



30 October 2020

## Quarterly Activities Report - September 2020

### Operational Highlights:

- Ground magnetics survey completed at El Dorado Project highlighting project potential
- PFS progressing with significant metallurgical and process testing advanced on YB6 resource
- Rock chip sampling at El Dorado yields high grade iron, copper and gold results - 9.93% Cu, 22.10 g/t Au and 36% Fe results received
- Following quarter end, Freehill completed the acquisition of the ~750Ha El Dorado Project

### Corporate Summary:

- A\$600,000 placement to existing shareholder and sophisticated investor Mr Gavin Ross
- Strong cash balance of \$1.326m retained with continuing option exercise— provides financial flexibility to near term exploration initiatives

Freehill Mining Limited (ASX: FHS 'Freehill' or 'the Company') is pleased to provide this activity report for the quarter ended 30 September 2020.

During the period, Freehill progressed a number of important exploration initiatives including geophysics at the recently acquired ~750 hectare El Dorado Project, completed rock chip sampling that yielded high grade iron, copper and gold results and made significant progress on the pre-feasibility study for the 100%-owned Yerbas Buenas project.

**Chief Executive Officer Peter Hinner said:** *"Freehill continued its tremendous progress in the September quarter adding more value to the recently acquired El Dorado project, as well as completing a number of important steps towards delivering a pre-feasibility study for our 100%-owned Yerbas Buenas project.*

*"The Company also completed a \$600,000 capital raise from existing and supportive shareholder Gavin Ross. This followed an initial \$700,000 investment from him following a site visit to Yerbas Buenas. His continuing commitment highlights the quality of Freehill's assets and the Company's near-term potential.*

*"Freehill is continuing to explore opportunities to extend the potential resource at Yerbas Buenas while also aggressively pushing forward the pre-feasibility study to facilitate the start-up of our first phase of mining.*

*"We also look forward to progressing works at the El Dorado project. Subsequent to the end of the period, the Company has now completed its acquisition of the tenements and looks forward to advancing with exploration initiatives that we have recently announced."*

### September Quarter Summary

#### **Geophysics survey at El Dorado:**

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Freehill completed a geophysics survey at the ~750 hectare El Dorado Project, which directly adjoins the Company's flagship Yervas Buenas magnetite project.

The commencement of the survey followed the completion of rock chip sampling and was aimed at identify magnetite structures within the new tenement package. Results will be used to define parameters for a subsequent Induced Polarisation ('IP') survey, which will be used to detect potential copper sulphide structures.

Additional surface sampling surveys were also undertaken around the time of the geophysics survey, with focus on the southern, mid and north eastern sections of the El Dorado tenements. These were undertaken on various geological structures identified by previous initiatives (refer ASX announcement: 8 April 2020).

#### **Pre-feasibility Study works at Yervas Buenas**

Several hundred kilograms of representative diamond core samples from a recent drilling program completed at Yervas Buenas were sent two Santiago specialist laboratories. These samples have since been used to determine various process parameters and will ultimately be used to verify a suitable processing circuit for a full-scale magnetite processing plant. Results from those tests will also be used to progress additional aspects of the pre-feasibility study which will be reported as various milestones are achieved.

Following the receipt of these samples, crushing tests have been completed by SGS Santiago with modelling of crushing and screening circuits completes at the JK Tech Centre in Queensland. The modelling of crushing and screening circuits allows main energy requirements to be determined.

Magnetic separation, iron recovery and product quality testing was completed at Polimin Santiago and preliminary process circuit design completed.

Subsequent to the end of the period, the Company advised it had received metallurgical testing result of drill core sample from its YP6 magnetite resource, which produced high quality and grade iron ore concentrate.

Results have confirmed that a quality -3mm concentrate 'sinter feed' of +62% Fe can be produced relatively simply due to the high quality of the Yervas Buenas mineralisation whilst some tests have produced over 63% Fe. Additional testing of the concentrates using Davis Tube Separation showed that the Yervas Buenas sinter feed reduced to -45 microns can produce a high quality, low impurity pellet feed with over 71% Fe.

#### **Rock Chip Sampling at El Dorado yields high grade iron, gold and copper**

The Company's extensive rock chip sampling program revealed a number of high grade results across the El Dorado tenement, with three new mineralisation targets discovered.

Freehill advised that the initiative revealed several high grade copper samples in the range of 2% to nearly 10% Cu, gold up to 22.1 g/t and iron up to 36% Fe (refer Table 1 below).

The three primary zones of interest identified will assist the Company in selected areas for IP geophysics. The IP survey will target sulphide mineralisation and build upon two IP surveys completed in late 2019 that identified three anomalies that were open to the north.

Sample Number	Tenement	North (WGS84)	East (WGS84)	RL	Fe (%)	Cu (%)	Au (ppm)
EDM01	ED 8	6,725,581	280,190	401	7.9	0.09	0.03
EDM02	ED 8	6,725,581	280,190	451	2.1	0.04	0.00
EDM03	ED 8	6,725,518	280,289	375	3.1	0.05	0.01
EDM04	ED 8	6,725,428	280,343	375	36.0	1.48	0.02
EDM05	ED 8	6,725,379	280,340	368	18.4	0.29	3.56
EDM06	ED 8	6,725,385	280,297	381	10.9	0.38	7.12

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EDM07	ED 8	6,725,405	280,212	407	20.5	0.82	22.10
EDM08	ED 8	6,725,405	280,212	408	4.4	0.05	0.64
EDM09	ED 8	6,725,286	280,255	401	10.0	0.25	13.00
EDM10	ED 8	6,725,288	280,242	400	1.9	0.05	0.35
EDM11	ED 8	6,726,870	280,611	513	16.6	3.55	0.25
EDM12	ED 5	6,726,868	280,586	526	22.3	4.02	0.87
EDM13	ED 5	6,726,868	280,586	526	7.6	0.06	0.01
EDM14	ED 5	6,726,868	280,586	526	9.2	0.05	0.02
EDM15	ED 5	6,726,983	280,594	519	10.7	0.04	0.01
EDM16*	ED 5	6,728,256	279,712	947	18.2	9.93	1.59
EDM17	ED 5	6,727,134	280,310	603	29.0	2.09	0.72
EDM18*	ED 1	6,727,787	279,644	989	12.3	3.27	0.74
EDM19*	ED 1	6,727,787	279,644	989	2.1	0.57	0.04

Table 1- Rockchip sampling results

\*- samples from outside project area

### Completion of El Dorado acquisition

Subsequent to the end of the period, Freehill advised that its wholly owned subsidiary San Patricio Minería (spA) completed the acquisition of the 750 hectare El Dorado project from Minería El Dorado SCM. The project was completed on the terms provided to shareholders at the EGM on 28 July 2020.

### Yerbas Buenas Magnetite Project Overview

The Yerbas Buenas project contains several magnetite structures identified during several geophysics campaigns. Two of those structures, YB1 and YB6, have now been drilled with both resulting in JORC Mineral resource Estimates that have been reported.

The YB1 structure which was the focus of a trial mining and demonstration processing plant was drilled as the Company's maiden resource in 2018/19. Following the acquisition of the Arenas XI tenement in early 2019 a significant extension of the YB6 magnetite structure within the newly acquired ground was then drilled 2019/20 resulting in a new resource.

The Company believes that a 67Mt magnetite iron resource situated close to significant infrastructure can be developed into an operating mine in a relatively short period of time, given the unique close proximity to major ports, large city and highways.

Five of the seven magnetite structures identified by geophysics within the current Yerbas Buenas project area remain untested as yet. Should the comparable mineralisation be identified by drilling within the remaining five structures, the Company anticipates being able to achieve a mineral resource estimate in line with the conceptual resource estimate. The YB6 and YB1 resources are located only 200-500m apart and are potentially joined by surficial mineralisation which would allow the opening of a larger elongated mining pit.

#### Project features include:

- experience gained from operating a trial mining and demonstration plant
- extremely easy access to transport corridors
- close to High Voltage transmission lines
- low impurity good quality pellet feed ability
- proven offtake to nearby pellet feed plant
- multiple port options for export
- large modern city 30kms away with all mining support facilities
- large modern airport nearby
- Skilled workforce available
- Pro mining province

The Company's demonstrated ability to operate a trial mining and demonstration production plant for more

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than two years whilst supplying magnetite concentrates to Chile's largest iron ore miner and producer of pellet feed and pellets should provide confidence that the Yervas Buenas project has the potential to become a low cost mine within the lower quartile of sinter feed magnetite producers.

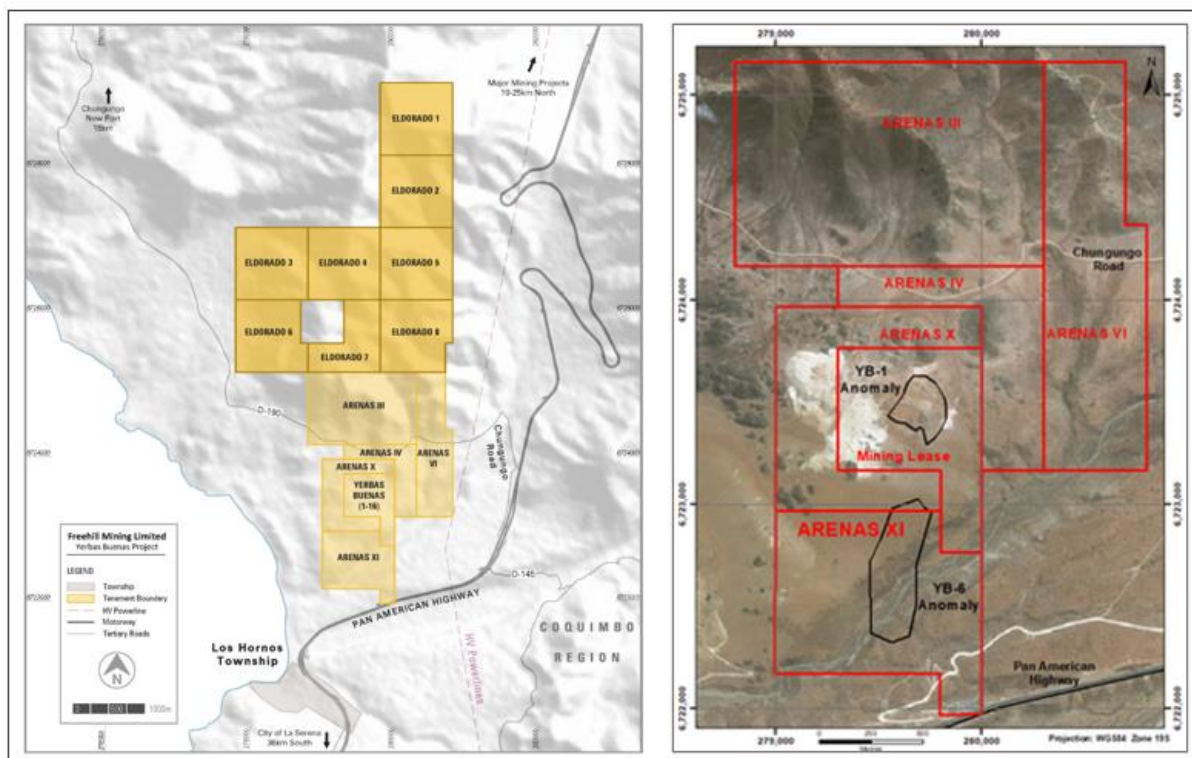


Figure 1 – YB1 & YB6 magnetite resource locations

### El Dorado Project Overview

The highly prospective El Dorado Project tenements, which adjoin the northern boundary of Yervas Buenas has provided Freehill with a significantly expanded footprint in the Chile's premier iron ore-copper-gold address.

The tenements are being acquired from local company Minera El Dorado SCM and are situated in the southern end of the Chilean IOCG belt near to Chiles La Higuera copper mining area.

The acquisition of 750 hectares at El Dorado and are situated in the southern end of the Chilean iron ore-copper-gold belt near to Chiles La Higuera copper mining area has increased Freehill's exploration and development area to almost 1,250 Hectares.

As part of the earlier due diligence process, Freehill's geological personnel carried out preliminary surface sampling on the southern portion of the El Dorado tenements, focussing on the artisanal mining areas that have demonstrated encouraging gold mineralisation at surface.

Results of the earlier survey were reported to the ASX on 27 April and included multiple +45% Fe samples as well as gold grades up to 22.8 g/t Au and 4.85% Cu. The most recent channel sampling survey (Table 1) continues to provide confidence and supports the company's view that the area hosts copper, gold and iron mineralisation.

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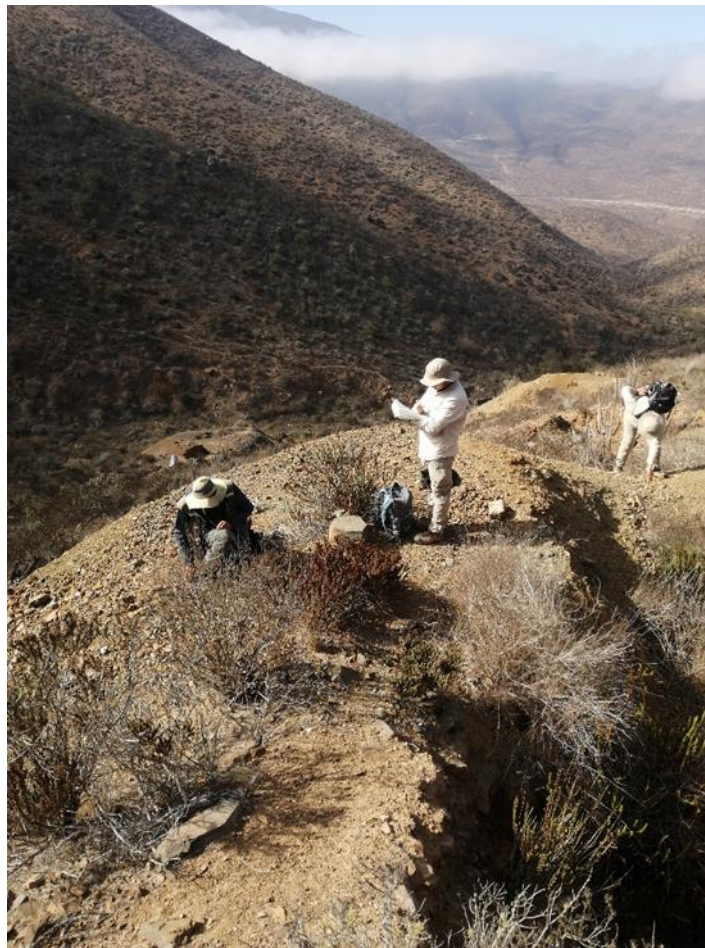


Figure 2 – Exploration team sampling at El Dorado with PanAmerican highway in background

### **Corporate Activities**

#### **\$600,000 placement to sophisticated investor**

The Company considerably strengthened its balance sheet following the issue of 10 million fully ordinary paid shares at \$0.06 per share to raise \$600,000. The shares were issued to professional and sophisticated investor Mr Gavin Ross ([www.gavinross.com.au](http://www.gavinross.com.au)). Mr Ross is an existing and supportive shareholder of the company who has previously made significant investments in Freehill following a site visit to Yerbas Buenas.

### **Financial Commentary**

Freehill strengthened its cash position during the period following the aforementioned placement, the conversion of a number of options and \$601,000 in debt conversion. This has led the Company to retain a healthy cash balance of \$1.326m.

Freehill continues to receive a number of offers from parties expressing interest in the project and its ongoing development. Board and management will continue to explore these opportunities, ensuring the best outcome for shareholders.

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### 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 Yerbas Buenas magnetite project in Chile. Yerbas 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.**