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ASX ANNOUNCEMENT Friday 21<sup>st</sup> November 2014

## More Strong Drilling Results Highlight Potential of Alice Copper Discovery at Productora

Productora now a multi-deposit copper project

Hot Chili (ASX: HCH) is pleased to advise that the second round of drilling results from the recent Alice discovery at its Productora copper project in Chile highlight the potential for a substantial increase in Mineral Resources and Ore Reserves.

The latest results also support Hot Chili's view that Alice may host porphyry-style mineralisation.

The Company has received assay results from a second hole located 200m south of the discovery intersection reported on 7 November (151m @ 0.4% Cu from 116m down-hole, including 54m grading 0.5% copper and 0.1g/t gold from 128m down-hole depth).

This second hole intersected **26m grading 0.7% copper from 95m down hole followed by 105m grading 0.4% copper from 175m down-hole**, substantially expanding the known extent of the mineralisation. Several follow-up holes have also recorded intersections of visual sulphides, with assays pending.

Hot Chili believes further drilling and analysis is required in order for the style of mineralisation to be confirmed. This drilling is ongoing, with a diamond drill rig currently in operation and a second rig scheduled to start at Alice in the coming weeks.

Hot Chili Managing Director Christian Easterday said the initial results from Alice showed it had the potential to underpin a substantial increase in Productora's metal inventory.

"The impact of this discovery on the size and economics of Productora is potentially significant," Mr Easterday said. "The results so far suggest Alice could make a material contribution to the

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inventory at Productora and therefore further strengthen the project's economics through increased scale and mine life.

"The importance of the Alice discovery could be even greater if it is porphyry-style mineralisation because it would suggest there is the potential for a cluster of similar deposits to exist around the planned central pit."

The Alice deposit is the first confirmation of significant mineralisation outside the Productora main zone, which hosts Productora's entire Mineral Resource of more than 1 million tonnes of copper and 675,000 ounces of gold.

#### Alice Copper Deposit- New bulk tonnage copper resource emerging

Alice is located 400m immediately west of the proposed central pit at Productora, meaning any Mineral Resources and Ore Reserves identified there would form part of the overall project development.

The Alice discovery is an early success from Hot Chili's first exploration drilling in more than two years at Productora. An extensive exploration review undertaken in early 2014 had identified Alice among 19 regional targets within the wider Productora project area. Exploration drilling is currently underway over a number of these other targets with results expected over the coming weeks ahead.

Certain characteristics of the Alice discovery appear to be related to copper porphyry style mineralisation as opposed to Productora breccia style mineralisation. These include:

- Sulphide mineralisation at Alice is associated with finely disseminated pyrite and chalcopyrite which is evenly disseminated throughout the non-brecciated volcanic and intrusive host rocks.
- Diamond core at Alice has revealed biotite, chlorite and epidote veining and alteration as well as quartz-pyrite veins (B-veins) commonly associated with copper porphyry style deposits.
- Geochemical analysis of multi-element ratio plots from Alice indicate similarities to Hot Chili's Frontera copper-gold porphyry project, 50km south of Productora

The implications for the growth potential of copper resources at the Productora copper project are very significant if this can be confirmed by further drilling. Hot Chili is working towards confirming this aspect of the Alice copper deposit following the results of the next phase of drilling.





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Figure 1. Plan displaying location of the Alice drill results in relation to the planned Productora central pit design, Mineral Resource and Ore Reserve outlines and TMI.



Figure 2. Cross-section displaying the location of the Alice discovery in relation to the planned central pit design at Productora.





#### Productora Copper Project- New Significant Drilling Intersections

	Co	ordinates		<b>A</b> i	Dia	Bin Hole	S. Hole		ection	Interval	Copper	Gold	Molybdenum
Hole_ID	North	East	RL	Azım.	Dip	Depth	From	То	(m)	(% Cu)	(g/t Au)	(ppm Mo)	
PRP0869	6822610	322957	749	-68	270	330	98	260	162	0.3	0.0	47	
						including	142	173	31	0.5	0.1	30	
							260	283	23	0.1	0.0	19	
PRP0875	6822395	322805	807	-55	315	366	87	113	26	0.7	0.0	42	
						including	95	108	13	1.0	0.0	45	
							175	280	105	0.4	0.0	27	
						including	230	246	16	0.6	0.1	21	

#### Notes to Significant Drilling Intersections

- All drill holes with pre-fix "PRP" are reverse circulation (RC) and all drill holes with suffix "D" are diamond holes.
- Results comprise ICP analysis (ME-ICP61) of all 1m whole core samples (D); 1m selective cone split samples (RC) and 4m composite samples (RC).
- Priority AAS analysis (CU-AA62 ore grade analysis) results were utilised where analysis was undertaken for copper results greater than 1.0%.
- Priority MS analysis (ME-MS61) results were utilised where analysis was undertaken for uranium results greater than 50ppm.
- Gold analysis only undertaken over copper results greater than 0.1%. All gold results comprise ICP analysis (Au-ICP21). Gold significant intersections may in some instances represent the average of gold results within the zone of intersection. In these instances generally gold analysis has been undertaken over 90 percent of the samples taken within the length of the intersection.
- All results were analysed by ALS Chemex (La Serena and Lima) laboratories
- \* denotes RC extension of previously drilled RC hole.





### **Qualifying Statements**

#### **JORC Compliant Ore Reserve Statement**

#### Productora Open Pit Probable Ore Reserve Statement – Reported 31<sup>st</sup> March 2014

Ore Type	Category	Tonnage		Gra	de	C	Contained Metal			Payable Metal	
		(Mt)	Copper	Gold	Molybdenum	Copper	Gold	Molybdenum	Copper	Gold	Molybdenum
			(%)	(g/t)	(ppm)	(tonnes)	(ounces)	(tonnes)	(tonnes)	(ounces)	(tonnes)
Transitional	Probable	10.2	0.54	0.10	128	55,000	34,000	1,300	27,000	13,000	1,000
Fresh	Probable	80.3	0.47	0.11	177	378,000	274,000	14,200	323,000	139,000	8,000
Total	Probable	90.5	0.48	0.11	172	433,000	308,000	15,500	350,000	152,000	9,000

Note 1: Figures in the above table are rounded, reported to two significant figures, and classified in accordance with the Australian JORC Code 2012 for Mineral Resource and Ore Reserve reporting.

Note 2: Average recoveries applied to Probable Ore Reserve estimate are: Fresh Cu– 88.8%; Fresh Au - 65%; Fresh Mo - 60%, Transitional Cu- 50%, Transitional Au- 50% and Transitional Molybdenum- 50%. Payability factors applied for Cu- 96.5%, Au- 78% and Mo- 98%. The Probable Ore Reserve was estimated using price assumptions of US\$3.00/lb copper, US\$1,250/oz gold and US\$10/lb molybdenum and an exchange rate (AUD:USD) of 0.88.

#### **JORC Compliant Mineral Resource Statement**

Classification	Tonnage	Grade			Contained Metal		
(+0.25% Cu)	(Mt)	Copper	Gold	Molybdenum	Copper	Gold	Molybdenum
		(%)	(g/t)	(ppm)	(tonnes)	(ounces)	(tonnes)
Indicated	158.6	0.50	0.11	152	799,000	540,000	24,000
Inferred	55.6	0.41	0.08	97	229,000	133,000	5,000
Total	214.3	0.48	0.10	138	1,029,000	675,000	29,000

Productora Mineral Resource Statement – Reported 31<sup>st</sup> March 2014

Note 1: Figures in the above table are rounded, reported to two significant figures, and classified in accordance with the Australian JORC Code 2012 for Mineral Resource and Ore Reserve reporting.

#### **Mineral Resource and Ore Reserve Confirmation**

The information in this report that relates to Mineral Resources and Ore Reserve estimates on the Productora copper project was previously reported in the ASX announcement "Maiden Ore Reserve at Productora Set for Strong Growth in 2014", dated 31st March 2014, a copy of which is available on the ASX website at www.asx.com.au and the Company's website at www.hotchili.net.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.





#### **Competent Person's Statement-** Exploration Results

Exploration information in this announcement is based upon work undertaken by Mr Christian Easterday, the Managing Director and a full-time employee of Hot Chili Limited whom is a Member of the Australasian Institute of Geoscientists (AIG). Mr Easterday has sufficient experience that 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' (JORC Code). Mr Easterday consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

#### **Forward Looking Statements**

This announcement contains "forward-looking statements". All statements other than those of historical facts included in this announcement are forward-looking statements including estimates of Mineral Resources and Ore Reserves. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, copper and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade ore recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. All persons should consider seeking appropriate professional advice in reviewing this announcement and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of this announcement nor any information contained in this announcement or subsequently communicated to any person in connection with this announcement is, or should be taken as, constituting the giving of investment advice to any person.





#### Appendix- JORC Code, 2012 Edition Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <li>Reverse circulation drilling (RC) was used to produce a 1m bulk sample and representative 1m split samples (12.5%, or nominally 3kg) were collected using a cone splitter. Diamond drilling was used to produce drill core with a diameter of 63.5mm (HQ). Diamond holes were logged and sampled in their entirety. Diamond core was whole sampled in one metre intervals, regardless of geological interpretation.</li> <li>RC sample representivity was ensured by a combination of Company Procedures regarding quality controls (QC) and quality assurance / testing (QA).</li> <li>Examples of QC include (but are not limited to), daily workplace and equipment inspections, as well as drilling and sampling procedures.</li> <li>Examples of QA include (but are not limited to), collection of drilling duplicates ("field duplicates"), the use of certified standards and certified blank samples, as well as umpire-laboratory checks.</li> <li>Industry standard practices for sampling techniques were employed at the Productora project. Geological logging was completed and mineralised intervals were determined by the geologists to be submitted as 1m split samples. In zones logged as unmineralised geologists directed field assistants to collect a 4m composite sample and this was submitted to the laboratory for analysis. If these 4m composite samples came back with Cu grade &gt; 0.2% the corresponding original 1m split samples were collected and submitted to the laboratory for analysis.</li> <li>The drill samples (RC and diamond) were submitted to ALS La Serena. Laboratory analysis involved: sample crushed to 70% &gt; 2mm, riffle/ rotary split off 1kg, pulverize split to &gt; 85% passing 75 microns, then 100g analysis by ME-ICP61 technique.</li> <li>Samples were submitted to ALS Global, La Serena which is ISO accredited.</li> </ul>
Drilling techniques	• 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-	<ul> <li>The Reverse Circulation drilling method was predominantly down-the-hole hammer drilling with 140 to 130mm diameter drill bits used.</li> <li>Diamond drilling used HQ drill bits (96mm external and 63.5mm</li> </ul>









Criteria	JORC Code explanation	Commentary
	<ul> <li>quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>stored on the company's data server.</li> <li>Every metre (100%) of RC and DD drilling was geologically logged and sampled.</li> <li>Quantitative alteration geochemistry characterization was also completed using ME-ICP61 assay data. This characterization has identified seven main alteration types at Productora- albite, kaolinite, potassic (k-feldspar), magnetite-amphibole, sericite, sericite-albite and sodic-calcic.</li> <li>At Productora a clear correlation between silicate mineralogy (alteration) and sulphide mineralogy (copper mineralisation) is evident from the geochemical alteration classification work completed, and this has been used to guide exploration drilling and resource modelling.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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> <li>Entire whole HQ diamond core was sampled to ensure maximum sample representivity.</li> <li>Splitting of RC samples occurred via a rotary cone splitter by the RC drill rig operators.</li> <li>Cone Splitting of RC drill samples occurred regardless of whether the sample was wet or dry.</li> <li>Company procedures were followed to ensure sub-sampling adequacy and consistency. These included (but were not limited to), daily work place inspections of sampling equipment and practices, as well as drilling/ sub-sample duplicates ("field duplicates").</li> <li>RC Sample condition was routinely recorded</li> <li>Field duplicates were taken at a rate of 1 in every 50<sup>th</sup> meter of drilling. Results of field duplicate assays give confidence that acceptable relative levels of accuracy and precision of assay data returned from Productora.</li> <li>Sample sizes (width and length) were based on industry best practice and mineralisation style.</li> <li>Previous comparison between diamond and RC samples at Productora shows an acceptable correlation and supports the use of RC samples as representative of the in-situ material.</li> </ul>
Quality of assay data and laboratory	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered	<ul> <li>All samples (RC chips and diamond core) were assayed by industry standard methods.</li> <li>All samples were submitted to ALS, La Serena for analysis. Sample preparation involved:</li> </ul>





Criteria	JORC Code explanation	Commentary
tests	<ul> <li>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> <li>sample crushed to 70% &gt; 2mm, riffle split off 1kg, pulverize split to &gt; 85% passing 75 microns</li> <li>Analytical Technique involved:         <ul> <li>ALS Method ME-ICP61 (31 element analysis), with additional assaying triggered as follows; samples which returned copper &gt;1,000ppm were analysed for gold by ALS Method Au-ICP21 (30g Fire Assay).</li> <li>Samples with Cu &gt;10,000ppm were analysed by ALS "ore grade" method Cu-AA62 (represents ~ 2% of samples)</li> </ul> </li> <li>Reported gold significant intersections may in some instances represent the average of gold results within the zone of intersection. In these instances generally gold analysis has been undertaken over &gt;90 percent of the samples taken within the length of the intersection.</li> <li>Routine "mineralized" Certified Reference Material (CRM) were inserted by Hot Chili Ltd at a rate of 1 in 50 samples. Routine Blank Certified Reference Material ("Blanks") were inserted by Hot Chili Ltd at a rate of 1 in 100 samples. Results from CRM</li> </ul>
		<ul> <li>(standards, blanks), and results from umpire laboratory testwork (ACME), gives confidence in the accuracy and precision of assay data returned from ALS.</li> <li>The analytical laboratory (ALS) also provided their own routine quality controls within their own practices. The results from their own validations were provided to Hot Chili Ltd.</li> </ul>
Verification of sampling and assaying	<ul> <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> <li>Routine Umpire laboratory checks are performed by an alternative and independent laboratory (ACME). 5% of coarse rejects are submitted for Umpire checks and validation against the primary laboratory. To date Umpire laboratory results correlate well with primary laboratory (ALS) results, with no discernible bias detected.</li> <li>At Productora there are quite a few RC intervals twinned with diamond holes. A previous direct verification comparison between nominally equivalent intervals showed these is some short-scale structural and mineralisation noise in all elements. Population comparison plots for matched twins has previously been attempted but were not informative. This makes quantitative correlation troublesome, but visual validation of mineralisation domains suggest that there is acceptable correlation, and no apparent bias in the twinned mineralisation intervals and assay ranges.</li> </ul>
		• Hot Chili has strict procedures for data capture, flow and data storage, a full description of these procedures is included in the





Criteria	JORC Code explanation	Commentary
		resource report.
		• Limited adjustments were made to returned assay data; values returned lower than detection level were set to the methodology's detection level, and this was flagged by code in the database. Additionally, copper values are converted from ppm to %.
		<ul> <li>Various analytical techniques have been used for analysis of ore grade elements (including Au and Cu), therefore a ranking has been applied to these elements ensuring the highest priority assay value is used for resource estimation. All assay values (from all analytical techniques) are stored in the database for completeness.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole	• Collar surveys were completed by topographical surveying company (Geotopo's Exploraciones).
	surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• Down-hole directional surveys using a gyroscopic instrument were completed by reputable down-hole surveying company's Wellfield (pre June 2013) and North Tracer (post June 2013).
	• Specification of the grid system used.	Down-hole surveys were completed using a north-seeking gyroscope, eliminating the risk of magnetic interference.
	Quality and daequacy of topographic control.	• The WGS 84 UTM Zone 19S coordinate system was used for all Hot Chili undertakings.
		• Magnetic north has been used for directional surveys.
		<ul> <li>Accuracy and adequacy of topographic control was validated visually in 3D software by comparison of drill collar locations and high resolution satellite (1m contours) derived DEM.</li> </ul>
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	<ul> <li>Drillhole spacing at Productora within the preliminary central pit design is on a nominal 80m by 40m grid, with some infill control sections drilled on 40 x 40m spacing</li> </ul>
	• 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> <li>This drillhole spacing has provided a high level of support for robust geological and mineralisation modeling. Geological and grade continuity is sufficient for mineral resource estimation, with both indicated and inferred resources being classified at Productora.</li> </ul>
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>In unmineralised areas four metre composite samples were taken. These 4m composite samples represent ~25% of the assay sample data, while the 1m split samples comprise ~75% of the samples. The majority of the 4m composite samples lie outside the mineralised geological wireframes.</li> </ul>





Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sa achieves unbiased sampling of p structures and the extent to wh is known, considering the deposition.</li> <li>If the relationship between the orientation and the orientation mineralised structures is consid have introduced a sampling bit should be assessed and report material.</li> </ul>	<ul> <li>The majority of drilling was oriented perpendicular to the overall NE structural trend of the Productora project area, with drillholes angled at 60 degrees towards 090 degrees to optimize drill intersections of the west dipping orebody. Where the mineralisation has been interpreted to dip moderately to the east, drilling has been oriented at 60 degrees towards 270 degrees. In some areas of the project, where drill rig access was limited by lack of drill platforms some variable drilling orientations were used for targeting the mineralisation.</li> <li>Drilling orientation and subsequent sampling is unbiased in its representation of reported material.</li> </ul>
Sample security	• The measures taken to ensure security.	<ul> <li>Hot Chili has strict chain of custody procedures that are adhered to for drill samples. All samples for each batch have the sample submission number/ticket inserted into each bulk polyweave sample bag with the id number clearly visible. The sample bag is stapled together such that no sample material can spill out and no one can tamper with the sample once it leaves Hot Chili's custody.</li> </ul>
Audits or reviews	• The results of any audits or rev sampling techniques and data.	<ul> <li>Coffey Mining Limited has completed an audit on the sampling techniques and data used for the Productora resource estimate. This audit has involved a site visit, review of drilling and sampling techniques, and independent grab sampling and analysis by an umpire laboratory.</li> </ul>

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> </ul>	<ul> <li>Hot Chili (through its subsidiary company SMEAL) controls an area measuring approximately 12.5km N-S by 5km E-W at the project through various agreements with private land holders; CMP (Chile's largest iron ore producer) and government organisations.</li> <li>Three types of lease agreements have been executed at the project:</li> </ul>
	• The security of the tenure held at the time of reporting along with any known impediments to obtaining a	<ul> <li>joint venture earn-in agreements with CMP (HCH to earn 65% over five years)</li> <li>100% purchase-option agreements (Central Lease Productora 1/16 Purchase Option agreement was executed in February 2013)</li> </ul>





Criteria	JORC Code explanation	Commentary
	license to operate in the area.	<ul> <li>30 year lease agreement for Uranio 1/70 (CCHEN-Comisión Chilena de Energía Nuclear)</li> <li>Hot Chili (through its subsidiary company SMEAL) has also secured large tenement holdings in its own right across available extensions at the project.</li> <li>The URANIO 1/70 lease is subject to a royalty payment, and the royalty agreement is with CCHEN. Details are as follows:         <ol> <li>After the first 5 years of the lease agreement or upon beginning of the exploitation phase if this situation happens before, the following minimum Net Smelter Royalty (NSR) shall be charged:</li></ol></li></ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration at the Productora Project has been completed by:         <ul> <li>CCHEN (Chilean Nuclear Commission) in the late 1980's:                 <ul> <li>Mapping, geochemical sampling, ground spectrometry, magnetometry, trenching, drilling (28 shallow percussion holes). Focus was on near surface, secondary uranium potential).</li> <li>GMC-Teck in the 1990's</li></ul></li></ul></li></ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The majority of copper-gold-molybdenum mineralisation at Productora is hosted in a structurally focused breccia and fracture network developed within a larger body of K-feldspar- tourmaline-magnetite breccia. Structurally-focused mineralised breccia zones are evident trending broadly sub-parallel to the</li> </ul>





Criteria	JOR	C Code explanation	Commentary				
Criteria	JOR	C Code explanation	•	Productora fault zone (NNE). The association between mineralisation, breccia zones and manto horizons shows that an interplay between units with significant primary permeability (mantos) and fault-related secondary permeability (breccias) exert a critical control on the distribution of mineralisation. Mineralised breccias are clearly visible in both RC drilling and in diamond core. The intensity of brecciation, alteration and sulphide mineralisation is generally greater within higher-grade domains. Sulfides comprise pyrite, chalcopyrite, bornite and molybdenite developed as breccia, vein and cavity fill, as well as disseminations within the brecciated host rocks. This sulphide distribution creates centimetre to metre-scale higher-grade patches enclosed by moderate-grade disseminated sulphide			
Drill hole Information	• 0 0 0 0 0 0 0	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: 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. 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> <li>minerals.</li> <li>A complete list of all holes reported as significant exploration results are provided in Productora Project- New Significant Drilling Intersections table</li> <li>This listing includes: <ul> <li>collar coordinates WGS84_19S),</li> <li>elevation,</li> <li>hole orientation (dip and azimuth- magnetic),</li> <li>downhole intersection depth and length</li> <li>total hole depth</li> <li>length weighted average grade for Cu%, Au g/t, Mo ppm</li> <li>Length weighted average grade is rounded to one decimal place</li> </ul> </li> <li>No material drillhole information has been excluded</li> </ul>			
Data	•	In reporting Exploration Results,	•	In reported exploration results, length weighted averages are			





Criteria	JORC Co	de explanation		Com	mentary				
aggregation methods	wei ma: trui ana ana	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.		<ul> <li>used for any non-uniform intersection sample lengths. Length weighted average is (sum product of interval x corresponding interval grade Cu%), divided by sum of interval lengths and rounded to one decimal place</li> <li>For example an aggregation of results could look like the below:</li> </ul>					
	• wn inco	orporate short lengt	hs of high grade		From	То	Interval	Grade Cu%	
	rest	ults and longer lengt ults, the procedure	ths of low grade used for such		236	240	4	0.623	
	agg son	regation should b ne typical examp	be stated and bles of such		240	241	1	0.25	
	agg det	regations should ail.	be shown in		241	242	1	0.451	
	• The	The assumptions used for any reporting of metal equivalent values should be clearly stated.		242	243	1	0.861		
	rep sho		Weighted average = ((4 x 0.623) + (1 x 0.25) + (1 x 0.451) + (1 x 0.861)) / (4+1+1+1) = <b>7m @ 0.58% Cu</b>						
			<ul> <li>Exploration results are nominally reported where copper results are greater than 0.3% Cu, significant intersections have a minimum down-hole width of 4m, internal dilution of up to 4 metres has been incorporated in some instances to allow continuity of significant intersections.</li> <li>No top-cutting of high grade assay results has been applied, nor was it deemed necessary for the reporting of significant intersections.</li> <li>No metal equivalent values have been reported</li> </ul>						
Relationshin	• The	ese relationships o	re particularly		Mineralisat	tion at D	roductora c	an he located within steenly west	
kelationship between mineralisatio n widths and intercept lengths	<ul> <li>Interimp</li> <li>Exp</li> <li>If tage</li> </ul>	Inese relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').	<ul> <li>Initial ansation at Productora can be located within steeply wes dipping breccia hosted envelopes, or within moderately eas dipping steeply plunging shoots, and to a lesser extent shallow dipping permeable volcaniclastic bedding horizons.</li> <li>Due to the variable nature of mineralisation geometry, the statement of the state</li></ul>						
	kno		•	<ul> <li>Due to the variable nature of mineralisation geom drilling orientation is chosen according to the mine geometry type being targeted.</li> </ul>					
	<ul> <li>If it hole</li> <li>be</li> <li>'dou</li> <li>kno</li> </ul>		•	Where pra intersect n however th	actical th nineralis nis is not	ne drilling o ation perpe always poss	rientation has been designed to ndicular to the lode orientation, sible.		
Diagrams	<ul> <li>App scal sho</li> </ul>	propriate maps and les) and tabulation uld be included for	sections (with s of intercepts any significant	•	Refer to f significant	igures in intersec	n announce tion drillhole	ment. A plan view of reported e collar locations is included.	





Criteria	JORC Code explanation	Commentary
	discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• 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.	<ul> <li>It is not practical to report all exploration results.</li> <li>Low grade intersections grading 0.2-0.5% Cu have been reported as well as high grade intersections grading&gt; 0.5% Cu.</li> <li>Unmineralised intervals &lt;0.2% Cu have not been reported.</li> </ul>
Other substantive exploration data	• 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.	<ul> <li>Other exploration data available:         <ul> <li>Surface mapping- geological observations (lithological and structural)</li> <li>Geophysical and radiometric surveys (airborne)</li> <li>Bulk density analysis is completed on every 5<sup>th</sup> metre of diamond core and pycnometer analysis is performed on every 25<sup>th</sup> RC metre</li> <li>Preliminary metallurgical test work has been completed at Productora as part of the scoping study. These results have indicated that conventional processing will be suitable, with metallurgical recoveries of &gt;90% for copper, ~80% for gold, ~75% for molybdenum (recoveries achieved from coarse 180µm grind size)</li> </ul> </li> </ul>
Further work	<ul> <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> <li>Resource definition drilling (copper-gold-molybdenum) and resource extensional drilling continue at Productora within the preliminary central pit design (which covers ~3km of the Productora mineralised corridor strike extent).</li> <li>Outside of the preliminary central pit design further exploratory testing for copper-gold-molybdenum and iron mineralization will be completed over the entire project holding. A systematic geochemical soil sampling programme has been designed as a first pass technique for discovering potential mineralisation, this will be followed up by prioritization and subsequent drill testing of favourable targets.</li> <li>Drill targeting of conceptual high grade shoots at depth, along strike and down plunge will also be a focus for future exploration.</li> </ul>



