

## SUNSTONE METALS LTD (STM)

## Ecuador drilling nears

Sunstone Metals is likely to begin drilling at Bramaderos (STM right to earn 80%), Ecuador in early 2018. Bramaderos is a porphyry gold-copper system, where previous exploration defined 6 targets and drilled 32 holes within an 8km alteration trend, beside an outcropping porphyry.

### Getting insight from Tujuh Bukit experience

Sunstone's surface work since mid-2017 has confirmed the potential for a large, low grade Au-Cu porphyry deposit analogous to Tujuh Bukit in Indonesia, and the alkalic porphyry systems of Western Canada. The Company's geological team discovered Tujuh Bukit (1.9 Bt at 0.45% Cu, 0.45 g/t Au and 93 g/t Mo in resource) in 2010. Tujuh Bukit and Bramaderos are associated with diorite hosted, low silica, alkalic porphyry intrusions.

## Deep drilling at Bramaderos Main planned first up

Previous drilling and surface work at Bramaderos Main has encountered mineralisation consistent with outer quartz stockwork and pyrite/chalcopyrite zones. Sunstone's drilling will test for deeper, broader zones nearer the core of the intrusive complex. One of the first holes will test to 500m depth beneath a previous hole that intersected 248m at 0.56 g/t Au and 0.14% Cu, including 30m at 0.8 g/t Au and 0.22% Cu to the end of the hole.

## West Zone and Limon prospects to follow

Historic programs were also curtailed before key prospects at West Zone (42m at 3.7g/t in trenching) and Limon were drilled. Earlier in 2017 Sunstone reported more trench results associated with hydrothermal breccias at West Zone, including 22m at 4.8g/t Au. West Zone has never been drilled and extensive colluvial cover masks the potential scale of the system.

Sunstone has also outlined large zoned soil anomalies at Limon. The Company interprets overlapping gold, copper & moly in soils flanked by zinc and lead anomalism at Limon as a classic porphyry signature. Rocks chipped from limited outcrops at Limon have assayed up to 1.2 g/t, 0.4% Cu. Sunstone will be the first to drill test Limon.

### Drilling approvals slated for early 2018.

The start date for STM's drilling at Bramaderos is most likely late January or early February 2018. Sunstone's JV partner, and project operator, Cornerstone (CGP.tsx) submitted a water use permit application and completed a draft EIA in early December.

After public and stakeholder feedback periods the regulatory authority should be in position to consider approval in January 2018, with a maximum 1-month response period.

### Maintain Speculative Buy

Drilling in 2018 will test potential high value, conventional gold-copper targets at Bramaderos. We recommend Sunstone shares as a Speculative Buy in anticipation of good results and a successful exploration campaign in 2018.

### STM.asx Speculative buy

	3 Jan 2018
Share Price	\$0.028
Valuation	\$0.040
Price Target (12 month)	\$0.040

Brief Business Description Copper and gold explorer

#### Hartleys Brief Investment Conclusion

Gold and copper explorer in Ecuador, Sweden and Finland with excellent large discovery potential. Leveraged to copper price.

#### Chairman & MD

Debt (21 Nov '17)

ΕV

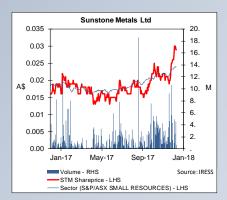
Graham Ascough (Non-Exec Chairman)	
Malcolm Norris (Executive Director and CEO)	
Top Shareholders	
Darren Carter	8.2%
Valbonne II	6.6%
Acorn Capital Ltd	5.2%
Marilei International Limited	5.0%
Company Address	
9 Gardner Close	
Milton, Qld 4064	
Issued Capital	1107m
- fully diluted	1280m
Market Cap	A\$31m
- fully diluted	A\$36m
Cash (21 Nov '17)	A\$5.8m

Prelim. (A\$m)	FY19e	FY20e	FY21e
Prod (kt Cu)	5	25	25
Op Cash Flw (A\$M)	-2	65	57
Norm NPAT (A\$M)	-7.6	26.4	20.0
CF/Share (cps)	-0.2	5.1	4.4
EPS (cps)	-0.6	2.1	1.6
P/E		1.4	1.8
		Cu	
Resources (kt)		616	kt

A\$0m

A\$25m





John Macdonald Resource analyst Ph: +61 8 9268 3020 E: john.macdonald@hartleys.com.au

Hartleys has completed capital raisings in the past 12 months for Sunstone Metals Limited ("Sunstone") for which it has earned fees. Hartleys has provided corporate advice within the past 12 months and continues to provide corporate advice to Sunstone for which it may earn fees in the future. Hartleys has a beneficial interest in 22.5 million options in Sunstone.

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# SUMMARY MODEL

Sunstone Metals STM	Share Price \$0.028
Key Market Information	
Share Price	\$0.028
Market Capitalisation	\$31.0M
Cash	\$5.8M
Debt	\$0.0M
Net cash (debt) Nov '17	\$5.8M
Fully paid, issued Capital	1107N
Options	168M
Issued Capital (fully diluted all options)	1275N
EV	\$25N
Valuation & Price Target	\$0.040

Projects	Interest	Location	Commodity
Viscaria	100%	Sweden	Copper
Southern Finland *	100%	Finland	Gold
Bramaderos **	rte 80%	Ecuador	Gold/Copper
* IV/ Dorthono interest: Nortes	Minorolo diluting to	200/ in colocitor ton	

\* JV Partners interest: Nortec Minerals diluting to 20% in selected tenure

 $^{\star\star}$  JV Partners interest: Cornerstone Capital Resources diluting to 20%

Reserves & Resources June ' Viscaria Cu Resource		52.4	1.2	k 616
Measured		14.6	1.8	259
Indicated		14.0		128
Inferred		25.2		230
P&L	FY2014A	FY2015A	FY2016A	FY2017A
	A\$	A\$	A\$	A\$
Net Revenue	0.0	0.1	0.0	0.1
Total Costs	(4.2)	(2.0)	(1.6)	(2.3)
EBITDA	(4.2)	(1.9)	(1.6)	(2.2)
Deprec/Amort	(0.1)	(0.0)	(1.7)	(0.0)
EBIT	(4.2)	(1.9)	(3.3)	(2.2)
Net Interest	0.0	0.0	0.0	0.0
Pre-Tax Profit	(4.2)	(1.9)	(3.2)	(2.2)
Tax Expense	-	-	-	-
NPAT	(4.2)	(1.9)	(3.2)	(2.2)
Abnormal Items	(1.4)	(0.0)	0.4	(1.3)
Reported profit (loss)	(5.6)	(2.0)	(2.8)	(3.5)
Sources: IRESS, Company	/ Information, Ha	artleys Researcl	h	

	3/01/2018 Speculative Buy
Directors and Key Management	Company Details
Graham Ascough (Non-Exec Chairman)	9 Gardner Close
Malcolm Norris (Executive Director and CEO)	Milton, Qld 4064
Stephen Stroud (Non-Exec Director)	+61 7 3368 9888
Don Hyma (Non-Exec Director)	
	www.sunstonemetals.com.au

	www.sunstonem	ctais.com.au
Shareholder	M shs	%
Darren Carter	90	8.2%
Valbonne II	73	6.6%
Acorn Capital Ltd	57	5.2%
Marilei International Limited	55	5.0%
Potezna Gromadka Ltd	44	4.0%

Investment Summary

Total

Copper and gold exploration company. Advanced asset at Viscaria confers potential development exposure to copper above US\$3/lb. Green field exploration in Ecuador began in 2017 with several objectives apparent within a large, outcropping porphyry system.

Key Milestones/N	ewsflow				Project
Doop drilling progr	am completed at D	Zono		Dec-15	Viscaria
				200 10	rioodilid
	study results annou			Dec-15	Viscaria
Exploration portfoli	io in Finland acquire	ed		May-16	S. Finland
1st assays from Sa	atulinmaki drilling			Sep-16	S. Finland
83m at 1.2g/t at Sa	atulinmaki			Oct-16	S. Finland
Scout drilling comp	pleted			Nov-16	S. Finland
Drilling commence	s at Viscaria			Apr-17	Viscaria
AVI farms in to Ec	uador Au/Cu projec	rt		Apr-17	Bramaderos
Geophysics extend	ds Satulinmaki pros	pectivity		May-17	S. Finland
Initial drilling result	s from Viscaria			Jun-17	Viscaria
Final drilling result	s from 4-hole progr	am at Visca	aria	Jun-17	Viscaria
Surface sampling	results from Brama	deros		Jul-Nov 17	Bramaderos
Fieldwork and geo	physics results			Jan-18	Bramaderos
Drilling target gene	eration and permittin	ng complet	е	Jan-18	Bramaderos
Drilling commence	s at Bramaderos			Feb-18	Bramaderos
		NI- (88)	¢ (88)	Aug For	
Unpaid Capital		No (M)	\$ (M)	Ave Ex.	% O
Options/Performa	ance Rights				
30-Jun-18	Perf. Rights	26.9			2
30-Jun-19	Options	13.2	0.9	0.07	19
30-0uii-13					

194.9

5.5

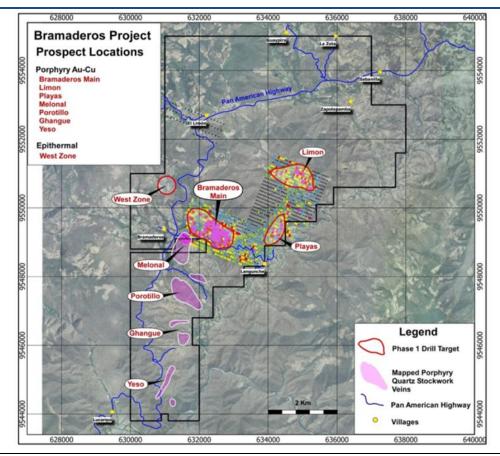
0.03

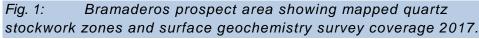
18%

## BRAMADEROS

Sunstone Metals is likely to begin drilling at Bramaderos, Ecuador in early 2018.

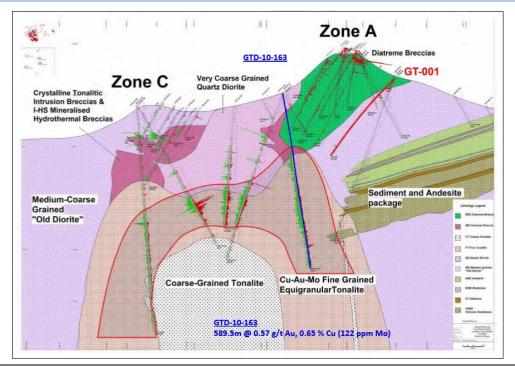
Bramaderos is a porphyry gold-copper system. Previous exploration (2006-2009) defined 6 targets and drilled 32 holes (20 at one prospect) within an 8km alteration trend, beside an outcropping porphyry. Sunstone believes previous exploration was misled by weakly mineralised pyrite halos and misinterpreted structural geology. The program was also curtailed before key prospects at West Zone (42m at 3.7g/t in trenching) and Limon (1.8% Cu, 1.5g/t Au rock chip sampling) were drilled.





Sunstone's surface work since mid-2017 has confirmed the potential for a large, low grade Au-Cu porphyry deposit analogous to Tujuh Bukit in Indonesia, and the alkalic porphyry systems of Western Canada. The Company's geological team discovered Tujuh Bukit (JORC Compliant Resource of 1.9 billion tonnes of ore at an average grade of 0.45% Cu, 0.45 g/t Au and 93 g/t Mo, see figure 2) in 2010. Both Tujuh Bukit and Bramaderos are interpreted to be diorite hosted, low silica, alkalic porphyry intrusive systems.

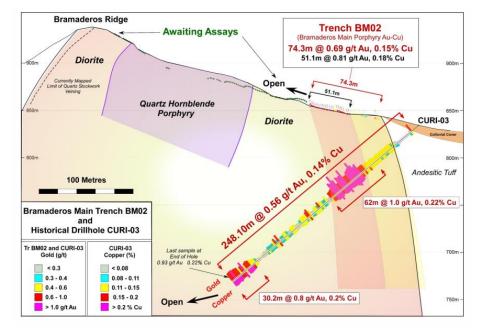
Source: Sunstone Metals



*Fig. 2:* Tujuh Bukit schematic section 2011. STM is targeting a similar system at Bramaderos, with a higher Au:Cu ratio.

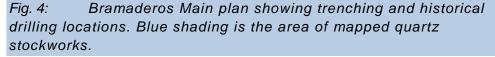
Source: Intrepid Mines, 2011

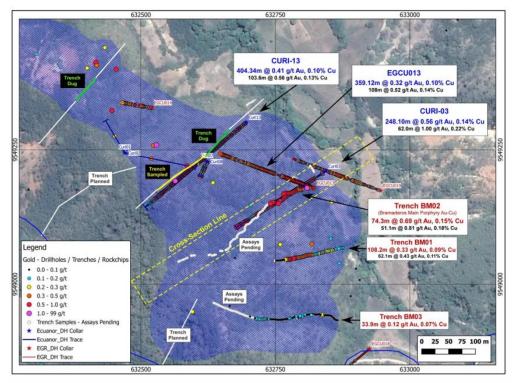
Previous drilling and surface work at Bramaderos Main has encountered mineralisation consistent with outer quartz stockwork and pyrite/chalcopyrite zones. Sunstone's drilling will test for deeper, broader zones nearer the core of the intrusive complex. One of the first holes is a 500m hole beneath and at a steeper angle to CURI-03, which ended in 0.93 g/t Au and 0.22% Cu. (see figure 4).



*Fig. 3:* Bramaderos Main schematic section 2017. Sunstone is planning a hole beneath and steeper than CURI-03, drilled in 2007.

Source: Sunstone Metals





Source: Sunstone Metals

Earlier in 2017 Sunstone reported trench results from West Zone including 22m at 4.8g/t Au. Results from the additional trenches include 8.9m at 6.1g/t Au, 11.6m at 1.8g/t Au and 8.4m at 1.2g/t Au. West Zone mineralisation is associated with hydrothermal breccias. West Zone has never been drilled and extensive colluvial cover masks the potential scale of the system.

Sunstone has also outlined large zoned soil anomalies at the Limon prospect. The Company interprets overlapping gold, copper & moly in soils flanked by zinc and lead anomalism at Limon as a classic porphyry signature. Rocks chipped from limited outcrops at Limon have assayed up to 1.2 g/t, 0.4% Cu. Sunstone will be the first to drill test Limon.

The start date for STM's drilling at Bramaderos is most likely late January or early February. Sunstone's partner and Cornerstone (CCC.tsx) submitted a water use permit application and completed a draft EIA in early December. After public and stakeholder feedback periods the regulatory authority should be in position to consider approval in January 2018, with a 1-month response period.

## MANAGEMENT AND DIRECTORS

#### Fig. 5: STM Management exposure, 2017.

conomic exposure of Board and key management		Opts	Perf. rights	shares	Exposure	Rank
	Position	М	М	М	М	
G Ascough	Non exec Chair	0.9	1.5	8.9	11.3	4
M Norris	CEO, MD	3.1	5.9	10.1	19.1	1
D Hyma	NED		1.5	0.7	2.2	6
R Robinson	GM Studies	2.3	7.0	3.4	12.7	3
G Leicht	CFO, Coy Sec.	2.4	6.8	3.5	12.7	2
B Rohrlach	GM Geology	1.6	6.8	2.1	10.5	5
S Stroud	NED		1.5		1.5	7

Source: Sunstone Metals, IRESS

#### **Graham Ascough appointed Chairman November 2013**

Geophysicist. Mr Ascough was the Managing Director of Mithril Resources Ltd from October 2006 until June 2012. Prior to joining Mithril in 2006, he was the Australian Manager of Nickel and PGM Exploration at the major Canadian resources house, Falconbridge Limited. He is currently non-executive Chairman of PNX Metals Limited, Mithril Resources Limited and Musgrave Minerals Limited. Councillor of the South Australian Chamber of Mines and Energy and Chair of its Exploration Committee from 2006 ~ 2012 and has strong ties to the SA Resources industry.

#### Malcolm Norris CEO and Managing Director.

MSc in Geology and a Masters in Applied Finance. More than 30 years of industry experience and in the last 15 years has focused primarily on corporate roles. Previous experience has included 23 years with WMC Resources, followed by roles with Intrepid Mines and SolGold.

#### **Stephen Stroud Non-Executive Director**

Mr Stroud is an experienced CPA qualified corporate finance executive with over 20 years experience advising across all aspects of corporate finance both as an advisor and client. He has advised boards and management teams across a broad range of transactions including public and private equity raisings, debt/hybrid debt, Initial Public Offerings, mergers & acquisitions, sell-downs and restructures both in Australia and overseas.

Based in Melbourne, Mr Stroud is Director - Corporate Finance with CCZ Equities, with a key focus on the small-mid cap market listed space on the ASX working across a broad range of sectors including IT, retail, FMCG, healthcare, metals and mining, energy, property and general industrials. Mr Stroud possesses strong relationships across buy and sell side clients across Australia, Asia, UK and North America. Mr Stroud is also a Non-Executive Director of Explaurum Limited an ASX listed gold explorer.

#### **Don Hyma Non-Executive Director**

BSc in Mining Engineering and an MSc in Mineral Processing. 25 years' experience in the resource sector, principally in copper, nickel and iron ore in Canada, Chile, New Caledonia and Australia. Currently Chief Technical Officer with Mitsui & Co and previously Vice-President Projects for the Iron Ore Company of Canada and General Manager Mine and Infrastructure Projects for Rio Tinto Iron Ore.

## VALUATION, TARGET PRICE, RISKS

Viscaria has value as a large, marginal, undeveloped copper resource with exploration upside, near developed infrastructure. The values of agreements to earn interests in the Bramaderos and Southern Finland projects are subject to market swings and geological interpretation. Hartleys ascribes nominal value of \$35M to Bramaderos on the strength of its geological potential and location in a sought after jurisdiction.

Viscaria can be modelled with open pit inventories as indicated in STM's scoping studies. At current spot price (US\$3.27/lb), returns from Viscaria, as modelled, are sufficient to attract development funding, although further permitting is required. Viscaria has value as a large, undeveloped inventory of near commercial copper, in an area well serviced by infrastructure. Hence, Sunstone is investable as a call option on the copper price. The improved project appeal due to STM's drilling in 2017 at Viscaria, also informs Hartleys' nominal valuation of A\$35M.

Net of future corporate overheads and equity dilution Hartleys values Sunstone at A\$52M or 4.0cps. A Speculative Buy recommendation is retained with a 12 month target price of 4.0cps, reviewable as exploration results from Bramaderos come to hand.

Assumption	Risk of not realising assumption	Downside risk to valuation if assumption is incorrect	Comment
Exploration within 1 year at Bramaderos will reveal a near commercial project.	High	Medium	Exploration is at an early stage. STM will work to a 3 year program.
The copper price will hold above US\$3/lb in the next 2-5 years	Medium	High	Hartleys assumes copper demand remains strong through this period, which depends largely on continued economic growth in China.
STM can obtain capital at reasonable prices	Low	High	Sunstone is dependent on new equity for future funding. Existing share value may be diluted by raisings completed at less than valuation.

Source: Hartleys

## HARTLEYS CORPORATE DIRECTORY

#### Research

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John Macdonald	Resources Analyst	+61 8 9268 3020
Paul Howard	Resources Analyst	+61 8 9268 3045
Aiden Bradley	Research Analyst	+61 8 9268 2876
Michael Scantlebury	Junior Analyst	+61 8 9268 2837
Janine Bell	Research Assistant	+61 8 9268 2831
Corporate Finance		

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Richard Simpson	Director	+61 8 9268 2824
Ben Crossing	Director	+61 8 9268 3047
Ben Wale	Associate Director	+61 8 9268 3055
Stephen Kite	Associate Director	+61 8 9268 3050
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Scott Stephens	Associate Director	+61 8 9268 2819
Rhys Simpson	Manager	+61 8 9268 2851

#### **Registered Office**

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#### **Hartleys Recommendation Categories**

Buy Accumulate	Share price appreciation anticipated. Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a price level at which it may become a "Buy".
Neutral	Take no action. Upside & downside risk/reward is evenly balanced.
Reduce /	It is anticipated to be unlikely that there will be gains over
Take profits	the investment time horizon but there is a possibility of some price weakness over that period.
Sell	Significant price depreciation anticipated.
No Rating	No recommendation.
Speculative Buy	Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk.

#### **Institutional Sales**

Carrick Ryan	+61	8	9268	2864
Justin Stewart	+61	8	9268	3062
Simon van den Berg	+61	8	9268	2867
Chris Chong	+61	8	9268	2817
Digby Gilmour	+61	8	9268	2814
Veronika Tkacova	+61	8	9268	3053
Wealth Management				
Nicola Bond	+61	8	9268	2840
Bradley Booth	+61	8	9268	2873
Adrian Brant	+61	8	9268	3065
Nathan Brav	+61	8	9268	2874
Sven Burrell	+61	8	9268	2847
Simon Casey	+61	8	9268	2875
Tony Chien	+61	8	9268	2850
Tim Cottee	+61	8	9268	3064
David Cross	+61	8	9268	2860
Nicholas Draper	+61	8	9268	2883
John Featherby	+61	8	9268	2811
Ben Fleay	+61	8	9268	2844
James Gatti	+61	8	9268	3025
John Goodlad	+61	8	9268	2890
Andrew Gribble	+61	8	9268	2842
David Hainsworth	+61	8	9268	3040
Murray Jacob	+61	8	9268	2892
Gavin Lehmann	+61	8	9268	2895
Shane Lehmann	+61	8	9268	2897
Steven Loxley	+61	8	9268	2857
Andrew Machaughtan	+61	8	9268	2898
Scott Metcalf	+61	8	9268	2807
David Michael	+61	8	9268	2835
Jamie Moullin	+61	8	9268	2856
Chris Munro	+61	8	9268	2858
Michael Munro	+61	8	9268	2820
lan Parker	+61	8	9268	2810
Matthew Parker	+61	8	9268	2826
Charlie Ransom	+61	8	9268	2868
Mark Sandford	+61	8	9268	3066
David Smyth	+61	8	9268	2839
Greg Soudure	-	-	9268	
Sonya Soudure	-	-	9268	
Dirk Vanderstruyf		-	9268	
Samuel Williams	+61	8	9268	3041
Jayme Walsh	+61	8	9268	2828

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