

El Palmar gold-copper discovery, northern Ecuador**Strong assays establish broad mineralisation over 500m by 300m from surface to 500m deep**

El Palmar clearly emerging as a substantial project with scale and grade

Key Points

- “Given the huge area of continuous, shallow mineralisation and grades which are in line with many well-known porphyry operations around the world, I have no doubt that we have a substantial project of very large scale at El Palmar.” – MD Malcom Norris
- Strong assays from holes EPDD007, 8, 10 and 11 from the upper 500m of the south-east and eastern domain at El Palmar include:
 - 167m at 0.57g/t gold and 0.14% copper from 112m in EPDD008
 - 165.9m at 0.58g/t gold and 0.15% copper from 19.1m in EPDD010 including;
 - 78m at 0.79g/t gold and 0.17% copper from 95m
 - 243.9m at 0.43g/t gold and 0.12% copper from 13.1m in EPDD011 including;
 - 58m at 0.64g/t gold and 0.13% copper from 95m
 - 162.05m at 0.38g/t gold and 0.13% copper from 10.15m in EPDD007
- Deep drilling has intersected extensive zones of gold and copper mineralisation to 900m deep; These are interpreted to relate to nearby well-mineralised domains within the broader El Palmar target area that measures 1.3km x 1km
- New assay results from the Bramaderos Project expected within a fortnight
- Sunstone is well funded with ~A\$30m in cash and equities

Sunstone Metals Ltd (ASX: STM) is pleased to announce strong assays from four more holes in the upper 500m at El Palmar which confirm that the project hosts a significant gold-copper porphyry discovery.

The latest assays extend the known, continuous mineralisation to an area of at least 500m x 300m by 500m vertical extent, from surface.

In addition, early-stage deep drilling has intersected peripheral mineralisation in wallrock that is interpreted to be close to higher grade mineralisation, providing further exploration targets at depth (Figure 3).

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El Palmar is located in northern Ecuador in the vicinity of the 1Bt Llorimagua copper-molybdenum porphyry deposit and in the same regional structural belt that hosts the 2.6Bt Alpala copper-gold deposit within the Cascabel project (Figures 4 & 5).

The El Palmar results reported in this release comprise all assays from drill holes EPDD007, 008, 010 and 011 in the upper 500m zone of the southeast sector of El Palmar, and holes EPDD009 and 016, which drilled deeper into the El Palmar system in the central sector of El Palmar (Figures 1-3 and Table 1). Previously released results are collated in Table 2 (see ASX release dated 23rd February 2022).

Sunstone MD Malcolm Norris said: “These latest results confirm El Palmar is a substantial project of immense scale with grades which are in line with those seen in many of the world’s high-profile porphyry deposits.

“And there is huge scope to continue growing the discovery, with the strong result from hole EPDD011 opening up the eastern and north-eastern sectors for further drilling.

“This area will be explored initially with an undercut hole, with further drilling targeting untested magnetic anomalies and surface gold-copper soil anomalies in this area”.

Mr Norris said the discovery was shaping up as a series of targets across an extensive vertical and lateral interval of the 750m diameter El Palmar intrusive complex, and additional satellite targets.

“We continue to expand the zone of porphyry gold-copper mineralisation,” he said. “The targets in the upper 500m in the south-east and eastern sectors have a clear relationship between gold, copper and magnetite and so drill targeting is aided by our robust 3-D magnetic model. The success of this approach is shown by the results in this release from holes EPDD007, 008, 010 and 011.”

Mr Norris said targets below 500m were less well defined in magnetics, but a large Spartan magnetotelluric (MT) survey had just been completed which maps conductivity and resistivity. This will now be integrated with magnetic models to deliver higher confidence deep drill targets.

“We have identified clear extensive intervals of deep gold and copper mineralisation in holes EPDD009 and 016 to depths of up to 900m,” he said.

“For example, EPDD009 intersected 513m @ 0.17m Au, 0.09% Cu from 225m. Such long intervals of mineralisation are typical in the adjacent wall-rocks to syn-mineral porphyry intrusions. We expect these relate to adjacent zones of better mineralisation that are yet to be drilled within the El Palmar intrusive complex. Our exploration program will now focus on defining drill targets in this domain.”

Sunstone’s cash and equity investments remain strong at ~\$30m, allowing expanded exploration activities at both El Palmar in northern Ecuador and Bramaderos in southern Ecuador.

Summary of Drill Results

Drill hole EPDD007 targeted the area below the high-grade mineralisation in EPDD002, and defined continuity of mineralisation at depth below and north of EPDD002.

Drill hole EPDD008 drilled above strong mineralisation in EPDD001 and defined continuity of mineralisation from EPDD001 northward to surface.

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Drill hole EPDD010 drilled over and to the south of EPDD002, 006 and 007, and also defined continuity of mineralisation both above and south of EPDD002.

Drill hole EPDD011 drilled to the north and into a previously undrilled area. This hole was drilled at a shallow angle of -35° and as such has defined a broad mineralised zone which will now be explored to depth. No holes to date have drilled underneath this mineralised domain.

All holes within the south-eastern and eastern portions of the El Palmar intrusive complex have defined strong mineralisation from surface. This zone measures at least 500 x 300m, with a vertical extent of at least 500m, which remains open (Figure 2).

Drill hole EPDD009 (Figures 1 & 3) was drilled to test a deep magnetic anomaly below and west of the two shallower mineralised zones in EPDD004, but the hole deviated and lifted so that it passed over the upper section of the anomaly (Figure 3). Nevertheless, EPDD009 intersected 513m @ 0.17m Au, 0.09% Cu from 225m, including 68m at 0.14g/t gold and 0.1% copper within a syn-mineral bi-modal quartz diorite body. The broad interval of 513m of anomalous gold and copper comprises two of these syn-mineral intrusives and the intervening mineralised wallrock.

Drill hole EPDD016 (Figures 1 & 3) was drilled to test a sub-vertical magnetic anomaly in the north-west area of the El Palmar target. The drillhole intersected two phases of diorite with variable veining, and traces of chalcopyrite and molybdenite to the end of hole at 974m. The mineralisation graded up to 0.78g/t gold with anomalous copper at 840m, and 0.3g/t gold and 0.23% copper at 740m. These narrow intervals sit below broader highly anomalous intervals of 77m at 0.29g/t gold and 0.14% copper from 549m within a bi-modal quartz diorite, similar to the mineralised intrusions in BMDD009.

Figure 3 shows combined El Palmar magnetic models 1 and 6, with drill holes, and a portion of the models removed to better visualise the lack of drill holes piercing the deep magnetic targets. The geometry of the magnetic models at this depth are less reliable than at shallower positions, and therefore will be combined with the recently completed MT models to further refine deep drill hole targeting.

It is clear that mineralisation at El Palmar occurs in a variety of rock types, including in higher-grade syn-mineral intrusions, in lower-grade syn-mineral intrusions, and in their immediate wallrocks. In porphyry systems it is the amalgamation of these multiple mineralised domains that contribute to the large tonnage and hence economies-of-scale that apply to their eventual extraction. In this regard El Palmar is displaying these same characteristics.

Whilst chalcopyrite is the dominant copper-sulphide mineral that is being observed in drilling, bornite, covellite and chalcocite are associated with more strongly mineralised sections of drill core. These sulphides have higher copper tenor and are also being modelled to understand their distribution as drilling progresses.

Several highly prospective satellite anomalies that are also related to deeper magnetic bodies will be drilled in 2022. We will also commence exploration of compelling epithermal targets on the northern part of the concession, where historical surface rock chip results yielded an 85m-long (and open) zone from which 101 surface samples averaged 1.2 g/t Au, 25 g/t Ag and 0.16% Cu, with peak values for these elements being 6.47 g/t Au, 225g/t Ag and 0.78% Cu.

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Drill Hole	EOH (m)	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	Mo (ppm)	Ag (g/t)	
EPDD007	675	10.15	172.20	162.05	0.38	0.13	1.51	0.85	
		<i>incl</i>	91.00	117.20	26.20	0.48	0.15	1.2	0.8
			251.00	287.00	36.00	0.35	0.11	3.9	0.6
			367.10	466.00	98.90	0.36	0.17	4.4	0.7
			383.00	412.50	29.50	0.51	0.22	3.8	1.1
		388.00	391.50	3.50	1.03	0.35	6.1	1.8	
EPDD008	540	19.40	324.00	304.60	0.47	0.15	2.19	0.81	
		<i>incl</i>	71.50	95.80	24.30	0.62	0.21	1.0	1.0
			112.00	279.00	167.00	0.57	0.14	2.7	0.7
		<i>incl</i>	120.50	133.00	12.50	1.07	0.16	1.7	0.9
<i>and</i>	197.10	229.00	31.90	0.65	0.17	2.8	0.9		
EPDD009	901	100.00	113.50	13.50	0.15	0.04	13.6	0.1	
			225.00	738.00	513.00	0.17	0.09	5.33	0.3
			232.00	300.00	68.00	0.14	0.12	11.2	0.4
			326.30	335.00	8.70	0.42	0.12	7.3	0.7
			608.00	630.00	22.00	0.21	0.16	5.8	0.3
			608.00	688.00	80.00	0.15	0.11	6.0	0.3
EPDD010	523	19.10	185.00	165.90	0.58	0.15	1.0	0.8	
		<i>incl</i>	95.00	173.00	78.00	0.79	0.17	1.1	0.8
			241.00	314.00	73.00	0.42	0.17	2.5	0.8
			241.00	255.00	14.00	0.72	0.18	1.4	0.9
EPDD011	509	4.72	347.00	342.28	0.34	0.11	5.4	0.4	
		<i>incl</i>	13.10	257.00	243.90	0.43	0.12	6.1	0.4
		<i>and</i>	95.00	153.00	58.00	0.64	0.13	14.8	0.5
EPDD016	974	361.00	369.00	8.00	0.23	0.12	6.2	0.2	
			469.00	523.00	54.00	0.27	0.15	6.1	0.3
			549.00	626.00	77.00	0.29	0.14	7.6	0.3
			563.00	573.00	10.00	0.43	0.23	1.7	0.5

Table 1: Mineralised intervals in holes EPDD007, EPDD008, EPDD009, EPDD010, EPDD011 and EPDD016

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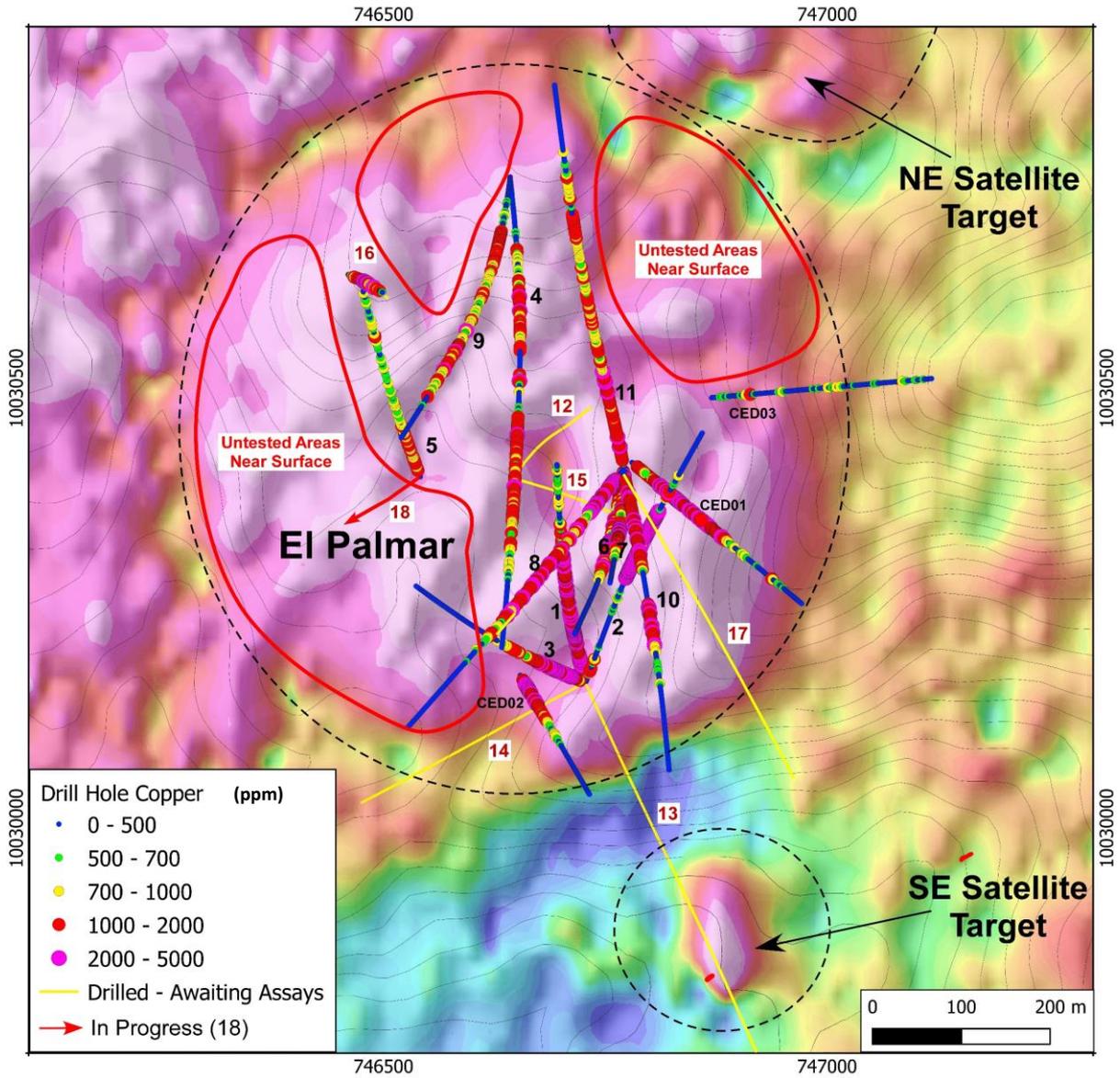


Figure 1: Distribution of copper (shown in ppm; 2000ppm = 0.2%) in drillholes at El Palmar. Assays are pending for holes 12 – 15, and 17 (yellow traces) whilst hole 18 (red trace) is nearing completion.

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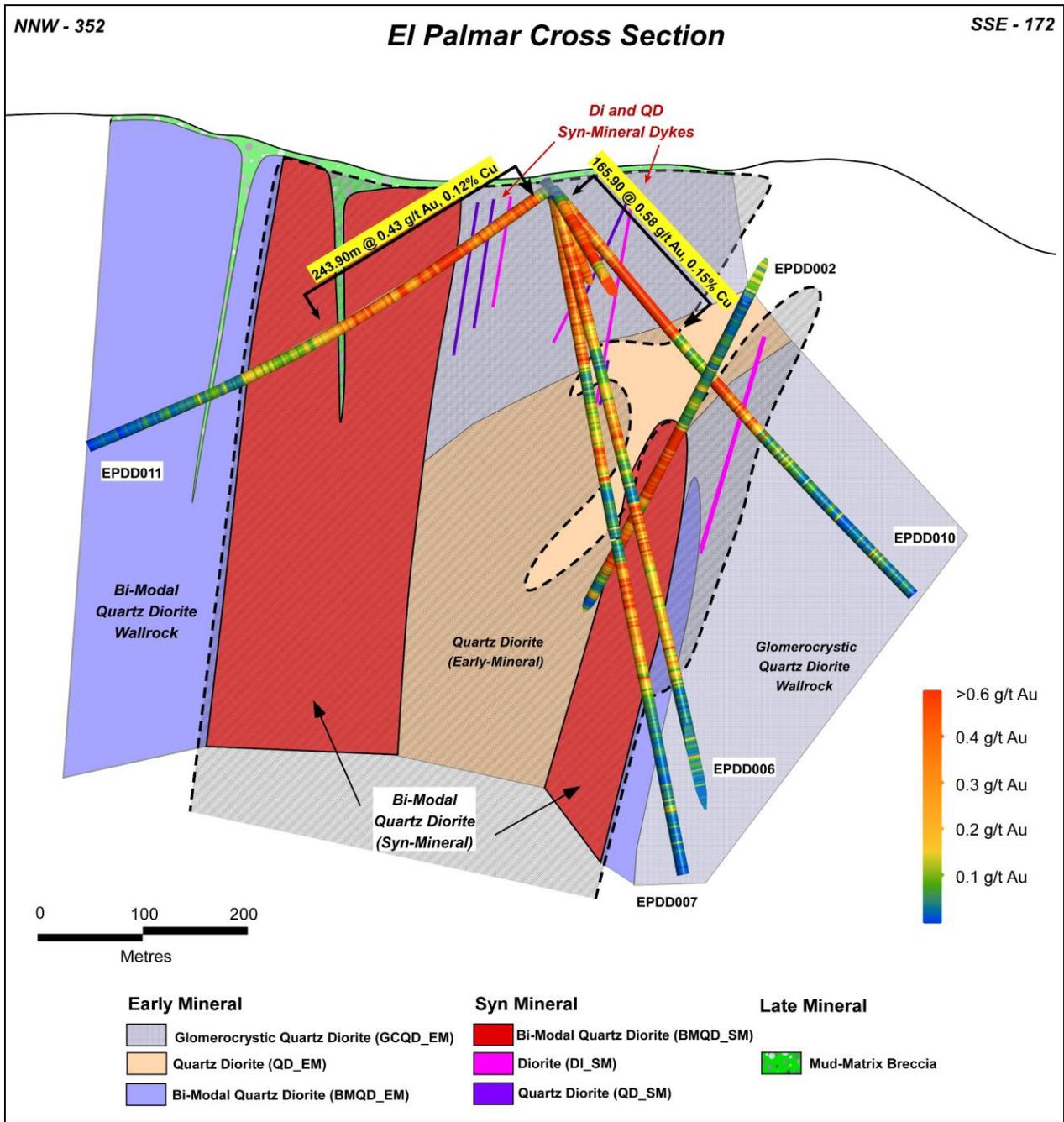


Figure 2: Cross section through holes EPDD002, 006, 007, 010, and 011 showing the lateral extent of mineralisation and the large areas that remain undrilled below EPDD011.

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Inclined View Looking North through El Palmar Magnetic Models 1 and 6

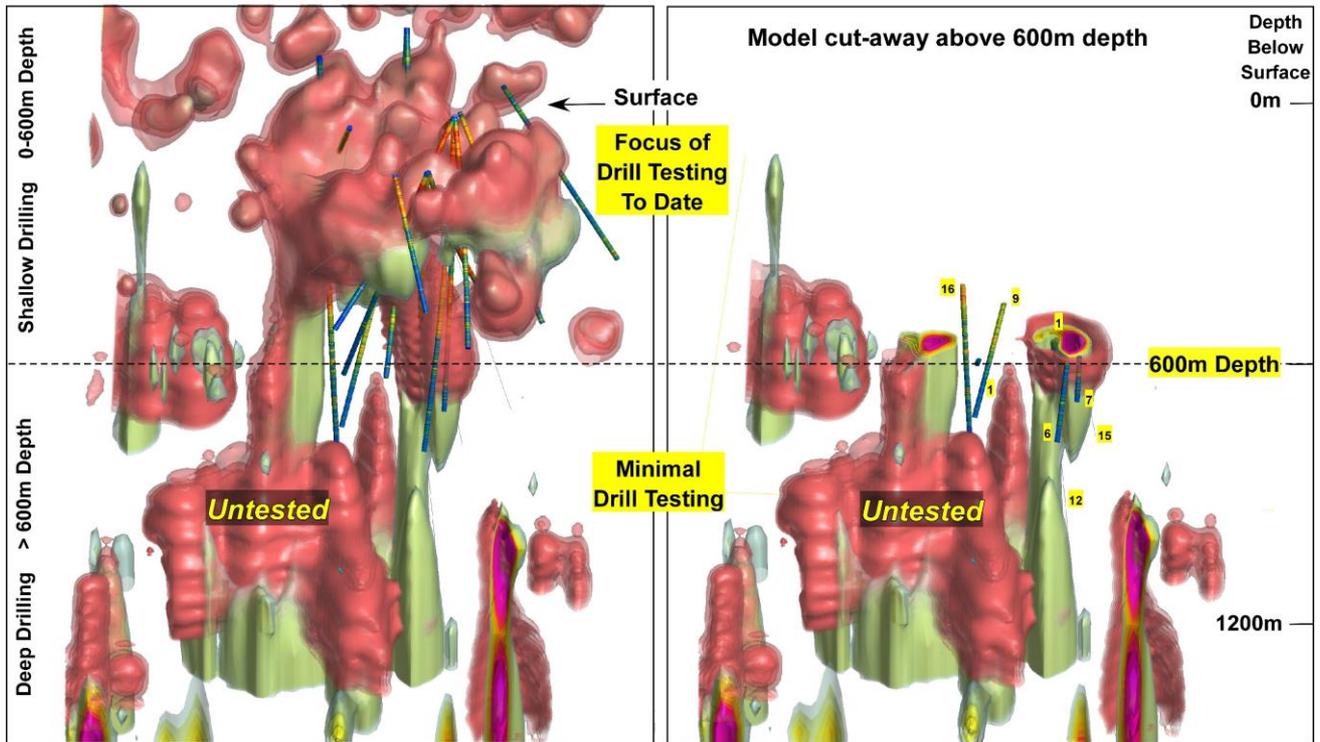


Figure 3: Combined El Palmar magnetic models shown in pink and green with drill holes. The image on the left extends from surface to 1200m below surface. The image on the right shows the upper 600m removed to show more clearly the sparsity of drilling below 600m, and the lack of drill holes piercing the magnetic models. The geometry of the magnetic models at this depth are less reliable than at shallower positions, and therefore will be combined with the recently completed MT models to further refine deep drill hole targeting.

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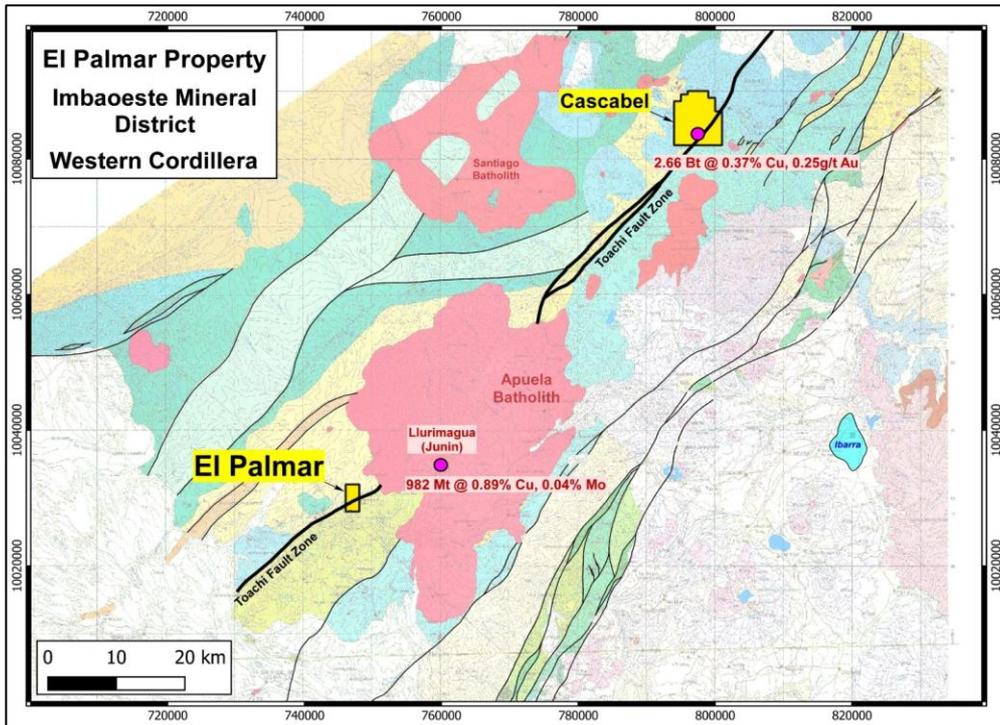


Figure 4: Location of the El Palmar project relative to the giant Llurimagua and Alpala (Cascabel) porphyry deposits, and the Toachi fault system.

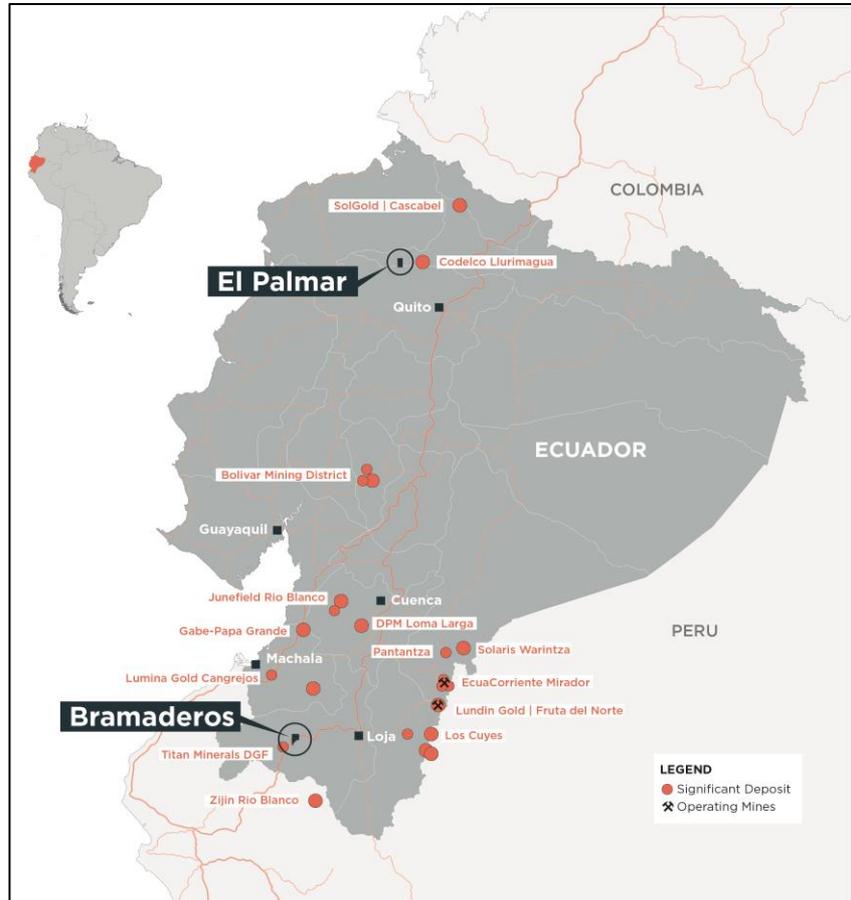


Figure 5: Location of the El Palmar project in northern Ecuador, and the Bramaderos Project in southern Ecuador.

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Drill Hole	EOH (m)	From (m)	To (m)	Interval (m)	Au (g/t)	Cu (%)	Mo (ppm)	Ag (g/t)
EPDD001	708.5	11.30	492.15	480.85	0.41	0.15	3.40	0.74
		<i>incl</i>	52.35	215.90	163.55	0.71	1.39	1.14
		<i>incl</i>	66.90	96.80	29.90	0.73	0.70	1.06
		<i>incl</i>	147.25	163.30	16.05	0.80	1.36	2.69
EPDD002	595.05	4.7	34	29.30	0.18	0.06	1.3	0.57
			250.00	463.75	213.75	0.48	3.84	1.58
		<i>incl</i>	250.00	417.50	167.50	0.58	3.54	1.81
		<i>incl</i>	252.00	274.00	22.00	1.06	3.87	1.49
		<i>and</i>	388.75	398.00	9.25	1.22	4.38	6.92
EPDD003	605.3	10.44	270.00	259.56	0.41	0.14	1.77	0.80
		<i>incl</i>	27.30	203.00	175.70	0.55	1.5	0.80
		<i>incl</i>	31.91	137.00	105.09	0.75	1.14	0.89
		<i>incl</i>	46.10	106.10	60.00	0.89	0.97	0.91
EPDD004	796.35	138.00	592.75	454.75	0.26	0.09	3.9	0.34
		<i>incl</i>	194.00	291.00	97.00	0.43	5.1	0.43
		<i>incl</i>	194.00	237.80	43.80	0.51	6.1	0.47
		<i>and</i>	415.00	592.75	177.75	0.26	5.0	0.35
		<i>incl</i>	424.00	491.00	67.00	0.34	8.0	0.42
EPDD005	328.49	10.35	82.50	72.15	0.27	0.10	2.3	0.37
<i>Abandoned at 330m</i>		10.35	328.49	318.14	0.17	0.06	3.1	0.24
EPDD006	759	10.65	495.00	484.35	0.27	0.12	4.22	0.63
		<i>incl</i>	10.65	135.00	124.35	0.41	1.70	1.10
		<i>and</i>	314.00	412.25	98.25	0.33	5.06	0.71
		<i>incl</i>	314.00	364.00	50.00	0.43	4.55	0.79
EPDD007	675	10.15	172.20	162.05	0.38	0.13	1.51	0.85
		<i>incl</i>	91.00	117.20	26.20	0.48	1.2	0.8
			251.00	287.00	36.00	0.35	3.9	0.6
			367.10	466.00	98.90	0.36	4.4	0.7
		<i>incl</i>	383.00	412.50	29.50	0.51	3.8	1.1
		<i>incl</i>	388.00	391.50	3.50	1.03	6.1	1.8
EPDD008	540	19.40	324.00	304.60	0.47	0.15	2.19	0.81
		<i>incl</i>	71.50	95.80	24.30	0.62	1.0	1.0
			112.00	279.00	167.00	0.57	2.7	0.7
		<i>incl</i>	120.50	133.00	12.50	1.07	1.7	0.9
		<i>and</i>	197.10	229.00	31.90	0.65	2.8	0.9
EPDD009	901	100.00	113.50	13.50	0.15	0.04	13.6	0.1
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		<i>incl</i>	95.00	173.00	78.00	0.79	1.1	0.8
			241.00	314.00	73.00	0.42	2.5	0.8

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<i>incl</i>		241.00	255.00	14.00	0.72	0.18	1.4	0.9
EPDD011	509	4.72	347.00	342.28	0.34	0.11	5.4	0.4
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		469.00	523.00	54.00	0.27	0.15	6.1	0.3
		549.00	626.00	77.00	0.29	0.14	7.6	0.3
<i>incl</i>		563.00	573.00	10.00	0.43	0.23	1.7	0.5

Table 2: Previously reported and current mineralised intercepts from drill holes EPDD001 - 11, and EPDD016.

Drill Hole ID	Easting (m)	Northing (m)	Dip (degrees)	Azimuth (UTM) (PSAD56 Grid) (degrees)	EOH (m)
EPDD001	746,737	10,030,181	-70	348	708.50
EPDD002	746,737	10,030,181	-60	018	595.05
EPDD003	746,737	10,030,181	-70	290	605.30
EPDD004	746,650	10,030,749	-55	175	796.33
EPDD005	746,550	10,030,410	-50	338	328.49
EPDD006	746,786	10,030,417	-75	190	759.00
EPDD007	746,786	10,030,417	-80	170	675.00
EPDD008	746786	10030417	-45	215	540.00
EPDD009	746650	10030749	-75	190	901.00
EPDD010	746,786	10,030,417	-50	165	523.00
EPDD011	746,786	10,030,417	-35	345	509.00
EPDD012	746,654	10,030,410	-85	20	1201.06
EPDD013	746,737	10,030,181	-35	153	611.00
EPDD014	746,726	10,030,165	-35	240	342.00
EPDD015	746646	10030398	-78	100	771.00
EPDD016	746460	10030629	-87	110	974.00
EPDD017	746770	10030406	-30	148	455.00
EPDD018	746542	10030399	-80	240	In progress

Table 3: Drill hole details for the El Palmar Project.

For further information, please visit www.sunstonemetals.com.au

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About Sunstone Metals

Sunstone has an advanced portfolio of exploration and development projects in Ecuador and Scandinavia. The portfolio comprises:

1. **The Bramaderos Gold-Copper Project** where Sunstone owns an 87.5% interest with TSXV listed Cornerstone Capital Resources holding 12.5% (see ASX announcement dated 10th April 2017, 28th August 2019, and 7 January 2020). The Bramaderos gold-copper project is located in Loja province, southern Ecuador, and is highly prospective for the discovery of large porphyry gold-copper systems, and high-grade epithermal gold systems. Historical exploration results from drilling at Bramaderos together with recent exploration by Sunstone and joint venture partner Cornerstone Capital Resources (TSXV:CGP) indicate multiple fertile mineralised systems with significant discovery potential.
2. **The El Palmar Copper-Gold Project** where Sunstone holds 70% of the highly prospective 800ha El Palmar gold-copper porphyry project in Ecuador. Sunstone can acquire 100% through a Staged Acquisition Agreement. The El Palmar gold-copper project is located in Imbabura province, northern Ecuador, within the same geological belt that includes the giant Alpala and Llurimagua porphyry copper-gold and copper-molybdenum deposits.
3. **Sunstone has an equity interest** in Stockholm listed Copperstone Resources (COPP-B.ST) following the sale of the Viscaria Copper project to Copperstone in 2019.

Competent Persons Statement

The information in this report that relates to exploration results is based upon information reviewed by Dr Bruce Rohrlach who is a Member of the Australasian Institute of Mining and Metallurgy. Dr Rohrlach is a full-time employee of Sunstone Metals Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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". Dr Rohrlach consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mr Malcolm Norris, Managing Director of Sunstone Metals Ltd., has authorised this announcement to be lodged with the ASX.

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TABLE 1 – Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. 	<ul style="list-style-type: none"> The drill core sampling was carried out using half core, generally at 1.5 to 2m intervals. New results are based on assays of drill core.
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> Core recovery was good, and core aligned prior to splitting and sampling.
	<ul style="list-style-type: none"> 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Diamond drilling, rock chip and channel sampling points have been guided by geological mapping. The drill samples from El Palmar were dried, crushed to 70% passing 2mm, Split 1000g and pulverised to 85% passing 75microns. A 20g portion of this sample was used for multi-element analysis (IMS-230) and a 30g sample for Fire Assay Au (FAS-111).
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 (e.g. 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"> The El Palmar target areas have been drilled with diamond core.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	<ul style="list-style-type: none"> Diamond core recovery data for the El Palmar drilling program was good.
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	<ul style="list-style-type: none"> Core recovery at El Palmar was good.
	<ul style="list-style-type: none"> 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"> No relationship between sample recovery and grade has been established.
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. 	<ul style="list-style-type: none"> Drill samples were logged for lithology, weathering, structure, mineralogy, mineralisation, colour, and other features. Recent logging and sampling for the El Palmar project were carried out according to Sunstone's internal protocols and QAQC procedures which comply with industry standards.
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. 	<ul style="list-style-type: none"> Drill samples are logged for lithology, weathering, structure, mineralogy, mineralisation, colour, and other features.
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> The drill holes have been logged in full. Drill hole lengths are included in the text of the announcement.
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. 	<ul style="list-style-type: none"> Half core was used to provide the samples that were submitted for assay from the El Palmar drilling.
	<ul style="list-style-type: none"> If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. 	<ul style="list-style-type: none"> This announcement relates to drill core samples.
	<ul style="list-style-type: none"> For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<ul style="list-style-type: none"> Historical drill core samples from El Palmar (drilled by Codelco) were analysed by ACME Labs in Vancouver. Samples were crushed and split with 250 grams pulverized to 200 mesh (Method - R200-250). Analysis on drill core was undertaken on a sample split (Method - VAN split pulp). Surface rocks at El Palmar are historical and were collected by 3 different companies. GOEX S.A. samples were analysed at Bureau Veritas Laboratories in Peru. Lowell Mineral Exploration rocks were

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	<ul style="list-style-type: none"> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>analysed by ALS Minerals, with sample preparation involving fine crushing 70% passing 2mm (Method CRU-31), crushed sample split (Method SPL-21) and pulverise 1000g to 85% passing 75um (Method PUL-32). Codelco surface rock samples were analysed by ACME Labs in Vancouver. Samples were crushed and split with 250 grams pulverized to 200 mesh (Method - R200-250)</p> <ul style="list-style-type: none"> The sample preparation for the current phase of drilling is carried out according to industry standard practices using highly appropriate sample preparation techniques. Sunstone used an industry standard QAQC programme involving Certified Reference Materials “standards” and blank samples, which were introduced in the assay batches. Standards (Certified Reference Materials) or analytical blanks were submitted at a rate of 1 in 28 samples. Field duplicates were also taken at a rate of approximately 1 in 28 samples. The check or duplicate assay results are reported along with the sample assay values in the final analysis report. For diamond core, the routine sample procedure is to always take the half/quarter core to the right of the orientation line (looking down hole) or the cut line (in cases where the orientation line was not reliable). Once assay results are received the results from duplicate samples are compared with the corresponding routine sample to ascertain whether the sampling is representative. Sample sizes are considered to be appropriate for the style of sampling undertaken and the grain size of the material, and correctly represent the style and type of mineralisation at the exploration stage.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> Sunstone uses a fire assay gold technique for Au assays (FAS-111) and a four acid multi element technique (IMS-230) for a suite of 48 elements. FAS-111 involves Au by Fire Assay on a 30-gram aliquot, fusion and atomic absorption spectroscopy (AAS) at trace levels. IMS-20 is considered a near total 4 acid technique using a 20g aliquot followed by multi-element analysis by ICP-AES/MS at ultra-trace levels. This analysis technique is considered suitable for this style of mineralisation. A handheld “Niton” XRF instrument is used on site for verification of anomalous metal values and to assist with the geological logging and mineral identification. No specific data from this instrument are referenced in this announcement. Standards, blanks and duplicates are inserted ~1/28 samples. The values of the standards range from low to high grade and are considered appropriate to monitor performance of values near cut-off and near the mean grade of the deposit. The check sampling results are monitored, and performance issues are communicated to the laboratory if necessary.
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> 	<ul style="list-style-type: none"> Procedure checks have been completed by the Competent Person for exploration results for this announcement. Twin holes have not been drilled in these areas.

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	<ul style="list-style-type: none"> 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"> Sunstone sampling data were imported and validated using Excel. Assay data were not adjusted. Core loss intervals are assigned assay values of zero where present. 																				
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. 	<ul style="list-style-type: none"> Sample co-ordinates are located by GPS and for trench samples measured along the length of the trench. Ecuador projection parameters: <table border="1" data-bbox="917 629 1481 1077"> <thead> <tr> <th>Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Reference Ellipsoid</td> <td>International 1924</td> </tr> <tr> <td>Semi Major Axis</td> <td></td> </tr> <tr> <td>Inverse Flattening (1/f)</td> <td></td> </tr> <tr> <td>Type of Projection</td> <td>UTM Zone -17S (Datum PSAD56)</td> </tr> <tr> <td>Central Meridian:</td> <td>-81.0000</td> </tr> <tr> <td>Latitude of Origin</td> <td>0.0000</td> </tr> <tr> <td>Scale on Central Meridian</td> <td>0.9996</td> </tr> <tr> <td>False Northing</td> <td>10000000</td> </tr> <tr> <td>False Easting</td> <td>500000</td> </tr> </tbody> </table> 	Parameter	Value	Reference Ellipsoid	International 1924	Semi Major Axis		Inverse Flattening (1/f)		Type of Projection	UTM Zone -17S (Datum PSAD56)	Central Meridian:	-81.0000	Latitude of Origin	0.0000	Scale on Central Meridian	0.9996	False Northing	10000000	False Easting	500000
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<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> The topographic control was compared against published maps and satellite imagery and found to be good quality. 																					
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 	<ul style="list-style-type: none"> The drill core samples reported were collected from diamond drill holes from the El Palmar targets, and with sample length generally ranging between 0.5-2m. 																				
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The data from these samples does not contribute to any resource estimate nor implies any grade continuity. 																				
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	<ul style="list-style-type: none"> No sample compositing was done. 																				
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	<ul style="list-style-type: none"> Drilling orientations were appropriate for the interpreted geology providing representative samples. Trench orientations and rock chip locations were appropriate for the interpreted geology providing representative samples. 																				
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No sampling bias is expected at this stage. 																				
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sunstone sampling procedures indicate individual samples were given due attention. Sample security was managed through sealed individual samples and sealed bags of multiple samples for secure delivery to the laboratory by permanent staff of the joint venture. MS Analytical is an internationally accredited laboratory that has all its internal procedures heavily scrutinised in order to maintain their accreditation. MS Analytical is accredited to ISO/IEC 17025 2005 Accredited Methods. 																				

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Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sunstone's sampling techniques and data have been audited multiple times by independent mining consultants during various project assessments. These audits have concluded that the sampling techniques and data management are to industry standards. All historical data has been validated to the best degree possible and migrated into a database.

TABLE 1 – Section 2: Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The El Palmar property is located in Imbabura province and is held by an Ecuadorian registered company 'Goex'. Due diligence to date show that there are no wilderness areas or national parks or areas of environmental significance within or adjoining the concession area. There are no native title interests. Sunstone and Goex have entered into a Staged Acquisition Agreement where Sunstone may earn up to 100% based on defined milestones.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The El Palmar exploration concession was granted in 2003 and is held 100% by Goex. Sunstone owns 70% of GOEX
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The historic exploration at El Palmar was completed by various groups over the period 1990's, 2007-2008, 2011-2012 and GOEX (2012 to 2020). Most of the readily available historic data has been acquired and compiled into databases and a GIS project. Exploration by other parties has included stream sediment surveys, geological mapping, rock chip sampling, some local soil sampling, channel sampling and limited diamond drilling (3 holes).
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The deposit style being explored for includes intrusion-related and stockwork hosted porphyry Au-Cu systems plus epithermal gold-silver-polymetallic veins. The setting at El Palmar is a volcanic arc setting of Miocene or Eocene age intrusions.
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: <ol 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. 	<ul style="list-style-type: none"> Details of the samples discussed in this announcement are in the body of the text. See Figure 1 for the location of historical drilling at El Palmar.
	<ul style="list-style-type: none"> 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"> Information included in announcement.

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Data aggregation methods	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> 	<ul style="list-style-type: none"> Weighted averages were calculated over reported intervals according to sample length. No grade cut-offs were applied.
	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Aggregating of intervals represent broad intervals consistent with porphyry gold-copper mineralised systems.
	<ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Metal equivalents are not presented.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.</i> 	<ul style="list-style-type: none"> The geometry of the mineralisation relative to the drill holes is not completely known at this stage of exploration. .
	<ul style="list-style-type: none"> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> True widths of mineralised lodes are not known at this stage.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> See Figures 1-3 for maps showing distribution of samples.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Figures 1-3 above shows the current interpretations of geology.
Other substantive exploration data	<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"> Figure 1-3 above shows various datasets that are being used to identify target areas and to guide current and future drilling.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> The planned exploration program is outlined in the announcement.
	<ul style="list-style-type: none"> <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"> See Figures 1-3 which show areas for further exploration.