



28 January 2021

Quarterly Report 31 December 2020

- **Board has approved drilling program at El Dorado and the Company is currently working through processes and approvals to initiate drilling program based on encouraging copper and gold results from sampling program and geophysical survey**
- **YB6 magnetite feasibility study activities progressing to plan with further infill and extensional drilling planned**
- **Company fully funded for all planned 2021 development activities**

Freehill Mining Limited (ASX: FHS 'Freehill' or 'the Company') is pleased to provide this activity report for the quarter ended 31 December 2020.

Funding

At 31 December 2020 the Company had a cash balance of \$2,180,000 following options exercise raising approximately \$1.69m during the quarter. Debt levels have also reduced significantly, also accompanied by a reduction in trade payables. This is the strongest financial position in which the Company has been since its IPO and positions us to move forward on our proposed development plans.

The Board will continue to review sources of capital to ensure the Company is adequately funded to pursue its development agenda.

El Dorado Project Update

It is clear from exploration results reported during the quarter that the El Dorado project could deliver significant value for the Company and provide exposure to two additional commodities – copper and gold. While work on the Yervas Buenas magnetite project continues, Freehill's team is in the process of identifying and contracting appropriate geological competence to move forward on a more comprehensive exploration program at El Dorado.

Structural mapping and several very successful surface sampling campaigns identified three potential copper targets in the central portion of the El Dorado exploration area. Channel sampling of surface faults yielded copper grades up to 2.5% and gold grades up to 1.32 g/t (see ASX release: *Highly Encouraging Copper Gold Mineralisation at El Dorado* 27 October 2020).

A subsequent Induced Polarisation "IP" geophysics survey completed in late 2020 identified a large and significant mineralised structure that is expected to contain copper sulphide mineralisation consistent with drill hole ES-001 several hundred metres to the south (see ASX release: *Large Potential Copper Structure Identified at El Dorado* 26 November 2020). Chargeability is also significantly higher than those within the three IP zones identified by the previous nine southern lines at Yervas Buenas in 2019.

Subsequent drilling of one of those IP targets, diamond drill hole ES-001, resulted in highly encouraging copper grades in the first 144m from surface confirming the presence of Chalcopyrite (copper sulphide).

The structure identified by the most recent IP work at El Dorado is 10 times larger than the target drilled at ES-001 and

Freehill Mining Ltd – iron ore producers | ACN 091 608 025 | www.freehillmining.com

| Tel: +61 (0)3 8658 5976 | email: info@freehillmining.com

Melbourne Office

| Level 24, 570 Bourke Street, Melbourne, Vic 3003

La Serena, Chile office

| Level 7, Edificio Seville, Avenida Del Mar La Serena, Chile South America

has a high intensity footprint of 1000m x 500m (32 hectares) with a mineralised halo of approximately twice this size.

Several important NW structures cut through the centre of the coincident chargeable-resistive anomaly. Higher grades may be associated with these structures, so this zone is considered a priority exploration target.

The IP survey has only been carried out over one of three targets identified by surface mapping and a further 2.8km of concession area to the north remains untested.

Approval is currently being sought from the relevant government agencies for the maiden drilling program at El Dorado. As the concession has not been drilled before there are a number of pre-drilling environmental and access protocols that need to be followed, including routine environment surveys and discussions with local landholders.

Primary and secondary drilling locations are in the process of being identified. A drill rig has been secured and construction on an access road to the initial drill sites is expected to begin next month.

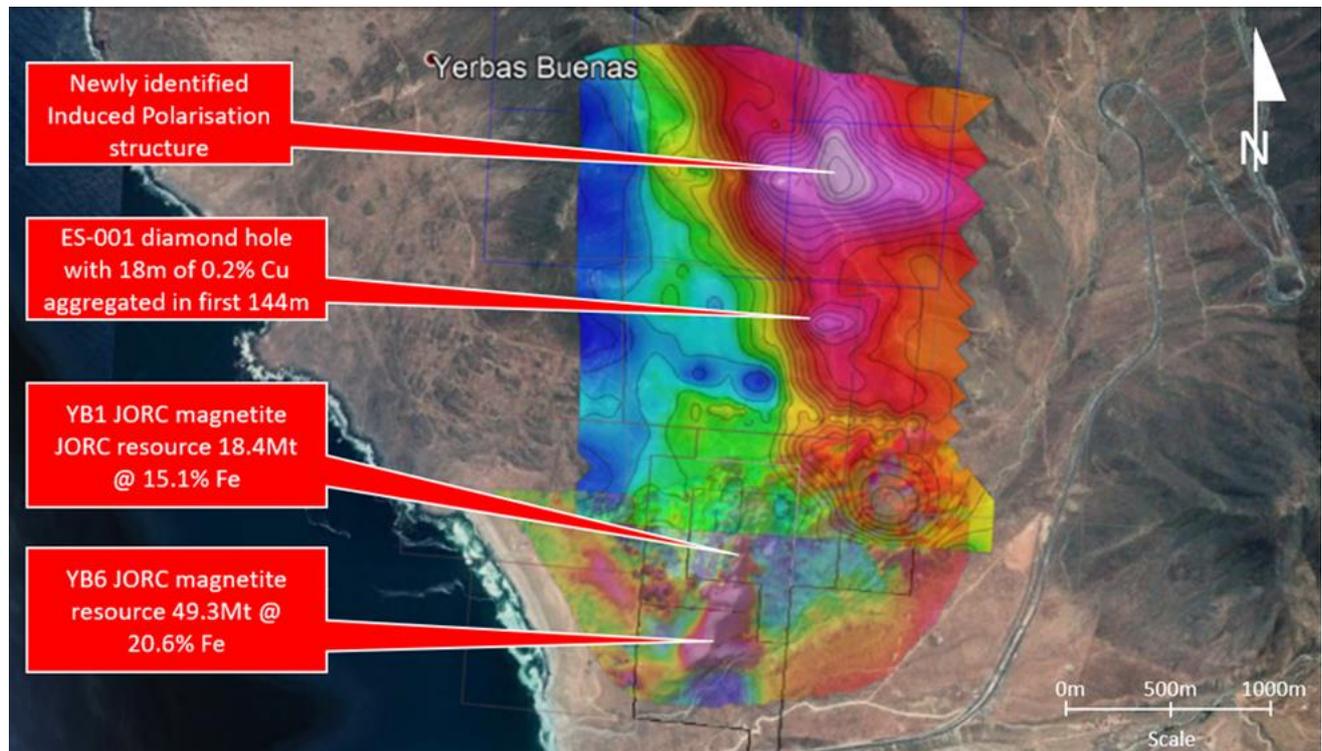


Figure 1 – Recent Induced Polarisation results at El Dorado project indicating area of potential copper mineralisation shown together with Ground Magnetics for YB1 & YB6 magnetite resource (see ASX release: Large Potential Copper Structure Identified at El Dorado 26 November 2020)

The 400m exploratory diamond drill hole (ES001) completed in the north eastern extremity of the Yerbas Buenas concession yielded several intersections with intense alteration and highly encouraging copper sulphide mineralisation within the first 144m from surface.

Significantly eighteen intervals from 34m to 144m from collar returned an average of 0.2% (2000ppm) copper with up to 0.324% Cu in individual intervals.

Visible copper sulphide veining was seen in a number of diamond cores as previously reported (see ASX release: *Highly Encouraging Copper Gold Mineralisation at El Dorado 27 October 2020*).

Sample Number	From (m)	To (m)	Interval (m)	Cu %
4482	33.00	34.00	1.00	0.25
4491	48.00	49.00	1.00	0.11
4510	81.00	82.00	1.00	0.17
4512	83.00	84.00	1.00	0.15
4520	91.00	92.00	1.00	0.29
4522	93.00	94.00	1.00	0.13
4527	98.00	99.00	1.00	0.15
4528	99.00	100.00	1.00	0.11
4539	110.00	111.00	1.00	0.17
4540	111.00	112.00	1.00	0.11
4541	112.00	113.00	1.00	0.11
4542	113.00	114.00	1.00	0.16
4543	114.00	115.00	1.00	0.32
4544	115.00	116.00	1.00	0.18
4545	116.00	117.00	1.00	0.32
4546	117.00	118.00	1.00	0.17
4547	118.00	119.00	1.00	0.25
4564	143.00	144.00	1.00	0.12

Table 1 – Significant copper assays for diamond drill hole ES-001

100%-owned Yerbas Buenas Magnetite Project

Technical development of Freehill’s YB6 magnetite project is continuing with ongoing mineral processing testwork and modelling. The studies are focussed on mineral separation, product quality and mining design and will eventually feed information into a scoping level feasibility study.

Infill drilling and extensional drilling programs are planned for the YB6 resource and will be scheduled subject to completion of a DIA (Declaracion Impacto Ambiental) which is a limited environmental study required for the further drilling at YB6.

The development concept for the YB6 mineral resource is that of an open pit drill, blast, truck and shovel mine with a conventional crushing and screening operation producing -3mm crushed ore. Crushed material would be processed through two or three stages of dry magnetic separation to produce a nominal 62% Fe fines product for sale. Final product could be shipped to China for sale or sold locally.

YB6 Project features:

- 49Mt resource declared June 2020 with iron grade of 20.6% Fe
- +62% Fe iron ore concentrate produced using totally dry process at high iron recoveries
- -3mm concentrate capable of producing high quality pellet feeds of +70% Fe
- Close to all major infrastructure
- Supply history with pellet plant owned by Chile’s largest iron ore producer

Freehill operated a trial mining and demonstration processing plant in the YB1 orebody for almost two years supplying sinter feed and preconcentrate to one of Chile’s largest pellet feed plants. Feedback from the customer was that Yerbas Buenas concentrate produced a very high-quality pellet feed that performed well in iron ore smelters. The current metallurgical test work using YB6 material suggests that a similar quality product is capable of being produced.

Recent work is focussed on evaluating whether finer levels of crushing will elevate iron ore processing recovery.

Metallurgical testing results of drill core confirmed that a quality -3mm concentrate ‘sinter feed’ of +62% Fe can be produced relatively simply due to the high quality of the Yerbas Buenas mineralisation with some tests having produced over 63% Fe at -3mm.

Additional testing of the concentrates using Davis Tube Separation showed that the Yerbas Buenas sinter feed reduced to -45 microns can produce a high quality, low impurity pellet feed with over 71% Fe.

What is most encouraging is that even the lower grade feed samples were able to produce a Davis Tube concentrate of over 70% Fe indicating Yerbas Buenas materials amenability to potentially produce high quality pellet feed and pellets.

All testing has been carried out at certified laboratories in Chile and Australia and include SGS Santiago, JK Tech Centre

Freehill Mining Ltd – iron ore producers | ACN 091 608 025 | www.freehillmining.com

| Tel: +61 (0)3 8658 5976 | email: info@freehillmining.com

Melbourne Office

| Level 24, 570 Bourke Street, Melbourne, Vic 3003

La Serena, Chile office

| Level 7, Edificio Seville, Avenida Del Mar La Serena, Chile South America

Australia and at one of Chile's most respected iron ore metallurgical laboratories Polimin Ltda.

Additional phases of testing and development are currently underway to optimise processing parameters

Structure	Category	Tonnes Mt	Mass %Recovery ¹	%Fe Head Grade	Concentrate Grades ²				
					%Fe	%Al ₂ O ₃	%SiO ₂	%P	%S
YB1	Inferred	13.4	14.7	14.8	68.1	0.67	1.47	0.023	0.026
	Indicated	5.0	15.8	15.9	69.1	0.69	1.36	0.018	0.022
	Total	18.4	15	15.1	68.4	0.68	1.44	0.020	0.025
YB6	Inferred	49.3	27.7	20.6	68.4	0.74	2.45	0.024	0.007
Project	Inferred	62.7	24.9	19.4	68.3	0.73	2.24	0.024	0.011
	Indicated	5.0	15.8	15.9	69.1	0.69	1.36	0.018	0.022
TOTAL RESOURCE		67.7	24.2	19.1	68.4	0.7	2.2	0.023	0.012

Table 2 – JORC Mineral Resource Estimates for both the YB1 and more recent YB6 areas (see ASX release: Yerbas Buenas Second JORC Mineral Resource Estimate 2 June 2020)

Highlights of the testing program were:

- SGS SMC testing to establish various crushing parameters.
- Bond Work Index tests indicate relatively low crushing energy requirements at 14-18 kWh/t.
- JK Tech Simulation using crushing data to establish likely processing circuits and crushing equipment needs.
- Pilot scale magnetic separation testing done at -3mm using only rougher and cleaner stages.
- All processing and magnetic separation done dry to reflect a final plant design that would use no water.
- All Davis Tube Separation tests produced concentrates of >70% Fe grade indicating very good magnetite release.
- Low degree of oxidation indicating minimal hematites present and thus high mass yields.
- Over 90% recovery of iron at the nominal mineable grade.
- Phosphorus (P) levels and other impurities below industry maximum limits.

Mining Tenements Listing

In accordance with ASX Listing Rule 5.3.3 Freehill provides the following information in relation to its projects tenement holdings located in Chile.

National Role Number	Concessions	Hectares	Verdict Date	Freehill Group Ownership
041022714 – 2	Arenas III 1 al 15	150	30/8/11	100.00%
041022715 – 0	Arenas IV 1 al 10	44	31/12/12	100.00%
041022755 – K	Arenas VI 1 al 20	92	8/9/11	100.00%
041022937 – 4	Arenas X 1 al 18	54	11/9/12	100.00%
041023522 – 6	Arenas XI 1 al 20	80	22/3/16	100.00%
041023669 - 9	El Dorado Uno 1 al 10	100	8/2/19	100.00%
041023670 – 2	El Dorado Dos 1 al 10	100	27/6/18	100.00%
041023671 - 0	El Dorado Tres 1 al 10	100	8/8/18	100.00%
041023672 – 9	El Dorado Cuatro 1 al 10	100	9/7/18	100.00%
041023673 – 7	El Dorado Cinco 1 al 10	58	25/9/18	100.00%
041023674 – 5	El Dorado Seis 1 al 10	94	27/7/18	100.00%
041023675 – 3	El Dorado Siete 1 al 7	70	9/7/18	100.00%
041023676 - 1	El Dorado Ocho 1 al 10	96	16/11/18	100.00%
041022723 – 1	Yerbas Buenas 1 al 16	50	11/6/10	100.00%
Total		1188		

Freehill owns 100% of the concessions listed above and will maintain that ownership as long as it pays its annual licence fees.

Comment

Chief Executive Officer Peter Hinner said: *“We have made considerable progress in with respect to all our projects, and at a corporate level, we have strengthened the balance sheet so we are well-funded for the year ahead. Freehill now has excellent exposure to three commodities – iron ore, copper and gold – all within our expanding footprint in Chile. The outlook for iron ore, copper and gold is very favourable and we continue to invest in our projects to realise further value. More exploration activity across Yerbas Buenas and El Dorado is planned and we are making good progress on the Yerbas Buenas feasibility study.”*

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.

Freehill Mining Ltd – iron ore producers | ACN 091 608 025 | www.freehillmining.com

| Tel: +61 (0)3 8658 5976 | email: info@freehillmining.com

Melbourne Office

| Level 24, 570 Bourke Street, Melbourne, Vic 3003

La Serena, Chile office

| Level 7, Edificio Seville, Avenida Del Mar La Serena, Chile South America

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 and the El Dorado copper gold 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.

For further information, please contact:

Peter Hinner	Paul Davies
Chief Executive Officer	Chief Financial Officer
Freehill Mining Limited	Freehill Mining Limited
+61 410569635	+61 419 363 630

Media & investor relations inquiries: Ben Jarvis, Six Degrees Investor Relations: +61 413 150 448



Follow [@FreehillMining](https://twitter.com/FreehillMining) on Twitter



Follow [Freehill Mining](https://www.linkedin.com/company/freehill-mining) on LinkedIn