



ACN 119 484 016

**CLASSIC**  
MINERALS LTD

## CORPORATE STRUCTURE

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

Shares: 245,139,499  
Options (listed): 101,137,607  
Options (unlisted) 13,125,000

Share Price: \$0.035 (18/06/2014)  
Options: \$0.01 (18/06/2014)

## BOARD & MANAGEMENT

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

## 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.

## CONTACT

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## INVESTOR RELATIONS

Neil Le Febvre  
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# LATEST SAM EM SURVEY DRIVES NEW DRILLING PROGRAM FOR CLASSIC MINERALS

Following promising results from a detailed SAM EM survey completed in May, nickel/copper explorer Classic Minerals (ASX:CLZ) is to undertake a highly targeted new drilling program at its Fraser Range tenement, 40kms north-east of Sirius Resources' Nova and Bollinger discoveries.

Drilling is scheduled to begin in late July and be completed before the end of August 2014.

The company will be focusing primarily on an eight-kilometre "hot zone" extending south-west, 8km from its Mammoth Ni,Cu discovery.

Four SAM conductor targets will be RC drilled to a depth of 400 metres, in one case preceded by a moving loop ground EM survey to more precisely define the target.

Drilling will be complemented by geochemical surveys of the target areas. If geochemical anomalies are identified at surface, those targets will be prioritised for drilling.

Classic plans to follow up all the deep RC holes drilled with downhole EM surveys which can detect nearby conductors for up to 200 metres along strike and up to 100 metres horizontally and vertically, depending on ground conditions.

Managing director Justin Douch said the highly targeted approach his company had planned would place the focus firmly on Classic's prime targets.

"Since drilling commenced in August last year we have discovered two sulphide deposits being (ALPHA Cu deposit and MAMMOTH Ni, Cu deposit) which demonstrates the potential for Cu-Ni mineralization within our tenement/project area, and we are confident it has the potential to host larger deposits of these minerals.

"We have an 80 km<sup>2</sup> tenement literally down the road from Sirius' Nova and Bollinger discoveries, and demonstrating many similar rock characteristics.

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“Our latest deep searching SAM EM survey has also been very encouraging, indicating clusters of deep conductors bearing similarities to major nickel copper sulphide deposit clusters in Canada and Russia”.

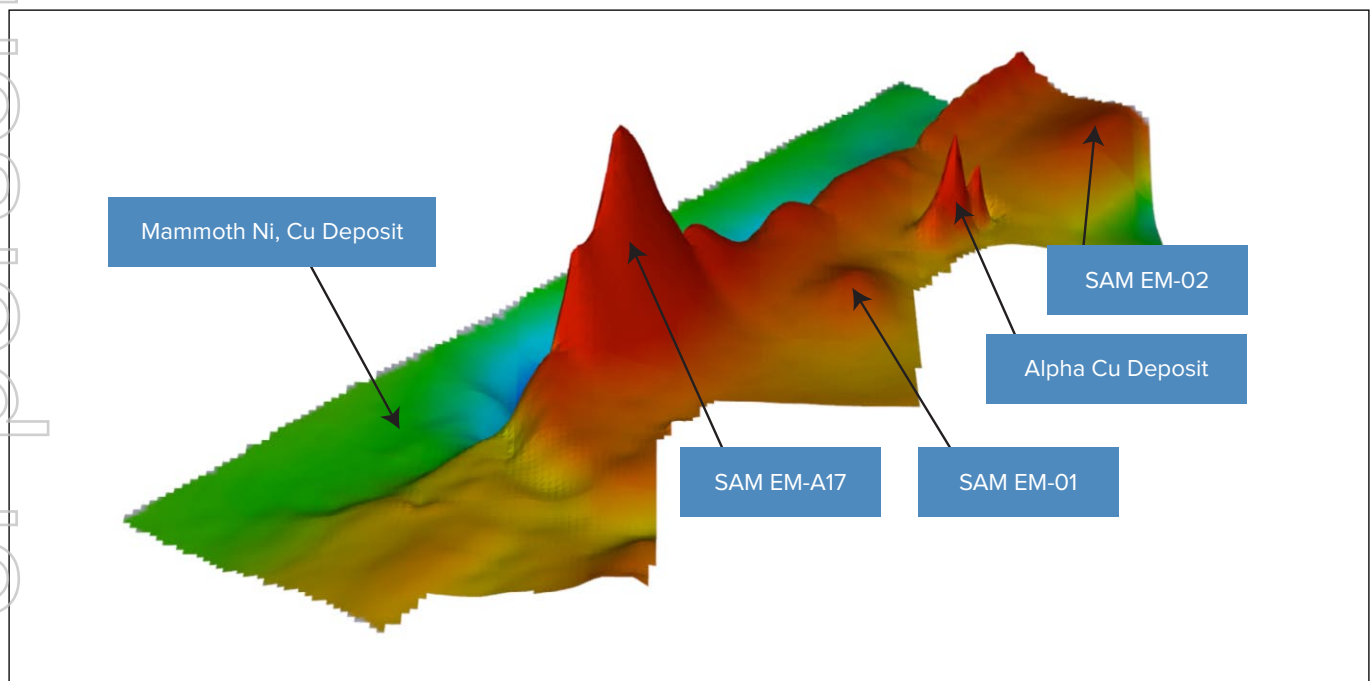
“In some ways we’re spoilt for choice, with a wealth of prospective targets, and it would be tempting to mount our exploration on a broad front, but on balance we believe that concentrating on a handful of key targets represents more prudent use of shareholders’ funds.

“We’ve come a long way since we floated, just a year ago, and we’re determined to maintain the pace in our quest to establish another world class nickel/copper operation in the Fraser Range,” he said.

## Details of CLZ Drilling Program

The detailed SAM EM survey undertaken over the 8km long hot zone, in the north of the project, has located four conductor targets, with three new targets (SAM01, SAM02 and evidence that SAM-A17, identified during the earlier airborne VTEM survey, extends to at least 500m depth. See Figure 1.

*Figure 1: SAM EM Targets shown with conductivity responses as elevation in northern part on Classic Minerals E28/1904 tenement. Looking South. Note A17 is the priority target.*

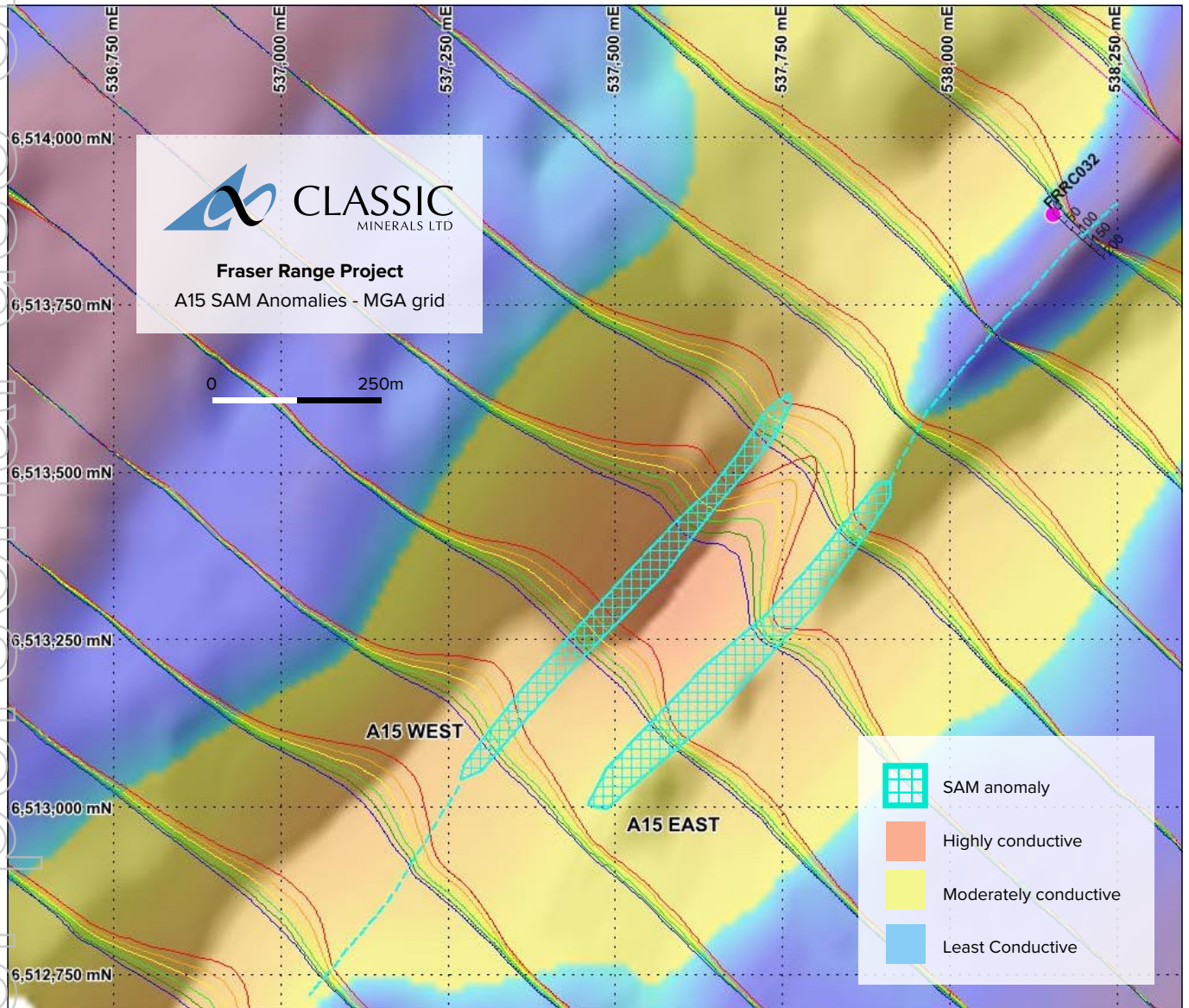


The recent SAM EM survey undertaken over the Eye structure in the south of the tenement has identified a new conductor at depth on the south east edge of this structure. This occurs as two parallel conductors, about two hundred metres apart and 600m long striking north east. These SAM conductors occur below part of the extensive A15 VTEM anomaly which is several kilometres long, and extends to 500m depth. These new deep conductors are called A15West and A15East. See Figure 2.



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Figure 2: A15 East and A15 West SAM EM Anomalies at south end of E28/1904



Each of the SAM EM conductor targets is to be initially tested by one deep RC hole to a depth of around 400m, with the one kilometre long, A17 target to be tested by two RC holes 400m deep located 200m apart along strike. A15West and A15East will each be initially tested with an RC hole to a depth of 350m.



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## Ground EM Moving Loop Survey

The SAM02 target SW of Alpha copper deposit is not well defined as a drilling target by the SAM EM, and a moving loop ground EM survey will be undertaken to better define the target before committing to drilling.

## Rock Chip Geochemistry

Surface geochemical sampling will be undertaken by rock chipping over the new SAM EM anomalies to determine if there is any surface anomalism, and to disclose the likely elemental composition of any sulphide mineralisation at depth. If a geochemical anomaly is present at surface, these targets will be prioritised for drilling, and CLZ may drill additional holes depending on the results of the initial drilling. The SAM EM targets without surface geochemistry anomalies will also be drilled, but as a lower priority.

## Downhole EM Surveys

At the completion of the drilling program, Downhole EM (DHEM) surveys will be conducted on the deeper RC holes. These surveys can detect the presence of nearby conductors for about 200m along strike in each direction and about 100m sideways and vertically, depending on ground conditions. These surveys will assist in further defining the conductors and in refining the targeting of follow up RC/ diamond core holes.

Several of the recently drilled deeper (200m) RC holes at A17 will be surveyed with DHEM to provide additional data on the conductor at moderate depth and provide a more complete geophysics model over the depth range.

## Historic Geochemistry Anomaly

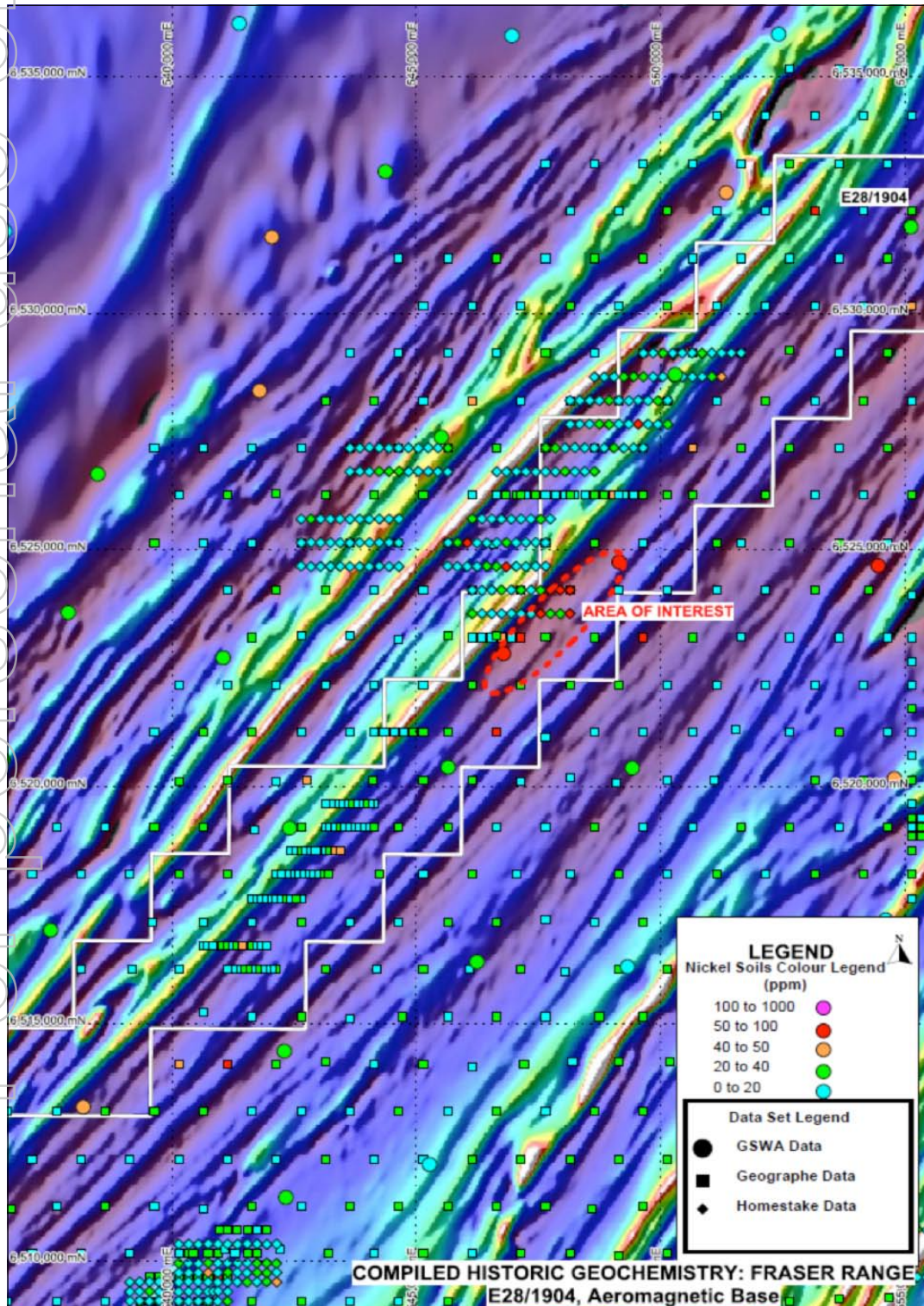
An historic calcrete geochemistry anomaly for nickel, copper and zinc occurs over the centre of the tenement, and extends for 3km along strike and upto 1km wide. (see Figure 3.); The original broadly spaced geochemical sampling by GSWA, Geographe Resources and Homestake Gold returned values upto 80ppm Ni, 291ppm Cu and 104ppm Zn. A program of geochemical sampling is to be undertaken over the area to better define the anomaly. This survey will be undertaken using a small 4WD mounted aircore rig, to take samples at the top of the bedrock as a consistent horizon. The initial sample spacing will be on east-west lines 400m apart, with samples taken from aircore holes 200m apart along lines. Samples will be logged for rock type, and analysed for base metals, gold and platinoid group elements

Follow-up infill geochemistry on infill lines at 200m between the initial lines will be undertaken where anomalous values are indicated from the first pass drilling.



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Figure 3: Historical Ni Geochemistry in Fraser Range tenement E28/1904





## COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Rust, who is a Member of the Australasian Institute of Mining & Metallurgy. Mr Rust is employed by Shearwater Australia Pty. Ltd who is a consultant to Classic Minerals Ltd. Mr Rust has sufficient experience 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". Mr Rust 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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## Adjacent Gold Anomalies

Two gold anomalies in auger soil sampling were reported by another company (Sirius Resources Ltd, December 2013) from areas immediately adjacent to the south west tenement boundary of E28/1904. The reported calcrete gold anomalies are in the range 20-50ppb Au. Calcrete sampling for gold will be undertaken in the adjacent area within the Classic tenement to determine if the gold anomaly extends to the east, which is to the west side of the nearby Eye structure.

### Justin Douch

Managing Director  
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## ABOUT CLASSIC MINERALS

Within a year of listing, Classic Minerals has established itself as one of the most advanced exploration company operating in the nickel / copper-prospective Fraser Range, 160 km east of Kambalda, Western Australia.

Classic is the 100% owner of an 84 square kilometre tenement just 40km north east of Sirius Resources' Nova and Bollinger nickel-copper discoveries.

Initial petrology indicates the area has similar rocks and sulphide mineralisation to Nova, and the overall tenement is an area with identified nickel, copper, cobalt, manganese, gold, and base metal targets.

The company has already discovered the Mammoth nickel-copper deposit and the Alpha copper deposit which is a new style of magmatic copper mineralisation on the Fraser Range. Classic Minerals has defined an 8km "hot zone" in the north of the project and a prospective new SAM target in the south adjacent to the EYE structure which will be the subject of a targeted drilling program in July, 2014.



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## JORC Table

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Sub-Audio Magnetic-Fixed Loop Electro-Magnetic (SAM-FLEM) survey.</li> <li>The survey was undertaken in a series of adjoining fixed loops, each 800m x 1200m.</li> <li>The transmitter used was a Gap GeoPak HPTX-70 high powered geophysical transmitter using 150amp current at 3.125Hz base frequency.</li> <li>The mobile receiver used was a Gap TM-7 magnetometer sampling at 2400Hz, continuously receiving. A GPS receiver accurate to +/-1m was used to locate the receiver.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>No information required for these exploration results as no drilling results are presented.</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>No information required for these exploration results as no drilling results are presented.</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>No information required for these exploration results as no drilling results are presented.</li> </ul>



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Criteria	JORC Code explanation	Commentary
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>No information required for these exploration results as no drilling results are presented.</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>Sub-Audio Magnetic-Fixed Loop Electro-Magnetic (SAM-FLEM) survey.</li> <li>The survey was undertaken in a series of adjoining fixed loops, each 800m x 1200m.</li> <li>The transmitter used was a Gap GeoPak HPTX-70 high powered geophysical transmitter using 150amp current at 3.125Hz base frequency.</li> <li>The mobile receiver used was a Gap TM-7 magnetometer sampling at 2400Hz, continuously receiving. A GPS receiver accurate to +/-1m was used to locate the receiver.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All data is checked on a daily basis by field staff and consultants</li> <li>Any data points that are questionable are re-surveyed</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>Data points were located by GPS. Elevation values were in AHD. Expected accuracy is +/- 1m for northing and easting and +/- 3m for elevation coordinates.</li> <li>The grid system is GDA94(MGA), zone 51</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>200m and 100m line spacing's.</li> <li>Continuous data sampling along lines at 2400Hz</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>Traverse lines oriented Northwest – Southeast (310o / 130 o mag), perpendicular to the general lithological strike direction. Some traverses undertaken parallel to the strike direction</li> </ul>





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Criteria	JORC Code explanation	Commentary
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>All data has been collected in the field by by GAP Geophysics Australia with the data then provided to the Company's Geophysical Consultants</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 carried out 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 SAM – FLEM survey is located wholly within Exploration Licence E28/1904, which is 100% owned by Classic Minerals Limited</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>No electrical geophysical surveys are known to have been undertaken by other Companies within the licence area</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>Geological setting is in Fraser Zone of the Albany Fraser Mobile Belt consisting of gneiss, mafic rocks including gabbro with significant garnet in the metamorphic rocks.</li> <li>The Company is exploring for magmatic hosted base metal mineralization.</li> </ul>
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>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>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>No information required for these exploration results as no drilling results are presented.</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>No information required for these exploration results as no drilling results are presented.</li> </ul>



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Criteria	JORC Code explanation	Commentary
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>No information required for these exploration results as no drilling results are presented.</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>Figure 1. Shows a plan view of the EM conductors</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>No information required for these exploration results as no drilling results are presented.</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>	<ul style="list-style-type: none"> <li>Previous ASX releases by Classic Minerals Limited have detailed aspects of previous work undertaken within the licence area.</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>The preliminary EM results are indicative in nature and require further exploration, including drilling, to establish the true size and nature of the conductors and the presence of mineralisation, if any.</li> <li>Refer to diagrams in body of report.</li> </ul>