## APPENDIX 1 -

## JORC CODE 2012 EDITION, TABLE 1 REPORT

## JORC Code, 2012 Edition – Table 1 Section 1: Sampling Techniques and Data

**Section 1: Sampling Techniques and Data** (Criteria in this section applies to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</li> </ul>	<ul> <li>Core was sawn in half to provide a geologically representative sample for analysis by a professional laboratory</li> <li>Sample intervals were selected by a qualified geologist upon visual inspection of the core.</li> <li>Samples were submitted to ALS Laboratories in Fairbanks, Alaska.</li> <li>Sample were analysed using an aqua regia digestion and ICP-MS multi-element analysis.</li> <li>Samples containing +1% Cu were automatically reanalysed with an aqua regia digestion and an ore grade analysis using an ICP-AES finish to more accurately determine the high grade Cu assays.</li> </ul>
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>A wireline core drilling rig was used to drill HQ core with a diameter of 63.5mm using a standard tube.</li> <li>Downhole surveys were completed using a Ranger Discoverer survey tool.</li> <li>Core is oriented by the drillers at the rig each run using the Fordia, Corient tool.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Drill Sample Recovery	<ul> <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> <li>Drillers record the drilled length and recovered length of core for each run on their run sheets. Geologists also measure and calculate recovery as a percentage drilled.</li> <li>HQ core was drilled to maximize recovery.</li> <li>Competent, experienced drillers were engaged.</li> </ul>
Logging	<ul> <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> <li>Core is geologically and geotechnically logged by qualified geologists. Where possible structural angles are measured for later interpretation.</li> <li>Core is qualitatively logged and all trays are photographed.</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>Core is cut in half, with half retained in the core box and the other half submitted for analysis. When duplicates are required this was noted on the sample dispatch. The half core sent for assay was split at the crushing stage by the laboratory and run as two separate samples. The geologists had, at the time of sample submission, assigned a sample number and provided a labelled sample bag for the duplicate split.</li> <li>The sample preparation technique is industry standard. HQ core is used and therefore provides a larger sample than more commonly used smaller diameter core.</li> <li>Duplicates, blanks and Certified Reference Materials (or standards) have been inserted approximately every 30 samples as an external quality control on the laboratory.</li> <li>Half HQ core is an appropriate sampling methodology for the mineralised material.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	<ul> <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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established</li> </ul>	<ul> <li>Samples have been submitted to ALS Laboratories in Fairbanks, Alaska, a globally recognized analytical laboratory.</li> <li>Duplicates, blanks and Certified Reference materials were inserted approximately every 30 samples as an external quality control on the laboratory.</li> <li>The laboratory has its own internal duplicates, standards and blanks process that is assessed before they release results to their clients.</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>The competent person has reviewed the intersections quoted.</li> <li>Twinned holes have recently been used to validate historical drill results as per this announcement, however there have been no twin holes drilled to verify results in recent holes.</li> <li>Geological practices are documented by the competent person.</li> <li>There are no adjustments to be made to assay data.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (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> <li>Handheld GPS was used to locate the position and elevation of drill collars in UTM, NAD83. A local grid is also used to display drilling data on sections.</li> <li>Locational accuracy is considered adequate for the purpose of this announcement.</li> </ul>
Data Spacing and distribution	<ul> <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> <li>As we are simply reporting exploration results data spacing is not relevant at this stage. Maps and diagrams show the distribution of the completed holes.</li> <li>No sample compositing has been applied at this stage.</li> <li>Results are reported as significant intercepts.</li> </ul>

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Orientation of data in relation to geological structure	<ul> <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> <li>The orientation of sampling is conducted in accordance with industry best practices.</li> <li>Some of the holes are drilled in an orientation that may not represent true thickness. These orientations were necessary to twin holes and/or due to the restraints of topography and underground infrastructure. Holes drilled in such a way are described in the body of the announcement.</li> </ul>
Sample Security	The measures taken to ensure sample security	<ul> <li>Samples were managed by Company representatives until they were handed to a professional courier service for delivery to the laboratory. Samples were stored in polyweave bags and cable tied for security.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data	The competent person has reviewed and assisted in the design implementation of all drill sampling techniques.

Section 2: Reporting of Exploration Results (Criteria listed in section 1 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> <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> <li>When undertaking due diligence on the Project during 2014, an Alaskan law firm confirmed that the Alaskan State Mining Claims (tenements) are in good standing.</li> <li>During October 2014 the annual renewal fees for all of the Claims were paid, well in advance of the 1 December 2014 renewal deadline. This ensures they are all in good standing until 1 September 2015.</li> <li>The Company controls 80% of the Claims via option agreements with Hatcher Resources Inc. and SV Metals LP.</li> <li>The operations are permitted by Alaska Department of Natural Resources.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The site has been explored intermittently since discovery in 1963. There are 112 historic drill holes on the project, 2 exploration adits and numerous geophysical and geochemical surveys.
Geology	Deposit type, geological setting and style of mineralisation	The deposit is a sedimentary hosted copper deposit, where sulphides are interpreted to have precipitated in a basinal environment, and to have been and to have been deposited contemporaneously with the sediments.

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Drillhole	A summary of all information	A table of the holes completed is included in the
Information	material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:	body of the announcement.
	<ul> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>downhole length and interception depth</li> <li>hole length.</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>	
Data aggregation methods	<ul> <li>explain why this is the case</li> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</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> <li>Exploration results have been reported on a weighted average basis.</li> <li>No top cut has been applied and is not deemed necessary due to consistent high grades.</li> <li>The amount of internal subgrade included in significant intercepts was kept to a minimum and alternative significant intercepts were provided.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Where possible drilling was conducted perpendicular to the interpreted dip and strike of the deposit. This was not always possible, due to (i) the deposit's dip and strike being unknown and/or (ii) topographic constraints.</li> <li>This is addressed in the body of the announcement.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Diagrams	<ul> <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 drillhole collar locations and appropriate sectional views</li> </ul>	<ul> <li>Diagrams, sections and tables showing the location of intercepts are included in the body of the announcement.</li> <li>The significant intercepts for all assay data received are included in the body of the announcement.</li> </ul>
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	All significant results are reported.
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.	This announcement is reporting on both the assay results received to date and some geological and visual representations of the core for which assays are yet to be received.
Further Work	<ul> <li>The nature and scale of planned further work (e.g. 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>The drill program is continuing and other assay results are still pending.</li> <li>Initially, future drilling will be focused on the lateral and depth extensions of the known and mapped mineralized lenses.</li> <li>A recent 3DIP survey has generated multiple new targets that have previously been outlined in plan and section. These will be systematically followed up in conjunction with drilling and further exploration.</li> </ul>