



27 October 2020

## Exploration at El Dorado reaffirms highly encouraging Copper and Gold mineralisation

- Channel sampling reaffirms copper mineralisation identified during previous rockchip surveys
- Several copper and gold surface structures have grades up to 2.51% Cu and 6.86 g/t Au
- 400m exploratory diamond drill hole ES001 at Yervas Buenas shows intense alteration zones with copper mineralisation of 0.1-0.32% Cu intercepted in 18 different intervals in the first 144m
- Interval 91-92m of ES001 shows visible chalcopyrite veining; 0.287ppm Cu
- Ground magnetic geophysics survey completed – identifies several magnetic high anomalies;
- Induced Polarisation geophysics underway to define more copper targets

Freehill Mining Limited (ASX: FHS 'Freehill' or 'the Company') is pleased to announce that assay results have now been received from a detailed channel sampling and structural mapping program completed in late August 2020 across the El Dorado project area. Assays continue to show strong copper and gold mineralisation.

Whilst advancing development of the company's JORC compliant 67 million tonne magnetite resource at the 100% owned Yervas Buenas project is the Company's priority, Freehill is pleased to confirm that follow-up exploration work at the El Dorado concessions continues to validate three high grade copper and gold zones and several potential iron structures. Significant assay results from the recent channel sampling survey include:

Copper assay	Gold Assay	Iron Assay
2.51%	1.32 ppm	18.75%
2.25%	0.51 ppm	7.90%
0.11%	1.81 ppm	11.05%
0.08%	6.86 ppm	6.82%
0.57%	0.03 ppm	12.40%

Table 1 – Channel sampling highlights

The El Dorado project covers 750 hectares over eight tenements and adjoins the northern boundary of Freehill's Yervas Buenas project area (Fig 1). El Dorado was acquired by Freehill in March this year and takes Freehill's exploration and development area to approximately 1,250 Hectares in Chile's highly prospective iron-copper-gold ('IOCG') belt. The project is located 7km WSW of the historic copper mining centre of La Higuera.

### Encouraging Copper & Gold Mineralisation

Additional detailed surface sampling has been carried out in the central portion of El Dorado to test structural features that may influence mineralisation and to better define localised structures. Channel sampling has identified several additional zones of copper mineralisation with the most prospective area coincident with a magnetic high shown as D1 in Figure 2.

The channel sampling follows on from a rockchip campaign completed in July that identified three zones of mineralisation. (See ASX release: 25 Aug 2020).

Geochemical sampling confirms a NW-SE structural trend of mineralization and is consistent with a high chargeability

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zone identified in an earlier IP survey on Yerbos Buenas (Figure 8). Induced Polarisation surveys were carried out in the northern portion of the Yerbos Buenas concessions in early 2019 (Reported ASX release: 25 February 2019 & 17 April 2019).

Additional images of channel sampling points and the type of mineralisation in the area are shown in Fig 6 and 7.

A single 400m exploratory diamond drill hole (ES001) was completed in the northern extremity of the Yerbos Buenas concession within the northern IP anomaly and the core was recently relogged leading to a reinterpretation of the geological model.

The hole yielded several intersections with intense alteration and very encouraging copper sulphide mineralisation within the first 200m from collar. Over 18 intervals had copper grades greater than 1000ppm with several intervals exceeding 2,000ppm (0.2% Cu) including one interval of 3240ppm (0.324%) at only 114m depth. Diamond core images are shown in Fig 4 & 5 indicating visible copper sulphide mineralisation with significant assays for the drill hole presented in table 2. A complete list of Cu, Au & Fe assays for DDH ES-001 are provided in Attachment 1.

Results from the recent channel sampling study shows El Dorado to have significant mineral alteration which is associated with Cu-Fe sulphide mineralisation which can contain gold. The work also identified a number of NW-SE trending structures that where channel sampled having significant gold, copper and iron grades of up to 22g/t Au and 9% Cu were associated with the trend ( see Fig 3 & Table 1).

### **El Dorado Ground Magnetic Geophysics Survey**

A ground magnetic survey (Fig 2) was completed recently in the El Dorado concession area with continuous profiles along E-W lines and line spacing of 50 m for a total survey length of 157 line km. Several magnetic highs are evident and will be tested during future drilling campaigns.

The recent ground magnetics data from El Dorado has been merged with data acquired during previous ground magnetics surveys at Yerbos Buenas and are shown as a single amalgamated ground magnetics image in Fig 3 demonstrating the approximate N-S continuity within both project areas.

The geophysics indicate a large NW structure, previously identified on the lower portion of the Yerbos Buenas project area, extending into the El Dorado tenements. Copper, gold and iron channel sampling locations are shown in Fig 8-11 with Figure 8 showing the Induced Polarisation chargeability signature at -300m.

This primary structure appears to control copper mineralization in both the northern end of Yerbos Buenas and El Dorado. Induced Polarisation (IP) lines are planned to test the southern part of El Dorado for copper mineralization and will focus on the area shown as D1 which is coincident with significant surface mineralisation, which is adjacent to the IP survey in the northern part of Yerbos Buenas.

The strongest magnetic anomaly within El Dorado is labelled D1 and modelling suggests that the magnetite mineralization may extend to a significant depth at D1 and the magnetite grade may increase, slightly, with depth.

The National Geology and Mining Service ( Sernageomin) 1:100,000 geological mapping shows a clear NW contact point between sub-volcanic complexes and dioritic intrusives in the area where higher grade copper and gold mineralisation has been mapped by Freehill.

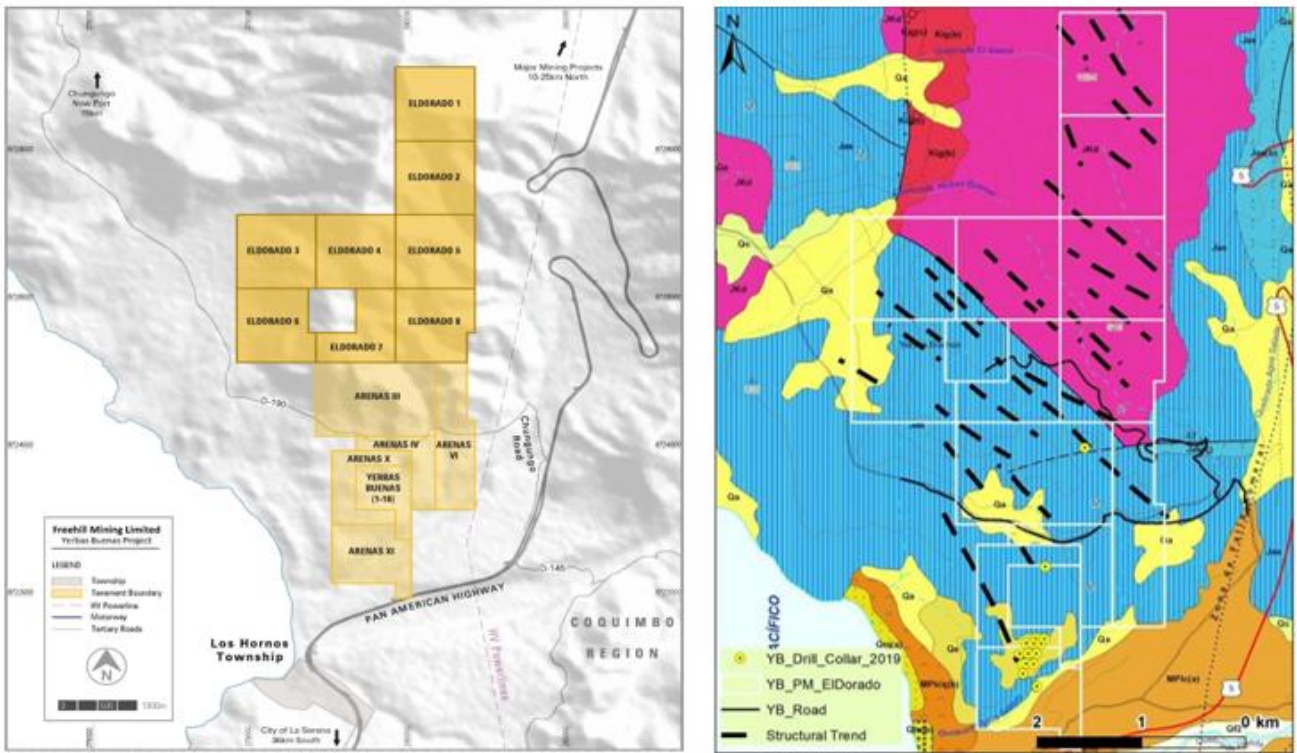


Figure 1: Freehill's tenement plan highlighting the El Dorado & Yerbos Buenas projects & Sernageomin La Higuera region 1:100,000 geology highlighting the geological contact passing through the centre of the El Dorado concession area

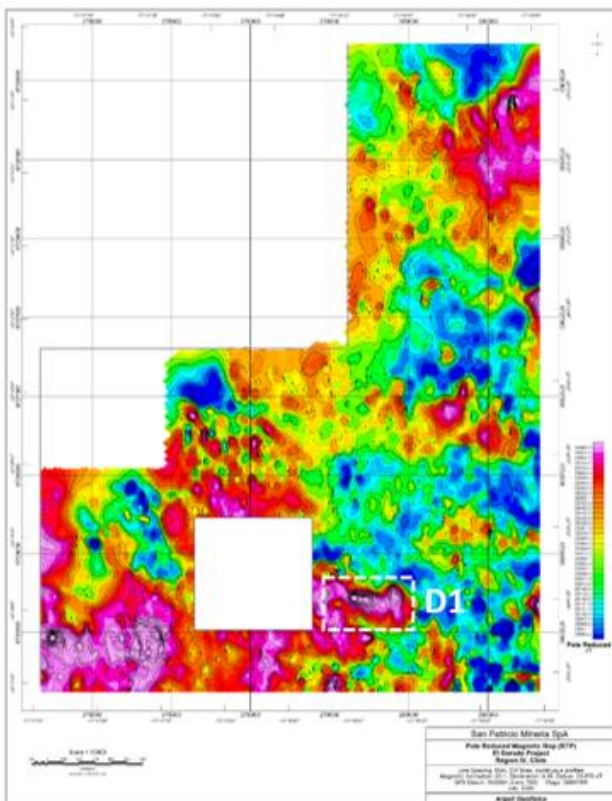


Figure 2 – Ground magnetic survey TMI-RTP for El Dorado concession area only

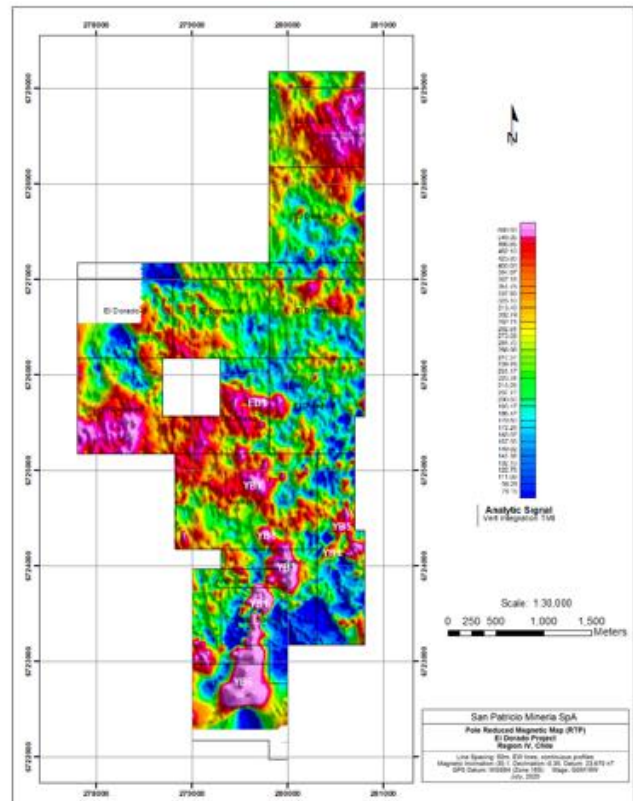


Figure 3 - Combined ground magnetic survey for all Yerbos Buenas and El Dorado concessions



## Comment

**Chief Executive Officer Peter Hinner said:** “These channel sample results reaffirm our view that El Dorado has extensive copper mineralisation which exposes us to another major commodity with excellent long-term supply and demand characteristics. The IP Survey that is currently underway will help us better determine the extent of future copper exploration undertakings. That said, the rock chip sample from August and now these channel sampling results are clearly showing us that El Dorado is well endowed with extensive copper mineralisation.

“Also highly encouraging are the assay results we are reporting for the first time from a single hole we drilled at Yervas Buenas, which confirm superb copper mineralisation. To have more than 18 intervals with copper mineralisation of meaningful grade is outstanding. While we are very much focused on advancing the feasibility study for the magnetite at YB, these results we have reported today on the copper give us sufficient confidence to now develop a comprehensive exploration and development program for our copper across Yervas Buenas and now El Dorado. The IP program that has just started is the next major step in this exploration.”

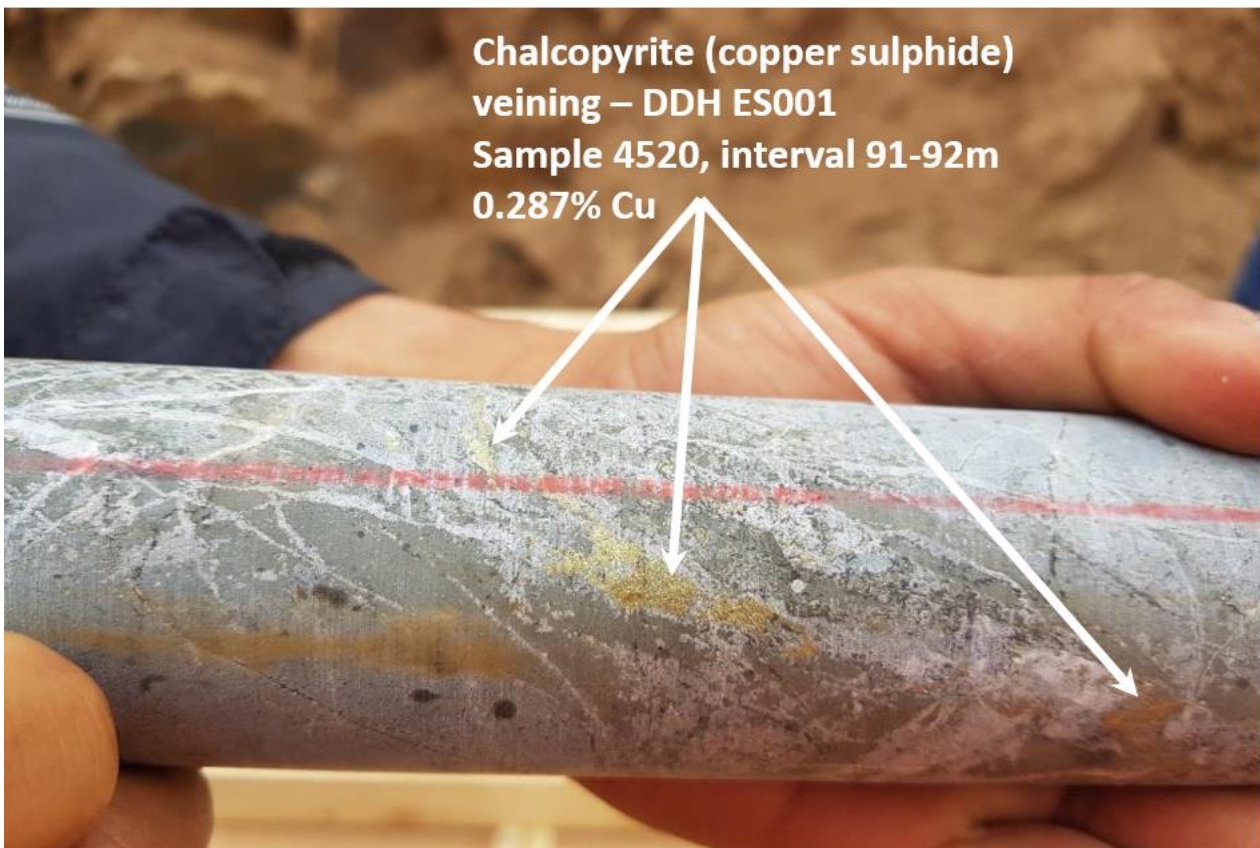


Figure 4 – Diamond core from hole ES-001 drilled into Induced Polarisation target. Sample is 4520, interval 91-92m showing visible chalcopyrite (copper sulphide) veining and grade of 2870ppm (0.287% Cu)



Figure 5 - Diamond core from hole ES-001 drilled into Induced Polarisation target. Samples 4513, interval 84-85m showing intense alteration and sample 4547, interval 118-119m showing visible chalcopryrite veining.

Hole_Id	Sample Number	From (m)	To (m)	Interval (m)	Cu ppm	Au ppm	Fe %
ES-001	4482	33.00	34.00	1.00	2480	0.07	8.02
ES-001	4491	48.00	49.00	1.00	1050	0.02	7.69
ES-001	4510	81.00	82.00	1.00	1720	0.04	7.48
ES-001	4512	83.00	84.00	1.00	1460	0.02	6.49
ES-001	4520	91.00	92.00	1.00	2870	0.05	5.63
ES-001	4522	93.00	94.00	1.00	1310	0.04	4.89
ES-001	4527	98.00	99.00	1.00	1480	0.04	8.06
ES-001	4528	99.00	100.00	1.00	1050	0.03	6.59
ES-001	4539	110.00	111.00	1.00	1720	0.05	7.82
ES-001	4540	111.00	112.00	1.00	1100	0.02	5.63
ES-001	4541	112.00	113.00	1.00	1060	0.02	4.92
ES-001	4542	113.00	114.00	1.00	1640	0.03	5.33
ES-001	4543	114.00	115.00	1.00	3240	0.1	6.68
ES-001	4544	115.00	116.00	1.00	1760	0.03	5.6
ES-001	4545	116.00	117.00	1.00	3180	0.07	7.4
ES-001	4546	117.00	118.00	1.00	1700	0.03	4.86
ES-001	4547	118.00	119.00	1.00	2450	0.03	4.97
ES-001	4564	143.00	144.00	1.00	1200	< 0.01	8.18

Table 2 – Significant copper, gold and iron intersections for diamond drill hole ES001. Samples greater than 2000ppm Cu highlighted



Figure 6 - WNW fault hydrothermal quartz-hematite-jarosite (6.8g/t Au), in diorite host rock. channel sample 311804



Figure 7- NW vein zone, quartz-albita-actinolite-clays-sericite-chalcopryrite (2.5% Cu, 1.3g/t Au) channel sample 311814



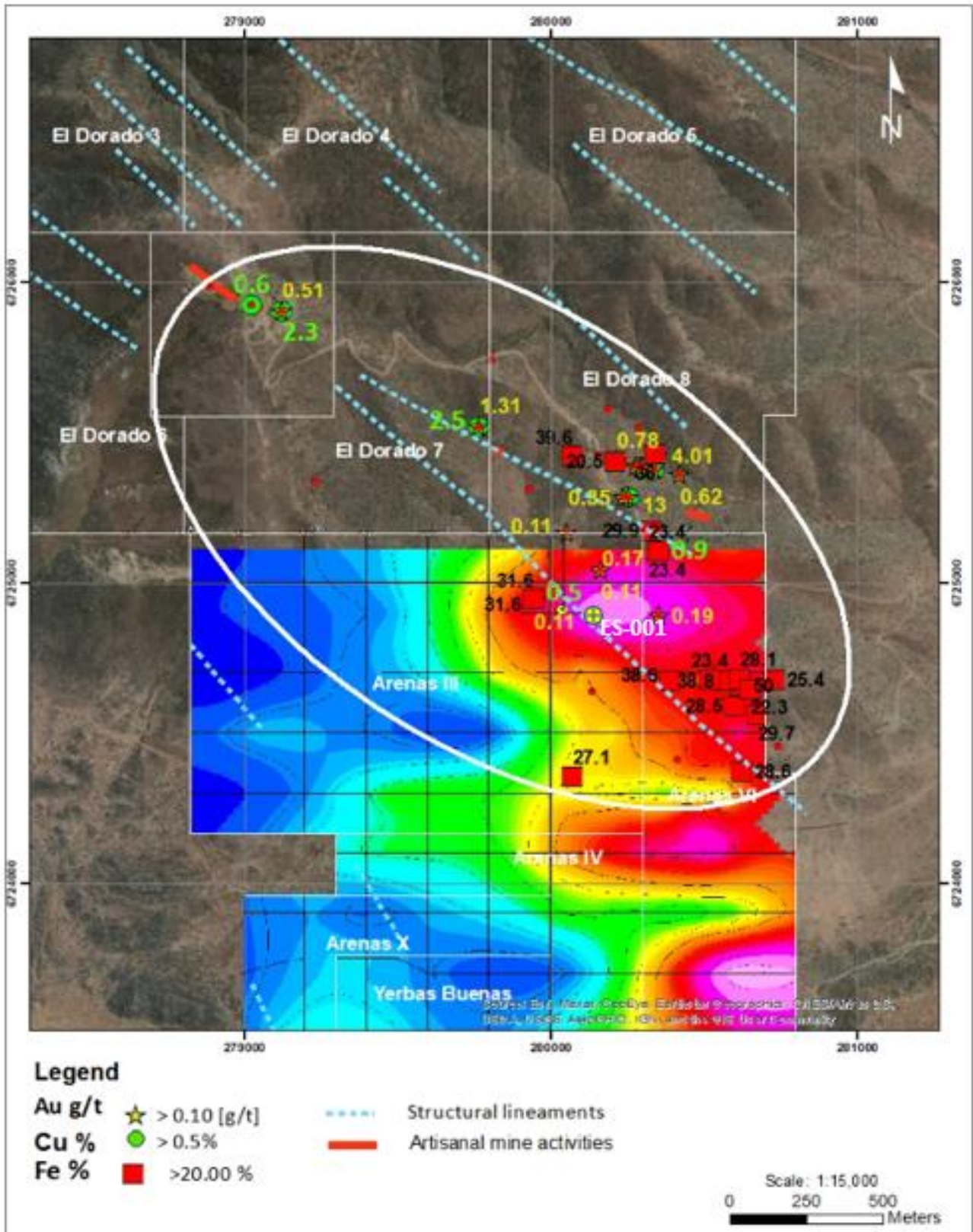


Figure 8 - IP plan (-300m depth), high chargeability associated with NW mineralised trend (area of interest), mapped structures and channel sampling results

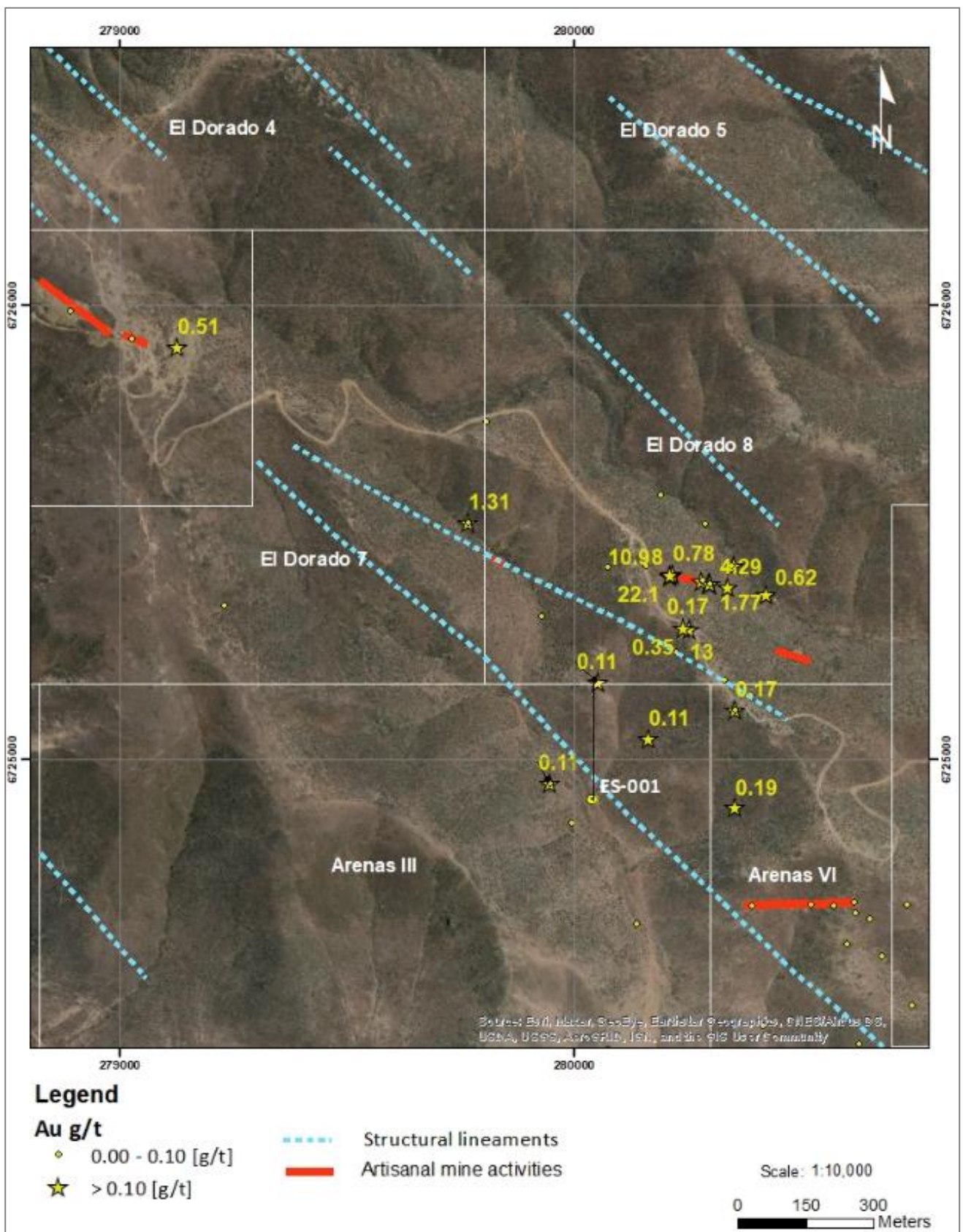


Figure 9 – Gold surface sampling grades



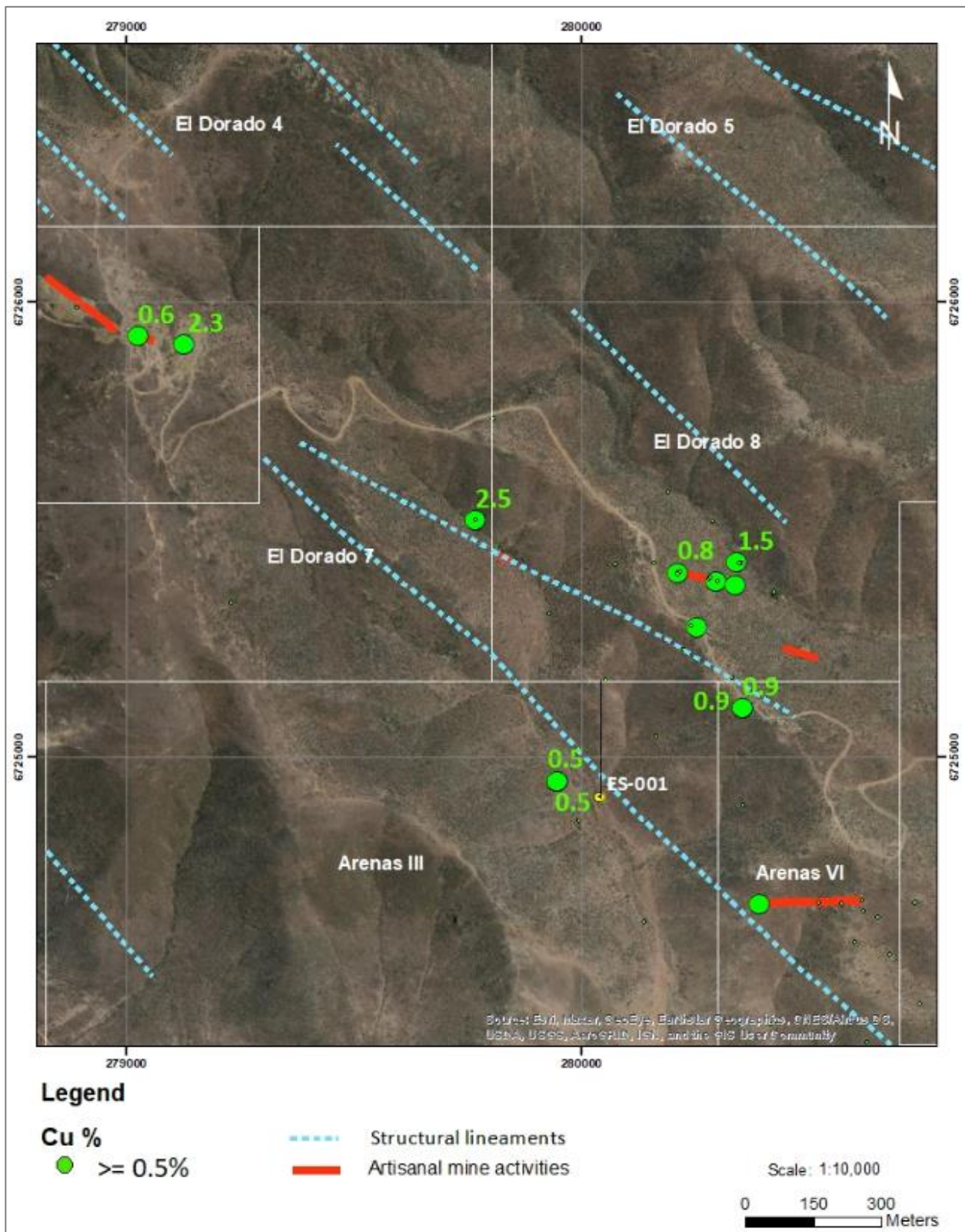


Figure 10 - Copper surface sampling grades



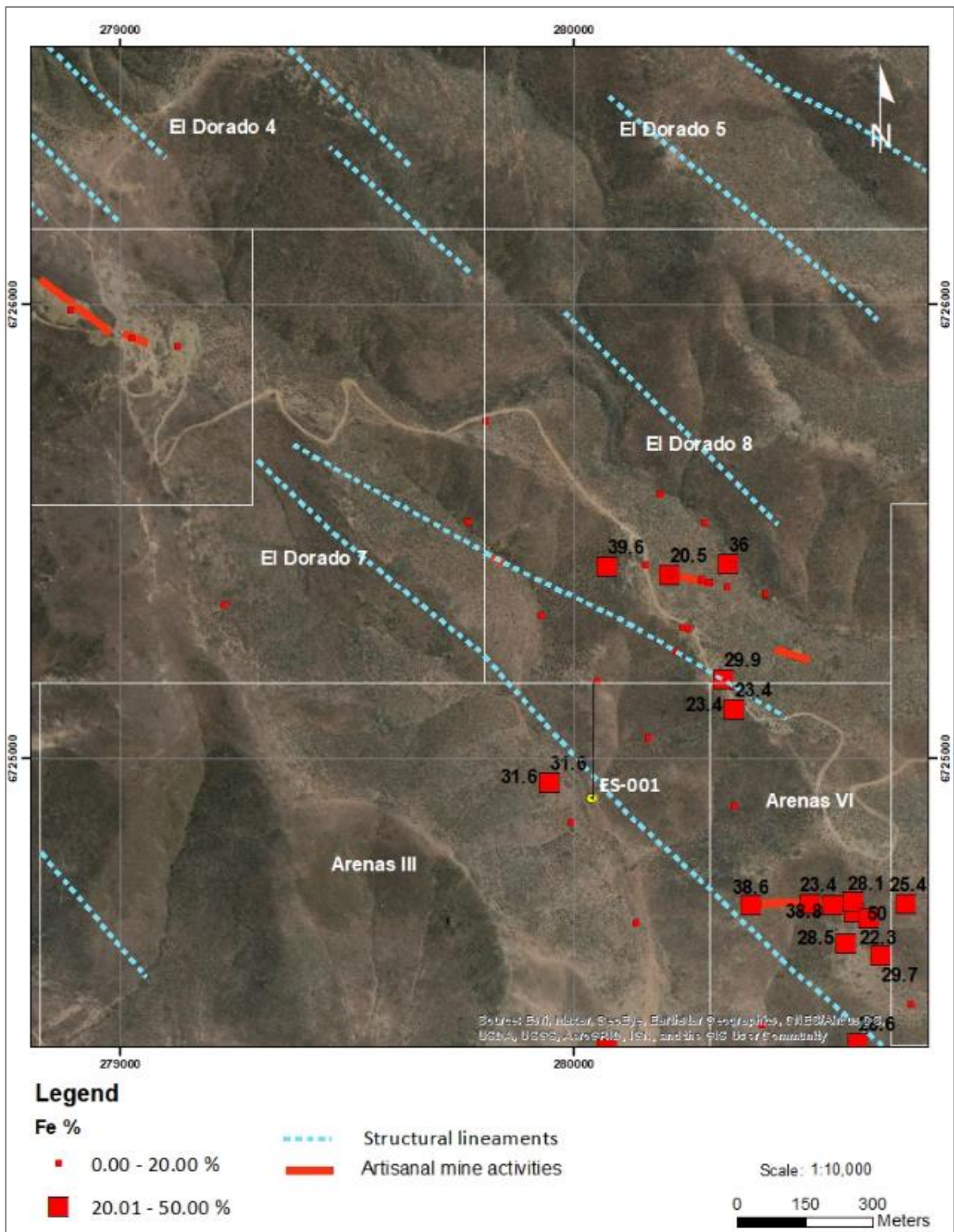


Figure 11 – Iron surface sampling grades

### Future Exploration by Freehill

Exploration works scheduled during the quarter will include completion of three Induced Polarisation lines through the primary target zone 'D1' identified in June ( See ASX release: 25 Aug 2020) followed by possible trenching.

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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 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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# Attachment 1 – All El Dorado reconnaissance surface sampling assays –

Compilation of all rockchip and channel samples taken during last three sampling campaigns

Area	Sample Number	North (WGS84)	East (WGS84)	RL	Fe %	Cu%	Au (ppm)
ED 8	EN01	6725408	280216	328	-	-	<b>0.78</b>
ED 8	EN02	6725408	280216	328	-	-	<b>10.98</b>
ED 8	EN03	6725394	280283	299	-	-	0.08
ED 8	EN04	6725387	280300	296	-	-	0.03
ED 8	EN05	6725387	280300	296	-	-	<b>4.29</b>
ED 8	EN06	6725387	280300	265	-	-	0.17
ED 8	EN07	6725387	280300	265	-	-	<b>1.77</b>
ED 8	EN08	6725387	280300	265	-	-	<b>2.28</b>
ED 8	EN09	6725387	280300	265	-	-	0.02
ED 8	EN10	6725425	280351	354	-	-	<b>4.01</b>
ED 8	EN11	6725362	280423	342	-	-	<b>0.62</b>
ED 8	EDM01	6725581	280190	401	7.94	0.094	0.028
ED 8	EDM02	6725581	280190	451	2.07	0.044	0.003
ED 8	EDM03	6725518	280289	375	3.06	0.049	0.014
ED 8	EDM04	6725428	280343	375	<b>36</b>	<b>1.480</b>	0.018
ED 8	EDM05	6725379	280340	368	<b>18.35</b>	<b>0.288</b>	<b>3.56</b>
ED 8	EDM06	6725385	280297	381	10.9	<b>0.384</b>	<b>7.12</b>
ED 8	EDM07	6725405	280212	407	<b>20.5</b>	<b>0.817</b>	<b>22.1</b>
ED 8	EDM08	6725405	280212	408	4.44	0.054	<b>0.644</b>
ED 8	EDM09	6725286	280255	401	10	<b>0.248</b>	<b>13.0</b>
ED 8	EDM10	6725288	280242	400	1.89	0.048	0.353
ED 8	EDM11	6726870	280611	513	16.55	<b>3.55</b>	0.245
ED 5	EDM12	6726868	280586	526	<b>22.3</b>	<b>4.02</b>	<b>0.866</b>
ED 5	EDM13	6726868	280586	526	7.62	0.063	0.013
ED 5	EDM14	6726868	280586	526	9.2	0.049	0.018
ED 5	EDM15	6726983	280594	519	10.7	0.042	0.013
ED 5	EDM16	6728256	279712	947	18.2	<b>9.93</b>	<b>1.59</b>
ED 5	EDM17	6727134	280310	603	<b>29.0</b>	<b>2.09</b>	<b>0.721</b>
ED 1	EDM18	6727787	279644	989	12.25	<b>3.27</b>	<b>0.738</b>
ED 1	EDM19	6727787	279644	989	2.1	<b>0.568</b>	0.035
ED8	311802	6725426	280347	365	10	0.018	0.002
ED8	311803	6725390	280281	357	11.05	<b>0.113</b>	<b>1.81</b>
ED8	311804	6725401	280212	404	6.82	0.081	<b>6.86</b>
ED8	311805	6725426	280158	419	1.08	0.002	0.005
ED8	311806	6725744	279808	485	10.4	0.013	0.008
ED8	311807	6725926	279026	657	12.4	<b>0.577</b>	0.032
ED8	311808	6725987	278890	657	7.29	0.059	0.006
ED8	311809	6725908	279125	617	<b>18.75</b>	<b>2.25</b>	<b>0.514</b>
ED8	311810	6725337	279230	552	7.03	0.024	0.004
ED8	311811	6725236	280226	364	8.08	0.020	0.002
ED8	311812	6725424	280074	422	<b>39.6</b>	0.044	0.001
ED7	311813	6725521	279766	409	1	0.003	0.001
ED7	311814	6725521	279766	401	7.9	<b>2.51</b>	<b>1.305</b>
ED7	311815	6725315	279929	337	1.42	0.003	0.001



## Attachment 2 – DDH ES-001 assays

Coordinate system: WGS84,19J  
 Coordinates: Northing 6.724.912 Easting 280.042,  
 Elevation: RL 267.22 m  
 Azimuth: 0.059  
 Dip: -50.2 degrees

Hole_Id	Sample Number	From (m)	To (m)	Interval (m)	Cu ppm	Au ppm	Fe %
ES-001	4482	33.00	34.00	1.00	2480	0.07	8.02
ES-001	4483	34.00	35.00	1.00	635	0.04	6.56
ES-001	4484	35.00	36.00	1.00	300	0.01	4.8
ES-001	4485	36.00	37.00	1.00	60.5	0.01	5.51
ES-001	4486	37.00	38.00	1.00	131	0.04	5.89
ES-001	4487	43.00	44.00	1.00	241	0.01	6
ES-001	4488	45.00	46.00	1.00	215	0.01	3.28
ES-001	4489	46.00	47.00	1.00	156	< 0.01	6.76
ES-001	4490	47.00	48.00	1.00	400	0.01	7.72
ES-001	4491	48.00	49.00	1.00	1050	0.02	7.69
ES-001	4492	49.00	50.00	1.00	518	0.01	5
ES-001	4493	53.00	54.00	1.00	153	< 0.01	5.2
ES-001	4494	54.00	55.00	1.00	191	0.01	5.36
ES-001	4495	55.00	56.00	1.00	250	0.01	5.23
ES-001	4496	56.00	57.00	1.00	105	0.01	7.73
ES-001	4497	57.00	58.00	1.00	124	0.01	6.65
ES-001	4498	60.00	61.00	1.00	134	0.01	3.36
ES-001	4499	61.00	62.00	1.00	284	0.01	5.2
ES-001	4500	62.00	63.00	1.00	244	0.01	7.19
ES-001	4501	63.00	64.00	1.00	474	0.02	7.72
ES-001	4502	64.00	65.00	1.00	134	0.01	4.41
ES-001	4503	65.00	66.00	1.00	91.2	< 0.01	3.63
ES-001	4504	66.00	67.00	1.00	208	0.01	5.1
ES-001	4505	67.00	68.00	1.00	496	0.01	4.18
ES-001	4506	77.00	78.00	1.00	121	0.01	3.72
ES-001	4507	78.00	79.00	1.00	272	0.01	4.85
ES-001	4508	79.00	80.00	1.00	86.7	0.01	5.45
ES-001	4509	80.00	81.00	1.00	168	0.01	3.8
ES-001	4510	81.00	82.00	1.00	1720	0.04	7.48
ES-001	4511	82.00	83.00	1.00	840	0.02	6.84
ES-001	4512	83.00	84.00	1.00	1460	0.02	6.49
ES-001	4513	84.00	85.00	1.00	748	0.02	5.67
ES-001	4514	85.00	86.00	1.00	891	0.01	4.06
ES-001	4515	86.00	87.00	1.00	594	0.02	4.77
ES-001	4516	87.00	88.00	1.00	695	0.02	5.46
ES-001	4517	88.00	89.00	1.00	258	< 0.01	4.24
ES-001	4518	89.00	90.00	1.00	395	0.01	4.22



Hole_Id	Sample Number	From (m)	To (m)	Interval (m)	Cu ppm	Au ppm	Fe %
ES-001	4519	90.00	91.00	1.00	836	0.02	4.21
ES-001	4520	91.00	92.00	1.00	2870	0.05	5.63
ES-001	4521	92.00	93.00	1.00	873	0.03	5.86
ES-001	4522	93.00	94.00	1.00	1310	0.04	4.89
ES-001	4523	94.00	95.00	1.00	296	0.01	3.91
ES-001	4524	95.00	96.00	1.00	525	0.02	4.56
ES-001	4525	96.00	97.00	1.00	381	0.01	4.51
ES-001	4526	97.00	98.00	1.00	607	0.02	5.23
ES-001	4527	98.00	99.00	1.00	1480	0.04	8.06
ES-001	4528	99.00	100.00	1.00	1050	0.03	6.59
ES-001	4529	100.00	101.00	1.00	622	0.02	4.71
ES-001	4530	101.00	102.00	1.00	713	0.02	4.6
ES-001	4531	102.00	103.00	1.00	114	0.01	3.47
ES-001	4532	103.00	104.00	1.00	119	< 0.01	4.77
ES-001	4533	104.00	105.00	1.00	346	0.01	5
ES-001	4534	105.00	106.00	1.00	163	0.01	6.41
ES-001	4535	106.00	107.00	1.00	374	0.01	7.8
ES-001	4536	107.00	108.00	1.00	433	0.01	11.9
ES-001	4537	108.00	109.00	1.00	106	< 0.01	3.14
ES-001	4538	109.00	110.00	1.00	488	0.01	6.87
ES-001	4539	110.00	111.00	1.00	1720	0.05	7.82
ES-001	4540	111.00	112.00	1.00	1100	0.02	5.63
ES-001	4541	112.00	113.00	1.00	1060	0.02	4.92
ES-001	4542	113.00	114.00	1.00	1640	0.03	5.33
ES-001	4543	114.00	115.00	1.00	3240	0.1	6.68
ES-001	4544	115.00	116.00	1.00	1760	0.03	5.6
ES-001	4545	116.00	117.00	1.00	3180	0.07	7.4
ES-001	4546	117.00	118.00	1.00	1700	0.03	4.86
ES-001	4547	118.00	119.00	1.00	2450	0.03	4.97
ES-001	4548	122.00	123.00	1.00	54.4	0.01	7.68
ES-001	4549	123.00	124.00	1.00	136	< 0.01	4.49
ES-001	4550	124.00	125.00	1.00	115	< 0.01	7.74
ES-001	4551	130.00	131.00	1.00	175	< 0.01	1.84
ES-001	4552	131.00	132.00	1.00	288	< 0.01	3.74
ES-001	4553	132.00	133.00	1.00	751	0.02	4.82
ES-001	4554	133.00	134.00	1.00	83.1	< 0.01	2.62
ES-001	4555	134.00	135.00	1.00	281	< 0.01	4.24
ES-001	4556	135.00	136.00	1.00	615	< 0.01	4.33
ES-001	4557	136.00	137.00	1.00	383	< 0.01	4.22
ES-001	4558	137.00	138.00	1.00	331	< 0.01	3.78
ES-001	4559	138.00	139.00	1.00	185	0.01	2.35
ES-001	4560	139.00	140.00	1.00	109	0.01	5.09
ES-001	4561	140.00	141.00	1.00	361	0.01	5.62
ES-001	4562	141.00	142.00	1.00	922	0.02	6.22
ES-001	4563	142.00	143.00	1.00	582	0.01	6.4
ES-001	4564	143.00	144.00	1.00	1200	< 0.01	8.18
ES-001	4565	144.00	145.00	1.00	188	< 0.01	4.19
ES-001	4566	145.00	146.00	1.00	820	0.01	6.81
ES-001	4567	146.00	147.00	1.00	81	0.01	4.52
ES-001	4568	157.00	158.00	1.00	90.3	< 0.01	3.83

Hole_Id	Sample Number	From (m)	To (m)	Interval (m)	Cu ppm	Au ppm	Fe %
ES-001	4569	158.00	159.00	1.00	171	0.01	4.76
ES-001	4570	164.00	165.00	1.00	677	0.02	7.92
ES-001	4571	165.00	166.00	1.00	77.6	0.01	3.76
ES-001	4572	166.00	167.00	1.00	109	< 0.01	6.19
ES-001	4573	187.00	188.00	1.00	233	0.01	7.4
ES-001	4574	188.00	189.00	1.00	212	< 0.01	7.24
ES-001	4575	189.00	190.00	1.00	178	< 0.01	4.25
ES-001	4576	201.00	202.00	1.00	101	< 0.01	3.37
ES-001	4577	202.00	203.00	1.00	160	0.01	2.6
ES-001	4578	203.00	204.00	1.00	999	0.03	5.62
ES-001	4579	204.00	205.00	1.00	618	0.01	4.14
ES-001	4580	207.00	208.00	1.00	424	0.01	7.82
ES-001	4581	221.00	222.00	1.00	425	0.01	4.41
ES-001	4582	230.00	231.00	1.00	82.8	< 0.01	3.61
ES-001	4583	239.00	240.00	1.00	83.6	< 0.01	8.47
ES-001	4584	251.00	252.00	1.00	25.4	< 0.01	8.7
ES-001	4585	252.00	253.00	1.00	18.1	< 0.01	3.47
ES-001	4586	253.00	254.00	1.00	36.1	< 0.01	4.34
ES-001	4587	254.00	255.00	1.00	27.4	< 0.01	4.83
ES-001	4588	257.00	258.00	1.00	11.7	< 0.01	3.85
ES-001	4589	283.00	284.00	1.00	70.9	0.01	6.13
ES-001	4590	302.00	303.00	1.00	67.5	< 0.01	5.55
ES-001	4591	320.00	321.00	1.00	57.5	< 0.01	6.78
ES-001	4592	321.00	322.00	1.00	84.7	< 0.01	8.45
ES-001	4593	328.00	329.00	1.00	153	0.12	4.36
ES-001	4594	355.00	356.00	1.00	203	< 0.01	5.41



# 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"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Data provided includes Channel sampling, diamond drilling of ES-001 hole and ground magnetic geophysics.</li> <li>NQ diamond core drilling carried out by DV Drilling using a Cortech 1300G maxi track mounted drill rig.</li> <li>Refer to Attachment 2 of announcement. Hole ES-001 orientated as shown, and were drilled at dip of 50.2° in a north direction.</li> <li>Core remained in the custody of the company after being picked up from the drilling site.</li> <li>Protocol set up and several magnetic</li> <li>The drill hole locations were located by survey differential GPS and checked against known government benchmarks.</li> <li>Down hole surveys were conducted on all holes during drilling for azimuth and orientation using Reflex Ezi-Gyro and Reflex-Ori</li> <li>Surface sampling undertaken using conventional methods described in previous table 1 versions. Assays from current sampling campaign and previous rockchip campaigns provided in Attachment 1 of media release.</li> <li>Ground magnetics carried out Agarli geofisica using 50m line spacing and the same equipment used in previously reported surveys/</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>DDH drilling was the method chosen for hole drilled. The core diameter was HQ triple tube (in weathered rock and surficial sands ) and NQ size in competent rock.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Core recoveries were observed during the drilling and any core loss was noted in the geological logs.</li> <li>Samples were checked by for volume, moisture content, possible contamination and recoveries. Any issues are discussed with the drilling contractor.</li> <li>Some core loss was apparent and noted (generally &lt;5%) in the weathered portion of the holes, however this was generally minor.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All core sample logged by a qualified geologist with experience in magnetite deposits in Chile to a level appropriate with the style of mineralization</li> <li>Logging was both qualitative and quantitative</li> <li>Lithology, alteration, mineralization level &amp; magnetic susceptibility all logged</li> <li>All core remained as full core until fully logged and magnetic susceptibility measurements</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>recorded.</li> <li>Four magnetic susceptibility readings taken of each metre of core prior to cutting and the averaged recorded.</li> <li>All holes were logged in full.</li> <li>Channel sampling samples and site mineralisation all logged by Tracking SpA senior geologist in presence of Freehill geologist.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>All ES001 core cut using a standard electric diamond saw.</li> <li>The preparation of samples follows industry practice.</li> <li>Following detailed logging and magnetic susceptibility measurements taken the core was marked for orientation and cut in half by diamond saw.</li> <li>Assay sample intervals were then marked by the geologist and ½ core samples bagged into plastic bags and dispatched to AGS Coquimbo, Chile for ore preparation.</li> <li>Ore preparation was a standard ore prep method which involved oven drying, crushing to ~5kg to 85% -10# and a 250g sub-sampled pulverized of 95% passing 150#</li> <li>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.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sample preparation of channel samples completed by ALS Coquimbo and pulps sent to ALS Lima.</li> <li>Sample preparation and assaying of DDH ES001 samples done by Activation Geological Services Coquimbo laboratory. Pulverised to 95% passing 150#. Gold assayed by 30g Fire Assay with AAS finish. Copper and other elements assayed by 4 acid digest followed by ICP.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No twinned holes have been completed to date – ES001 was a reconnaissance hole.</li> <li>Drill logs and geological logging has been done on hand written sheets which are converted to digital format each day.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Hole location has been done using differential GPS by a registered surveying company.</li> <li>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</li> <li>All digital data, maps and data products associated with the drilling program are provided in coordinate</li> </ul>

Criteria	JORC Code explanation	Commentary
		system: datum WGS84 and projection UTM zone 19S.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable – ES001 reconnaissance hole only</li> <li>• Drilling line spacing not applicable as only a single hole drilled.</li> <li>• No sample compositing has been done. Assay intervals have been selected based on lithology and visual assessment of any sulphide mineralization present.</li> <li>• Any single assay sample does not contain more than 2m of core.</li> <li>• Channel sampling position and orientation dependent on visible structure at each sampling location</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• ES001 drilled north based on hypothesized structures and 3 IP lines. No actual structure determined yet</li> <li>• No orientation based sampling bias has been identified in the data to date.</li> <li>• The main structure is thought to dip to the west</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 or AGS Coquimbo the samples were under the control of ALS or AGS until fully assayed in Coquimbo or Lima.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• None completed to date</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> <li>• 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.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Two Reverse Circulation drill holes-SDHYB1101 &amp; 1102- completed by previous tenement holder Compania Minería Pacifico (CAP) in 2011 and referred to in prospectus section 2.5 of IGR</li> <li>• Holes drilled to 101m &amp; 150m, Dip 70</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>degrees, azimuth 119, E6,723,594 N279,725 &amp; E6,723,564 N279,758</p> <ul style="list-style-type: none"> <li>• Complete drill hole assays provided by Compania Minera del Pacifico, photographs of drilling activity and hole collars, geophysics by Geoexploraciones,</li> <li>• Samples assayed for Total %Fe and % magnetics by Davis Tube.</li> <li>• 50m line spaced ground magnetics survey completed over 800mx800m in 2010 by Geoexploraciones</li> </ul>
Geology	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 evidence of IOCG mineralisation</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Table of drill hole positions provided in report appendix</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable for currently reported magnetic susceptibility measurements.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable for currently reported magnetic susceptibility measurements.</li> <li>• Geometry of mineralization not yet determined but will be determined as a result of the current drilling campaign</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and</i></li> </ul>	<ul style="list-style-type: none"> <li>• See Figure in Appendix following body</li> </ul>

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