



## **Visible cassiterite confirms second major tin target at Kikagati, Uganda**

Carnavale Resources Limited (ASX: CAV) is pleased to advise that first ever drilling and trenching at the Hippo Hill prospect has confirmed the presence of visible cassiterite (tin-bearing mineral). Hippo Hill is located approximately 2km west of the main Kikagati Tin Deposit (Figure 1) and is the second large scale tin prospect defined at the Kikagati Tin Project in Uganda.

The two large scale tin prospects defined to date demonstrate the prospective nature of the project and provide an excellent opportunity to define large tin resources potentially amenable to open pit mining methods and simple processing.

- **Second tin target with dimensions 1.5km long x 150m wide**
- **Visible cassiterite (tin mineral) observed at surface and in drilling**
- **Kikagati and Hippo Hill - large scale open pit resource targets**

Hippo Hill is a 1.5km long east west trending target with an interpreted 150m wide prospective corridor defined by quartz vein stockwork of variable density and associated mica rich alteration. The nuggetty cassiterite is observed as crystals up to 20mm long (Figure 2), occurring along the margins of the quartz veins in both drilling and in the surface trenching (Figure 4). Historic artisanal workings and shafts occur sporadically along the 1.5km strike length.

The recent exploration activities have focussed on Hippo Hill with 3 diamond drill holes completed for a total of 388.5m, limited short trenching adjacent to the drilling section and soil sampling along the 1.5km target. The drilling targeted outcropping quartz veins with mica alteration that has been mined by the local artisanal miners. The trenches were established upon identification of the visible cassiterite in drill hole KHHDD002 at 60m and 97m depth. Mapping of the trench has identified further finer grained cassiterite crystals in the selvage of thin quartz veins and in the weathered colluvium just above bedrock. All assays results remain pending with results expected during the September 2019 quarter.

- **3 HQ diamond drill core holes completed.**
- **1.5km x 400m soil sampling survey undertaken.**
- **Cassiterite (to 20mm) observed in hole KHHDD002 at 60m and 97m.**
- **Cassiterite observed along vein selvages in trench HHT001.**
- **Subvertical vein stockwork from surface.**

Cassiterite has been observed in quartz-mica veins as well as along the contact between individual quartz veins and the surrounding schist host rock. The stockwork is defined by a series of subvertical larger veins, historically targeted by artisanal miners through to bedding-parallel, sub-vertical and oblique less sized veins and associated mica alteration. Figure 3 is a cross section showing the drilling locations and the interpreted zone of sub-vertical stockwork trend. Bedding defined by thin quartzite units within the schist dips to the north and the dominant foliation fabric and vein orientation is subvertical.

Overall the Hippo Hill is considered prospective due to the large target dimension (1.5km x 150m), visible cassiterite observed within a quartz vein stockwork and the potential for simple open pit style mining and relatively easy processing requirements (i.e. crush-grind-heavy media separation).



Figure 1 Hippo Hill location map

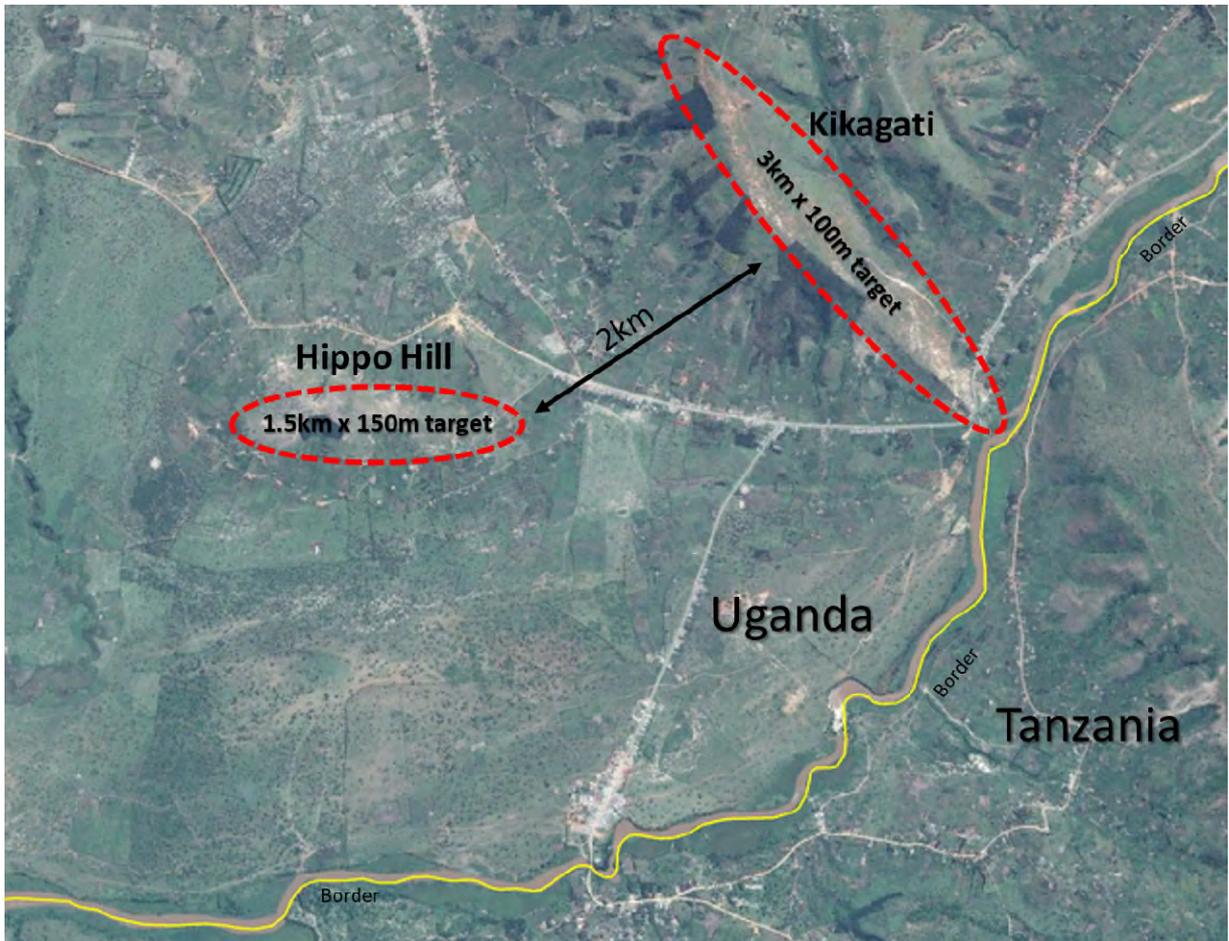


Figure 2 Photos 1 & 2 - Cassiterite in drill core from hole KHHDD002





Figure 3 Hippo Hill drill section

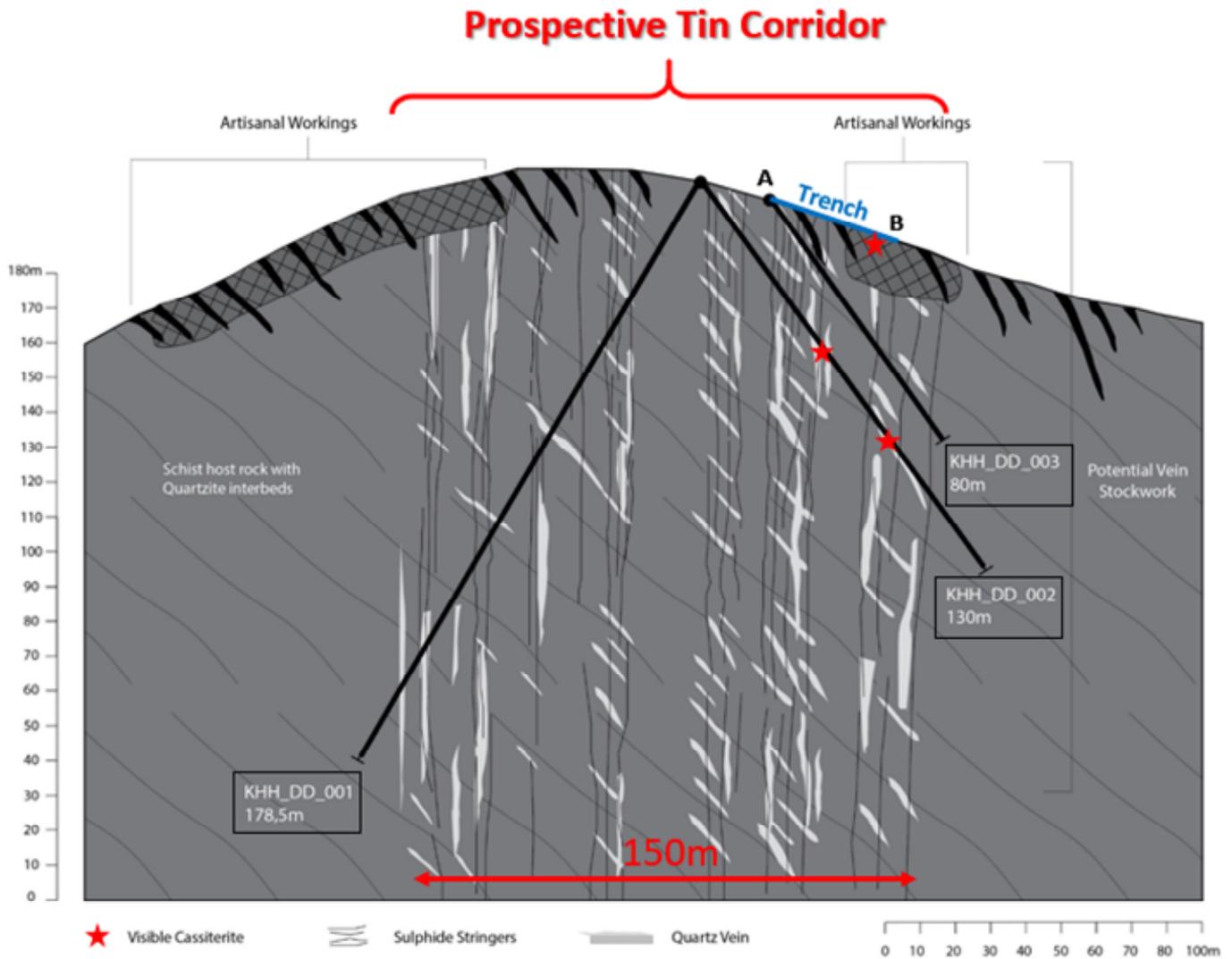


Figure 4 Photos 3 & 4 - Cassiterite in trench from Hippo Hill

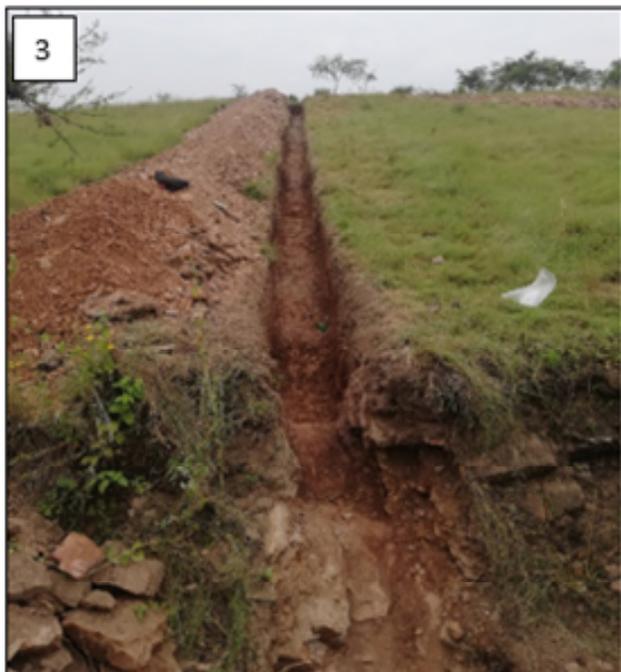




Figure 5 Hippo Hill artisanal areas and soil sampling programme (orange dots )

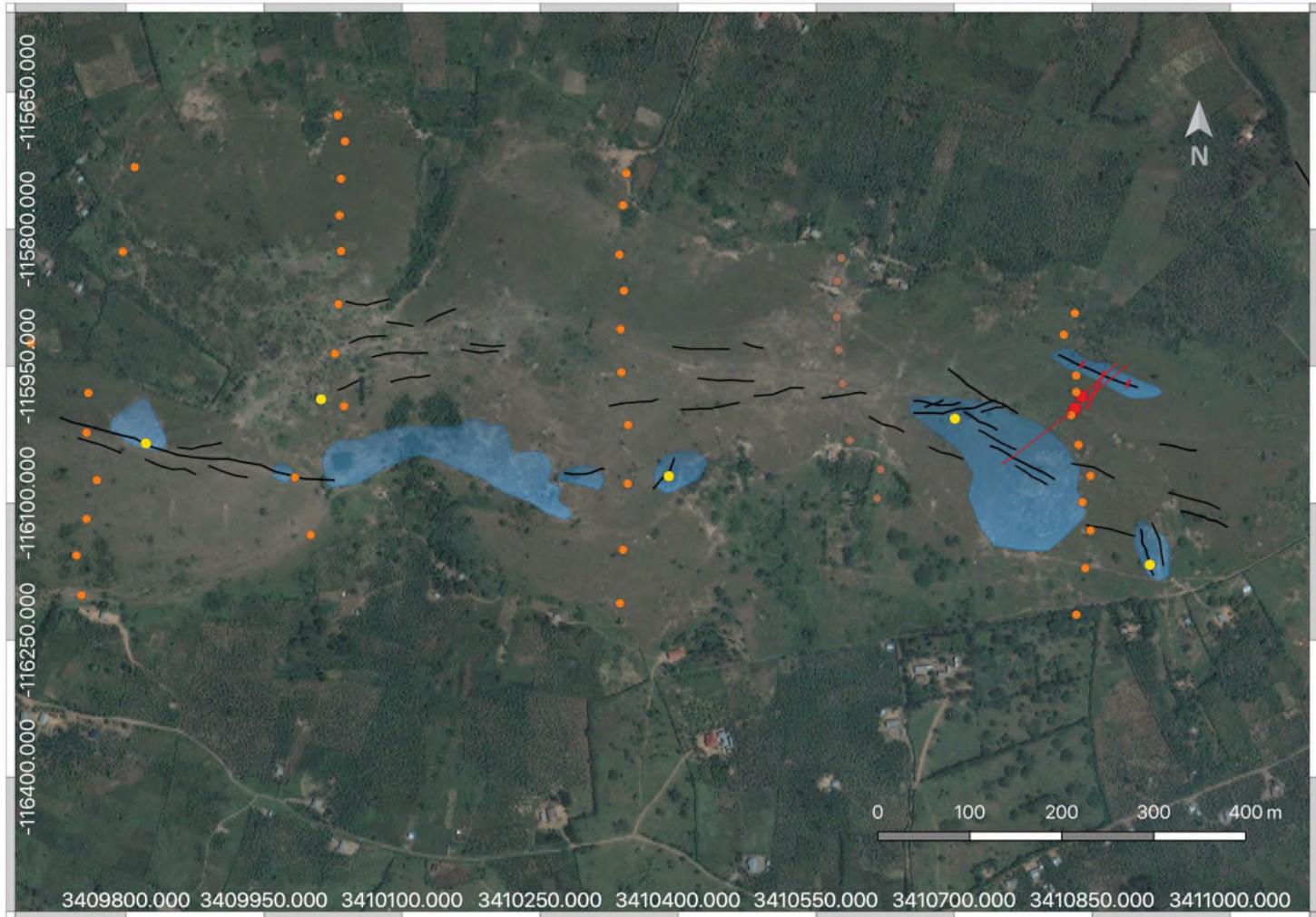


Table 1 Drill hole locations

HOLE	DEPTH FROM	DEPTH TO	COLLAR (Arc1960 / UTM 36S)		RL	AZIMUTH	INCLINATION	LENGTH
			EASTING	NORTHING				
KHHDD001	0	178.5	237360	9884731	1329	210	60	178.5
KHHDD002	0	130	237362	9884735	1329	40	-55	130
KHHDD003	0	80	237369	9884748	1329	40	-55	80

Table 2 Trench locations

TRENCH	DEPTH FROM	DEPTH TO	COLLAR (Arc1960 / UTM 36S)		RL	AZIMUTH	INCLINATION	LENGTH
			EASTING	NORTHING				
HHT001	0	43	237374	9884734	1329	40	-10	43
HHT002	0	5	237403	9884762	1318	40	-5	5
HHT003	0	3	237637	9884778	1318	40	-5	4

**For further information contact:**

**Ron Gajewski**

**Chairman**

**P: +61 8 9380 9098**

**Andrew Beckwith**

**Director**

**Competent Persons Statement**

*The information in this report that relates to Exploration Results is based on, and fairly represents information and supporting documentation prepared by Mr. Andy Beckwith, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr. Beckwith is a director of Carnavale Resources Limited. Mr. Beckwith has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr. Beckwith consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

**Forward Looking Statements**

*Statements regarding Carnavale's plans with respect to the mineral properties, resource reviews, programmes, economic studies and future development are forward-looking statements. There can be no assurance that Carnavale's plans for development of its mineral properties will proceed any time in the future. There can also be no assurance that Carnavale will be able to confirm the presence of additional mineral resources/reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Carnavale's mineral properties.*

**Information relating to Previous Disclosure**

*Information relating to Exploration Results associated with previous disclosures relating to the Kikagati Project in this announcement has been extracted from the following ASX announcements:*

*"High grade tin confirms large scale potential (Tier 1) at Kikagati Project, Uganda" 23 May 2019*

*"Multiple visible cassiterite occurrences in drilling at the Kikagati Tin Project, Uganda", 13 March 2019*

*"Extension to Option term for Kikagati Project , Uganda" 24 December 2019*

*"Cassiterite (tin mineral) observed in diamond drilling, Kikagati Project, Uganda", 27 November 2018*

*"Carnavale advances Kikagati Tin Project, Uganda", 30 August 2018*

*"Carnavale to acquire large-scale Tin Project, Uganda", 24 April 2018*

*The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. 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 announcements.*

**Table JORC Code, 2012 Edition**

**Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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 down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond core sampling to be completed and samples submitted to the independent laboratory.</li> <li>• All drilling and sampling undertaken in an industry standard manner.</li> <li>• All core is geologically logged and photographed, HQ drill core is cut in half, with one half sent to the laboratory for assay and the other half retained on site.</li> <li>• Holes are sampled over potentially mineralised intervals on a nominal 1m basis and down to 0.1m geological boundaries.</li> <li>• Samples are sent to an independent laboratory with the entire sample pulverised and a sub-sample analysed.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The diamond drill holes comprised HQ sized core.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core recovery is measured for each drilling run by the driller and then checked by the Company geological team during the mark up and logging process.</li> <li>• Samples have been marked out and are considered representative with generally 95-100% recovery.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The entire holes were geologically and geotechnically logged and photographed by consultant geologists, with systematic sampling to be undertaken on the prospective parts of the stratigraphy based on rock type and alteration observed.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling of the holes is underway and once complete will be despatched to the laboratory.</li> <li>• Drill core is collected from the diamond drill rig, logged and photographed, drill core is then cut in half using a core saw, with one half sent to the laboratory for assay and the other half retained on site.</li> <li>• Holes are sampled over mineralised intervals to geological boundaries down to 0.1m and on a nominal 1m basis where applicable.</li> <li>• Industry prepared independent certified Sn standards are inserted approximately 1 in 20 samples.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The samples are to be submitted to a commercial independent laboratory in Vancouver for XRF analysis.</li> <li>• The techniques are considered quantitative in nature.</li> <li>• As discussed previously certified reference standards have been inserted by the Company and the laboratory also carries out internal standards within individual batches.</li> <li>• The sampling and analytical techniques are considered normal industry practice and suitable for resource estimation.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample results will be merged by the company's database consultants.</li> <li>• Results will be uploaded into the company database, checked and verified.</li> <li>• Standards are checked and validated against the certified preferred value.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole collar locations are located by handheld GPS to an accuracy of +/-5m.</li> <li>• Locations are given in UTM 36S.</li> <li>• Diagrams and location table are provided in the report.</li> <li>• Topographic control is by a 30m resolution DTM.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling is across the strike of the mineralised zone.</li> <li>• All holes are monitored in regard to location, dip and downhole azimuth, then geologically logged in detail and provide a strong basis for geological control and continuity of mineralisation.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>applied.</i>	
<b>Orientation of data in relation to geological structure</b>	<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 recent drilling undertaken by CAV is the first in the prospect area and the orientation of mineralisation is currently unknown. Mapping in the vicinity indicated the drilling is perpendicular to the surface veining and mineralisation.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are collected by on site company personnel/contractors and delivered direct to the laboratory via a transport contractor.</li> </ul>
<b>Audits or reviews</b>	<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 have been completed. Review of QAQC data is carried out by database consultants and company geologists.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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 license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Hippo Hill drilling is on EL1380 which are in the Isingiro District in South-West Uganda.</li> <li>The licences are 100% owned by African Panther Resources (U) Limited (APRU)</li> <li>Carnavale has earned the right to 51% of the project by drilling 2,000m of diamond core, with the continuing right to earn up to 70% by sole funding to completion of a Bankable Feasibility Study.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>APRU have completed several pitting programmes to test the colluvial gravels at the nearby Kikagati Hill .</li> <li>No known hard-rock drilling has been undertaken on any of the licences prior to Carnavale involvement.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>At the Hippo Hill Prospect, the geology is composed of a mica schist with thin interbeds of quartzite. The sequence has been folded regionally and is north dipping at the drill target. Mineralisation targeted is within a subvertical stockwork of quartz veins and associated alteration. The target alteration zone is estimated to be 150m wide and potential to extend for 1.5km.</li> </ul>
<b>Drill hole Information</b>	<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> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Drill hole location and directional information is provided in the attached report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• down hole length and interception depth 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>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Sample results remain pending</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<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 (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling may not be perpendicular to the dip of mineralisation and true widths will be assessed when results are received and assessed.</li> </ul>
<b>Diagrams</b>	<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>• Representative plans and sections are provided in this report.</li> </ul>
<b>Balanced reporting</b>	<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>• The report is considered balanced and provided in context.</li> <li>• Further drilling, mapping, sampling and other exploration activities will be required to fully understand the deposit in greater detail.</li> </ul>
<b>Other substantive exploration data</b>	<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>• No meaningful previous or recent work is known to have been completed on the prospect area.</li> <li>• Artisanal workings are estimated to be approximately 30m depth and occur sporadically along the 1.5km strike length.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>• The Company plans to finalise the next phase of exploration activities once results from the current drilling, trench and soil samples assays are received.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>If assay results are positive then additional drilling and trenching are expected as follow-up programmes, subject to funding.</li> </ul>