



## CORPORATE STRUCTURE

ASX Code: CLZ - CLZO  
ABN: 77 119 484 016

Shares: 206,387,713  
Options: 44,390,353

Share price: \$0.13 (at 16/12/2013)  
Option price: \$0.021 (at 16/12/2013)

## BOARD & MANAGEMENT

Justin Douch, Managing Director  
Stanislaw Procak, Non-Executive Director  
Kent Hunter, Company Secretary and  
Non-Executive Director

## INVESTMENT

Tenements cover an area of 380 km<sup>2</sup> in the highly-prospective Eastern Goldfields and Fraser Range provinces of WA.

Flagship Fraser Range Project in WA is 40 km from Sirius Resources' Nova and Bollinger discoveries.

Experienced board and management team.

## CONTACT

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## INVESTOR RELATIONS

Neil Le Febvre  
Tel: 08 9468 0255

## ASX ANNOUNCEMENT 16 DECEMBER 2013

# GRADES INCREASING WITH DEPTH AT MAMMOTH FRASER RANGE NICKEL DISCOVERY

### Highlights:

- Strongest intercept to date of 2m @ **1.0% Ni** from 106m
- Target horizon increasing in width with disseminated sulphides over 23m
- Strike length is 120m and continuing
- Diamond rig commenced drilling to determine style and mineralogy of the mineralise zones.

Classic Minerals (**ASX:CLZ**) advises that assays from a further three holes at the Mammoth nickel-copper discovery on the Fraser Range have continued to return strong results with hole FRRRC040 intersecting a two metre wide massive intercept of **1.0% Ni** from 106m. This is the deepest intersection to date at Mammoth.

RC drilling has now stepped out over 120m along strike and is continuing to intersect the mineralized horizon.

Hole FRRRC041 has returned a 23m wide zone of disseminated nickel-copper sulphide, highlighting the significant width of the target horizon.

Hole FRRRC036, has also returned a strong interval for Cobalt of 5m of 0.1% Co from 5 to 10m down hole.

*"Picking up nickel grades above 1% so early in the campaign is a really encouraging step forward and it's great to see the grade increasing with depth," said Classic Minerals Managing Director, Justin Douch.*

*"We are continuing to see coarse nickel and copper sulphides in our RC drilling chips and this is being backed up with grade.*

*"We've mobilised a diamond rig to help us start to understand the style and size of the Mammoth mineralisation which will then assist our future exploration as we head into the first quarter of 2014."*

Nickel and copper sulphides have been intersected in all holes to date and the mineralisation is open along strike and at depth.

The holes have been drilled oriented at -60 degrees dip to 311 degrees true to intersect an EM conductor, but this is not a true thickness intersection. Holes have been drilled in six lines 20m apart, with holes 15m apart along lines, so that intersections were about 20m apart vertically.

All holes have intersected nickel and copper sulphides in a mixed zone of gneiss and mafic amphibolites with garnets often present.



ACN 119 484 016

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MINERALS LTD

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## About Mammoth

Drilling at the Mammoth target has discovered a new nickel-copper mineralized horizon which represents a new target style of magmatic nickel-copper mineralisation within mafic sills in the Fraser Range.

Mammoth sits on Classic Minerals' 100% owned Fraser Range tenement E28/1904 comprising 84sq km. 18 EM conductors have been highlighted for exploration with early drilling focusing in on 3 core conductors at the north end of the tenement being Mammoth, Alpha and Target A17.

The Mammoth target has about 15m of lateritic cover. The latest round of drilling commenced late November with analysis for the first seven RC holes drilled now received.

**Figure 1. 2 metre zone of sulphide rich chips from hole FRR040 106m–108m**



**Figure 2. RC and Diamond Drilling in progress at Mammoth target**





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Figure 3

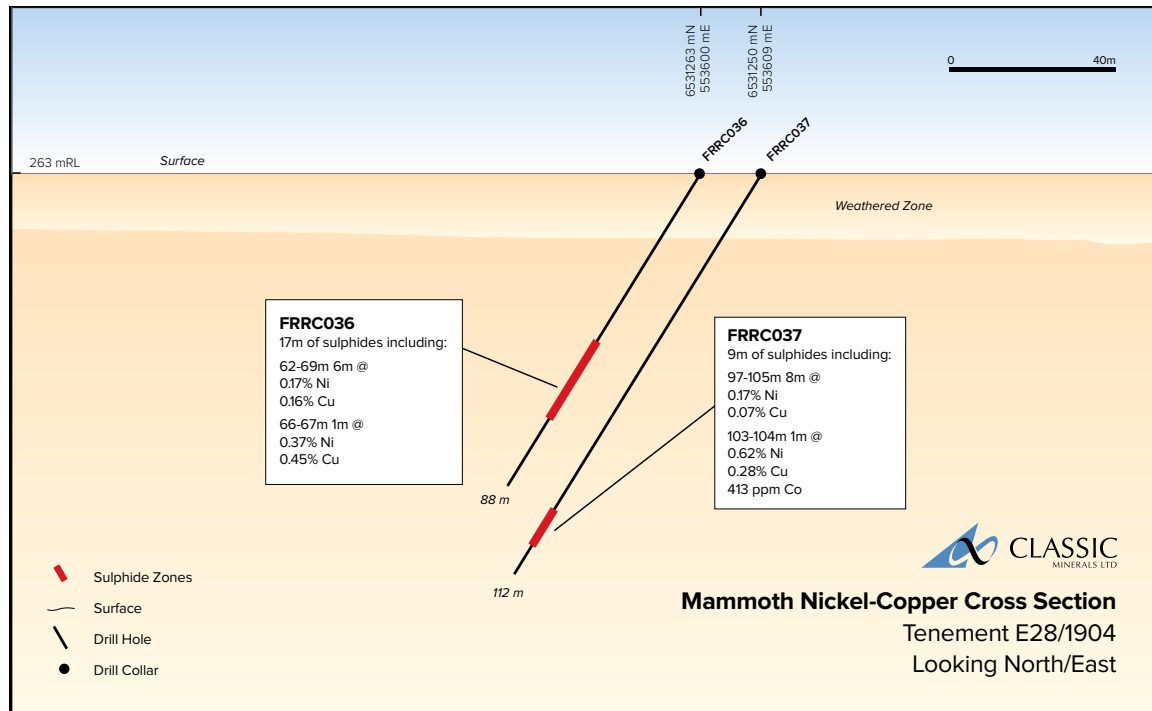
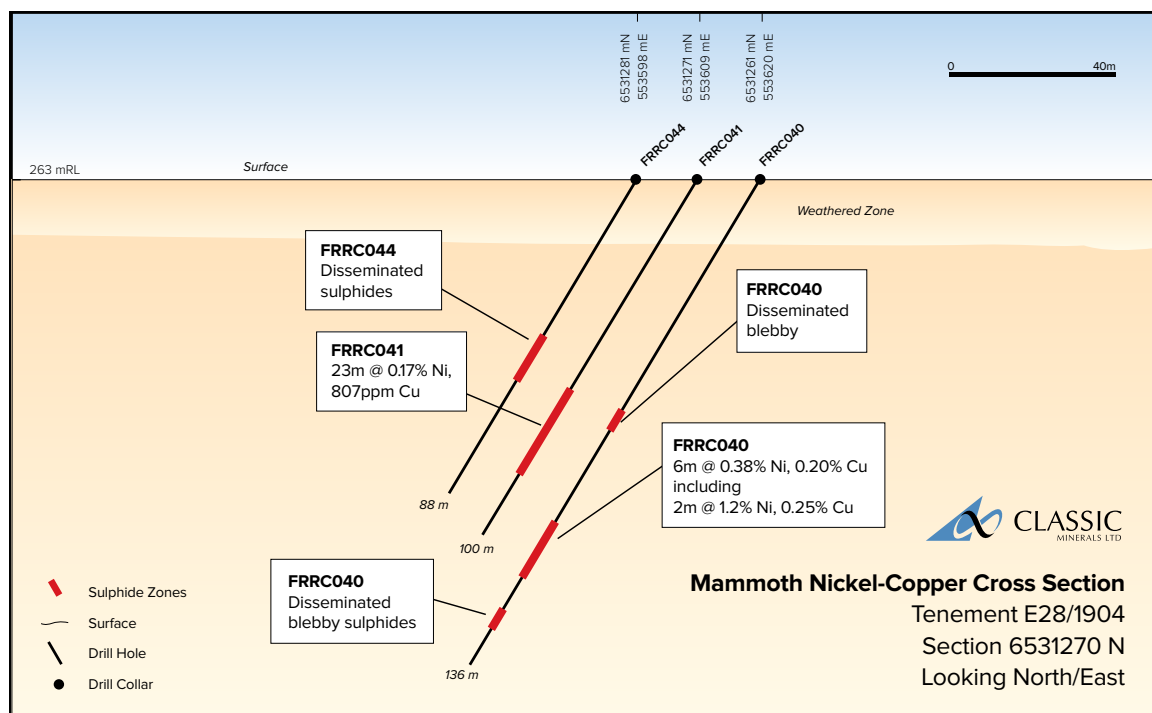


Figure 4





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Figure 5

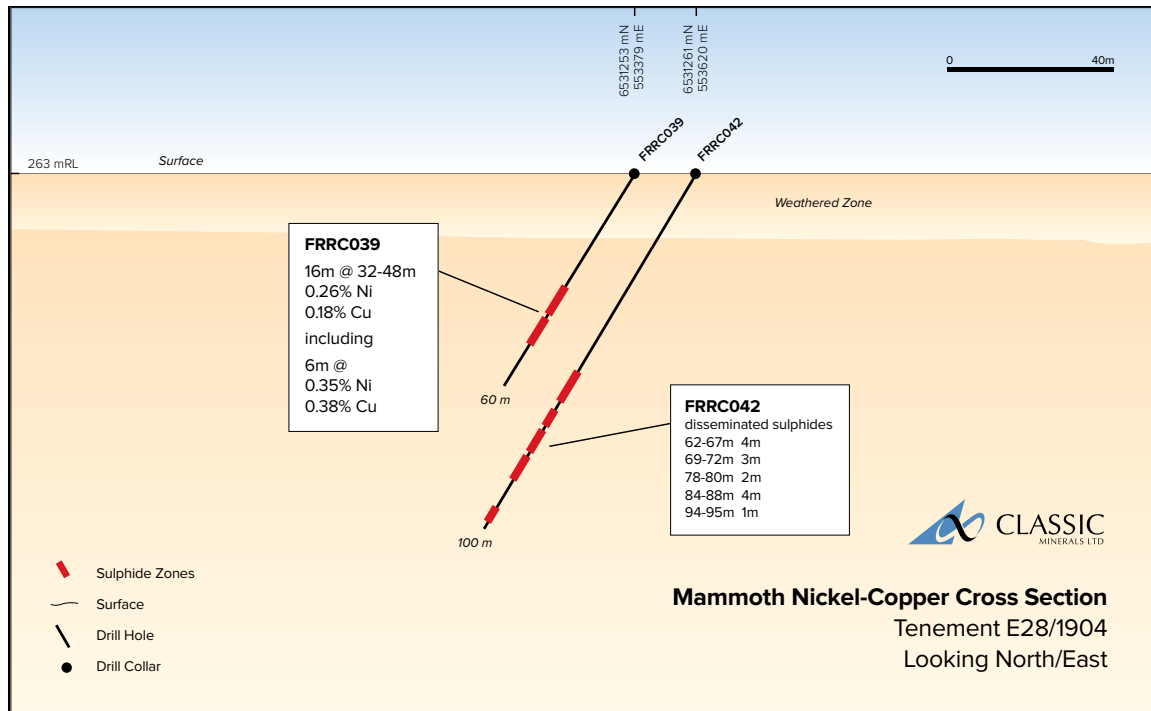


Table 1. RC Drillhole Locations

Hole Number	Northing MGA	Easting MGA	Dip Degrees	Azimuth Degrees True	Depth (m)
FRR040	6531261	553620	-60	311	136
FRR041	6531271	553609	-60	311	100
FRR042	6531243	553586	-60	311	100
FRR043	6531243	553560	-60	311	94
FRR044	6531281	553598	-60	311	88

By GPS, accuracy +/- 3m

Table 2. Significant Sulphide Intersections

Hole Number	Sulphide Intersections
FRR040	60m band with intersections of: 5m from 65-70m 15m from 95-110m 5m from 120-125m
FRR041	23m from 60-83m
FRR042	4m from 62-67m 3m from 69-72m 2m from 78-80m 4m from 84-88m 1m from 94-95m





## ABOUT CLASSIC MINERALS

Classic Minerals (ASX: CLZ) is a Perth-based mineral exploration Company focused on advancing its Fraser Range project E28/1904, in Western Australia. The Fraser Range Project is approximately 40km northeast of Sirius Resources' NL (ASX: SIR) Nova and Bollinger nickel-copper discoveries, and has historic nickel-copper-zinc soil anomalies.

Other projects include Doherty's Gold Project in the East Murchison region of WA, Mt Maitland Project in the Murchison region, which is prospective for uranium, and Cowarna Rocks near Kalgoorlie, which has detrital iron ore potential.

The company listed on the ASX in May 2013 and is focused on increasing shareholder value through exploration success at its West Australian projects.

Further details of the company's projects can be found at [www.classicminerals.com.au](http://www.classicminerals.com.au)

## COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Sheldon Coates, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Sheldon Coates is employed by Iron Resources Pty Ltd who is a consultant to Classic Minerals Ltd. Mr Sheldon Coates has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and 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'. Mr Sheldon Coates is a shareholder in Classic Minerals and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

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**Table 3: Assays Received to date**

Hole Number	From	To	Ni (ppm)	Cu (ppm)	Co (ppm)
FRRC036	5	10			1188
	48	50	1110	475	85
	58	62	1440	675	103
FRRC037	97	105	1575	759	140
including	103	104	6203	2815	413
FRRC038	112	113	1189	140	67
FRRC039	32	48	2060	1840	-
including	42	48	3520	3870	-
FRRC040	102	108	3822	2044	249
including	106	108	10239	2562	611
FRRC041	60	79	1785	807	123

**Justin Douch**

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## JORC Table

### Section 1

Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation (RC) drilling accounts for 100% of Classic's current drilling at the Mammoth prospect.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>RC recoveries are logged visually as a percentage.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>RC drilling has been geologically logged to a level of detail to be appropriate for mineral resource estimation.</li> <li>Logging of RC drilling records lithology, mineralogy, mineralization, weathering, colour and other appropriate features.</li> <li>All drill holes were logged in full(4x holes logged in full, all other holes are in process of logging)</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable</li> <li>RC samples were cyclone split. Samples were collected mostly dry except for 5 meters 130m to 136m in hole FRRC040.</li> <li>The sample preparation of RC samples follows industry best practice. All samples are pulverized (need to get info from lab).</li> <li>RC samples are collected at 1m intervals using a riffle splitter and composited into 4m samples using a scoop. Certified Reference Materials (CRM) and/or house controls, blanks, splits and replicates are analysed with each batch of samples.</li> <li>Field duplicates have been taken. Samples selected so there is total preparation at the pulverization stage.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The analytical technique used mixed acid digest and OEM</li> <li>No geophysical tools were used to determine any element concentrations at this report.</li> <li>Sample preparation checks for fineness were carried out by the laboratory as part of internal procedures.</li> </ul>



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Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections of the RC drilling have been visually verified by the Managing Director and independent technical consultants.</li> <li>There have been no twinned holes to date.</li> <li>Primary data was collected by excel templates using flat files.</li> <li>No Adjustments or Calibrations were made to the assay data reported.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drillhole collars were located by GPS. Elevation values were in AHD. Expected accuracy is +/- 3m for northing and easting and 15m for elevation coordinates.</li> <li>The grid system is GDA94(MGA), zone 51</li> <li>The GPS is +/- 3m, and the land surface is flat so an estimated RL is used from the 1:250,000 regional map for Zanthus sheet.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>The nominal drill spacing to between 20m and 60 on northings and 15m on easting section south east section lines (311/131 True).</li> <li>The drilling is at an early stage so there is not sufficient data to establish the degree of geological and grade continuity.</li> <li>There has been no compositing applied to the exploration results.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The data spacing at this stage is not sufficient to establish both geological and grade continuity.</li> <li>No orientation bias has been identified in the data at this point.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody is managed by Classic. Samples are stored on site and either delivered by Classic personnel to a Kalgoorlie laboratory or alternatively to a transport company to a laboratory in Perth.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been set up at this stage.</li> </ul>

**Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling is located wholly within Exploration Licence E28/1904, The tenement is 100% owned by Classic Minerals Ltd</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Soil sampling, Auger sampling by HOMESTAKE Gold Australia</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Albany Fraser Mobile Belt with consist of gneiss , mafic rocks including gabbro with significant garnet in ore rocks</li> <li>this appears to be a magmatic type of deposit, further information is required to fully assess the style of</li> </ul>



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Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> <li>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:               <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to table 1</li> <li>Refer to table 2</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>All reported assays are a result of 1/8th sample of 1 meter in mineralised zones or 5 meter composite samples aggregated as equal volume from the individual 1/8th samples in non mineralised zone . No top-cuts have been applied.</li> <li>Higher grade nickel and copper intervals internal to broader zones of nickel and copper are reported as included intervals.</li> <li>No use of metal equivalents has been used in this report.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>The geometry of the primary mineralization is not known at present due to the lack of deeper drilling and the early stage of exploration.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to figures in the body of text.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All significant results are reported.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>At this stage, mineralisation is only broadly understood and requires further step out drilling lines at 20m apart north east and south west, and holes 15m apart along lines down to 100m depth of mineralisation at shallow depth then deeper drilling will be undertaken to extend the deposit at depth</li> </ul>