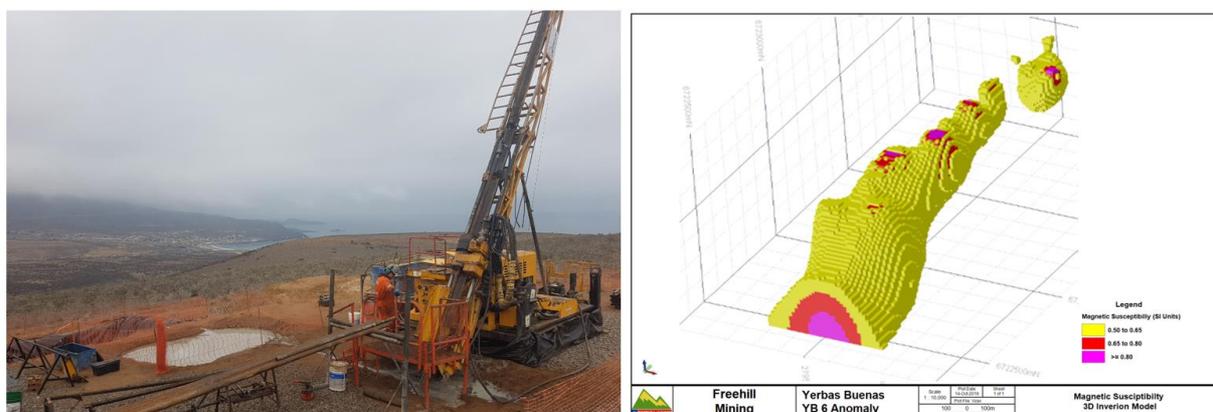


Figure 3 – Diamond drilling underway on Arenas XI tenement and YB6 structure 3D inversion model showing thickening and dipping of the structure toward southern end

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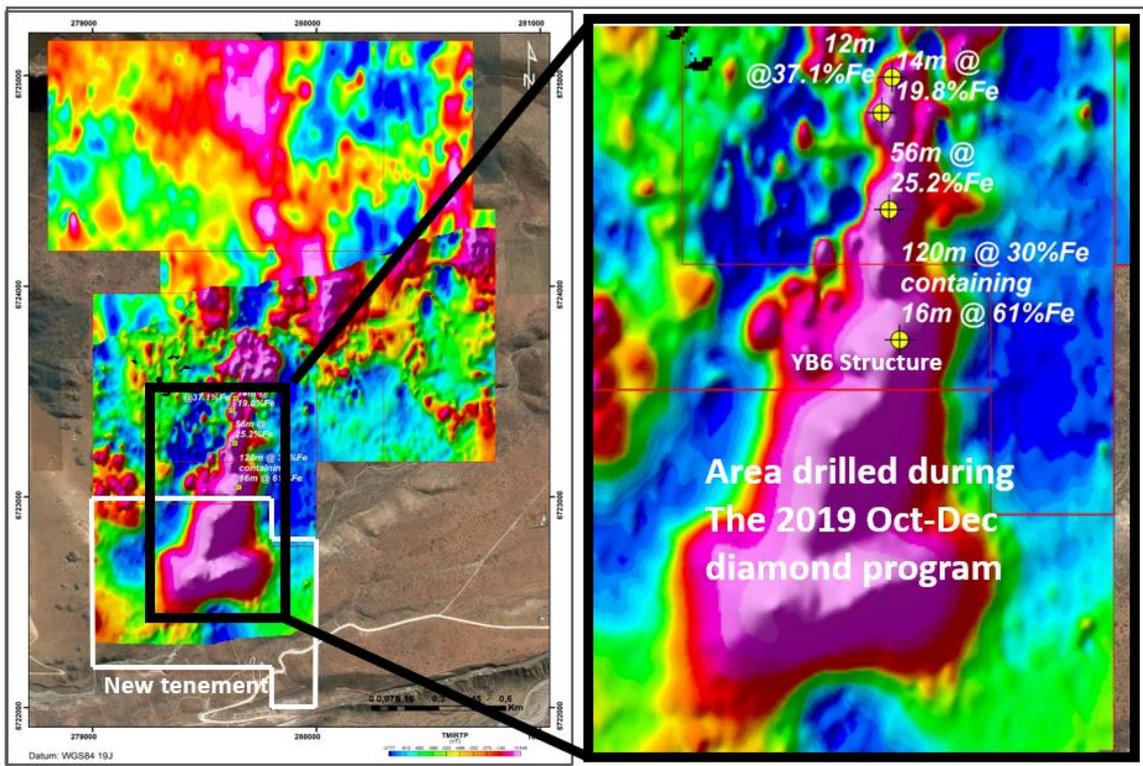


Figure 4 – Newly acquired Arenas XI tenement shown by white tenement boundary and containing significant extension to the YB6 magnetite structure. 2018 RC drilling shown in northern portion and 2019 diamond drilling predominantly done in southern portion

Previous mapping for copper mineralisation and two Induced Polarisation geophysics surveys carried out in late 2018 and early 2019 identified two large IP anomalies and those targets were scheduled for testing during the current diamond drilling program to establish the level of copper and gold mineralisation in the anomalies. A single 400m diamond hole was able to be completed before the Christmas break with core currently being logged and assessed.

The potential presence of copper and gold is consistent with the area's regional geology. The area's potential is evidenced by numerous artisanal copper and gold tunnels and diggings within several hundred metres of the anomaly that Freehill will test.

Analysis of the geochemical results and mapping survey (see ASX release *Significant Indication of Copper Mineralisation Identified*, 9 December 2019) highlighted a number of Cu, Au and Fe anomalies in the north-eastern portion of Freehill's tenements.

#### Events subsequent to the end of the quarter

Early in the current quarter, Freehill reported first assays from two holes from the diamond drill program referenced above and the Company is very encouraged by the quality and grade of the magnetite intercepted (see ASX release *Assays Confirm More High Grade Magnetite at Yerbas Buenas*, 28 January 2020). Significant intersections of magnetite encountered in the first two holes assayed include:

- **YB-03 202m @ 25.6% Fe (from 38 metres)**
  - **Including 56m @ 49.1% Fe (from 88 metres)**
  - **Including 14.6m @ 64.6% Fe (from 108 metres)**

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- **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)**

Of particular note is the 14.6m @ 64.6% Fe intersected in YB-028 which contained individual intervals as high as 67.5% Fe which is effectively equivalent to iron pellet grade. As such, Freehill has every confidence that it can very easily produce a very high grade concentrate for supply to local industry.

More assay results are pending, and while the Company is encouraged by the reported presence of copper and gold at Yervas Buenas, and given the recently reported high grade results reported, the primary focus for Freehill is to build a much larger magnetite resource in order to capitalise on near-term local supply opportunities underpinned by entrenched commercial relationships with local industry.

## Finance Commentary

During the Quarter the Company completed its \$2.6 million Placement and arranged a committed debt facility of \$850,000 to meet its ongoing capital needs. In addition approximately \$890,000 worth of debt was converted to equity during the quarter. The Company is in continuing dialogue with potential investors and the Directors are confident about the Company's ability to meet its requirements for capital.

## 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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