



## Strong off-hole EM conductors identified down-plunge of semi-massive sulphides at Akelikongo nickel-copper discovery

*Plus, high-resolution ground magnetic survey significantly expands footprint of prospective ultramafic host intrusion, providing compelling follow-up drilling opportunities*

### Highlights

- **Strong off-hole conductors (up to 10,000 siemens) identified** by recent down-hole electromagnetic (DHEM) surveys down-plunge of the semi-massive intersections reported in December 2016.
- **The conductors correlate well with the semi-massive sulphide intersections** in AKD017 and AKCD006, which returned intercepts of up to **7m at 1.04% Ni and 0.35% Cu** in AKCD006 and are consistent with the interpretation that the system is strengthening down-plunge (ASX: 1 Dec 2016).
- **The new conductors represent follow-up drill targets** for the second quarter of 2017, to be followed up after the next phase of drilling has been completed at the Paterson copper-gold project in Western Australia.
- **The prospective footprint of the Akelikongo nickel-copper prospect has been significantly expanded** by the results of a high-resolution ground magnetic survey and infill soil samples collected over the prospect and the surrounding district indicating the potential for a significantly increased strike length of prospective ultramafic rocks.

Sipa Resources Limited (ASX: **SRI**) is pleased to advise that it has identified compelling new drill targets at its **Akelikongo nickel-copper sulphide project** in Northern Uganda after receiving the results of down-hole EM surveys and a recent ground magnetic survey at the emerging discovery.

The Company is currently processing the data from recently completed DHEM surveys, with early results identifying strong (up to 10,000 siemens) conductors located down-plunge from two semi-massive sulphide intercepts reported towards the end of last year.

The position of the conductors correlate well with these intercepts and support Sipas geological model for Akelikongo as an emerging magmatic nickel-copper discovery which plunges gently to the north-west and strengthens with depth.

“The results of the down-hole EM surveys completed earlier this month represent a strong endorsement for our exploration strategy at Akelikongo, particularly when combined with the high-resolution magnetics – which further reinforce the expanding scope and potential of the discovery,” said Sipas Managing Director, Lynda Burnett.

“From the drilling completed last year, we now have a clearer understanding of the geometry and controls of the mineralisation. The strong conductors identified by the down-hole survey correlate extremely well with this interpretation and with the semi-massive sulphide zones intersected late last year.”

“All of this provides strong support for these EM conductors as priority follow-up drilling targets for the Company. The recent high-resolution ground magnetic survey also suggests that the extent of the



ultramafic and mafic intrusions may be significantly larger than previously thought. This increases the scope of the exploration opportunity at Akelikongo.”

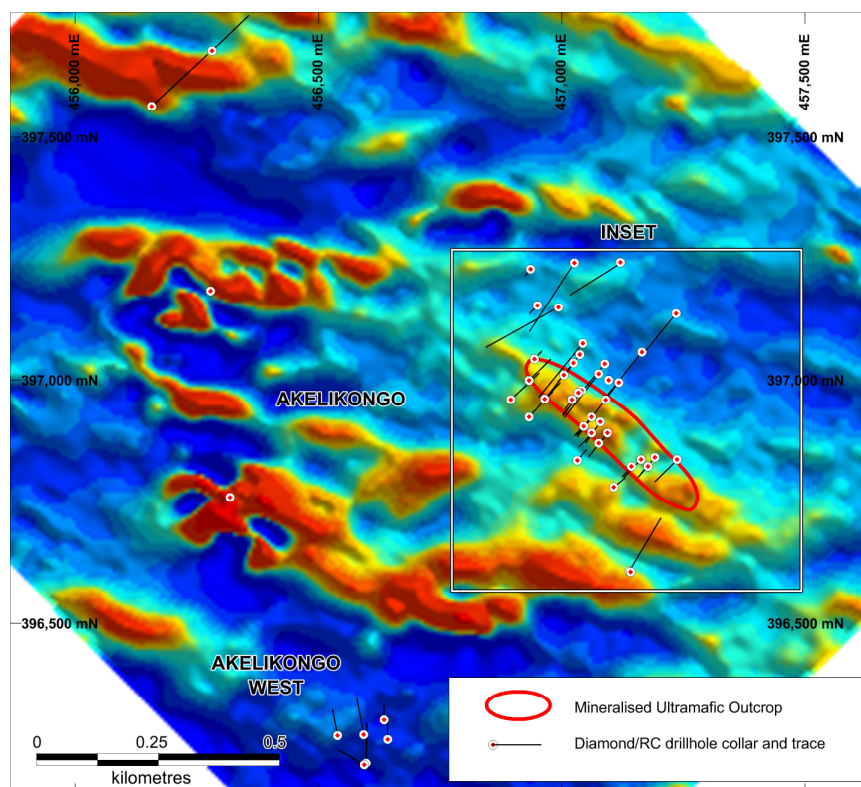
“We are very excited by these latest results and we are looking forward to the next phase of drilling – which is planned for the second quarter of this year.”

### **Akelikongo Results – Detailed Discussion**

Akelikongo is Sipa’s flagship discovery in Uganda. During 2015 and 2016, geochemistry, drilling and geophysics defined a sizeable body of nickel-copper sulphide mineralisation **which has strong similarities to other globally significant, intrusive-related magmatic nickel copper sulphide systems** such as Nova-Bollinger (14Mt @ 2.3% Ni and 0.9% Cu), Voisey’s Bay (141Mt @ 1.6% Ni and 0.8% Cu) and Raglan (30Mt @ 3.4% Ni and 0.9% Cu).

The key elements of these systems are a plunging magma channel or conduit with a high magma fluid flux which then interacts with the country rock during emplacement to form a mixing zone, which triggers sulphur saturation and the formation of nickel-copper sulphide mineralisation.

At Akelikongo, the conduit essentially sub-crops with an intense nickel and copper anomaly in residual soil. The infill soil samples have now confirmed the circular pipe like geometry of the shallowly plunging intrusive complex. This anomaly has a surface footprint of about 300m by 300m which has been traced by drilling for up to 1km and remains open in all directions.



*Figure 1 – Regional ground magnetics reduced to the pole and diamond and RC drill-hole locations, showing potentially more prospective ultramafic intrusive geology, to the west of the main area of drilling.*

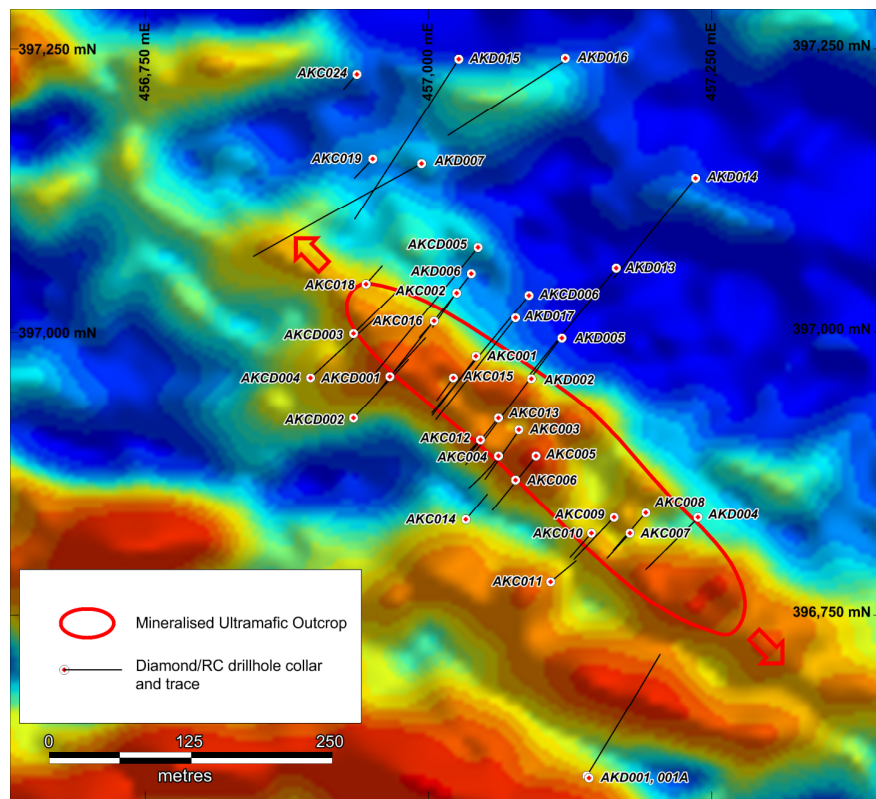


Figure 2– Local ground magnetics reduced to the pole and drill-hole locations (inset)

Figures 1 and 2 shows drilling and the reduced to the pole ground magnetics with the outcropping part of the mineralised ultramafics outlined in red.

The best intercepts to date include:

- Semi-massive zones of up to **7m @ 1.04% Ni and 0.35% Cu** from AKCD006 and **5.2m @ 0.98% Ni and 0.41% Cu** in AKD017 Figure 3 (ASX Release 1 December 2016); and
- Disseminated zones of up to **113m @ 0.36% Ni and 0.11% Cu** in AKC003 from 2m below surface (ASX Release 2 June 2016).

Nickel tenor (% Ni in 100% massive sulphide) in the massive zones averages 5-6% and ranges up to 15% in disseminated zones.

The recent down-hole EM survey has produced significant results. Modelling shows the presence of substantial off-hole conductors (of up to 10,000 siemens conductance) related to the down-plunge extension of the semi-massive sulphide intercepts of AKD017 and AKCD006 reported in December 2016 amongst a number of other conductors Figure 3 and 4.

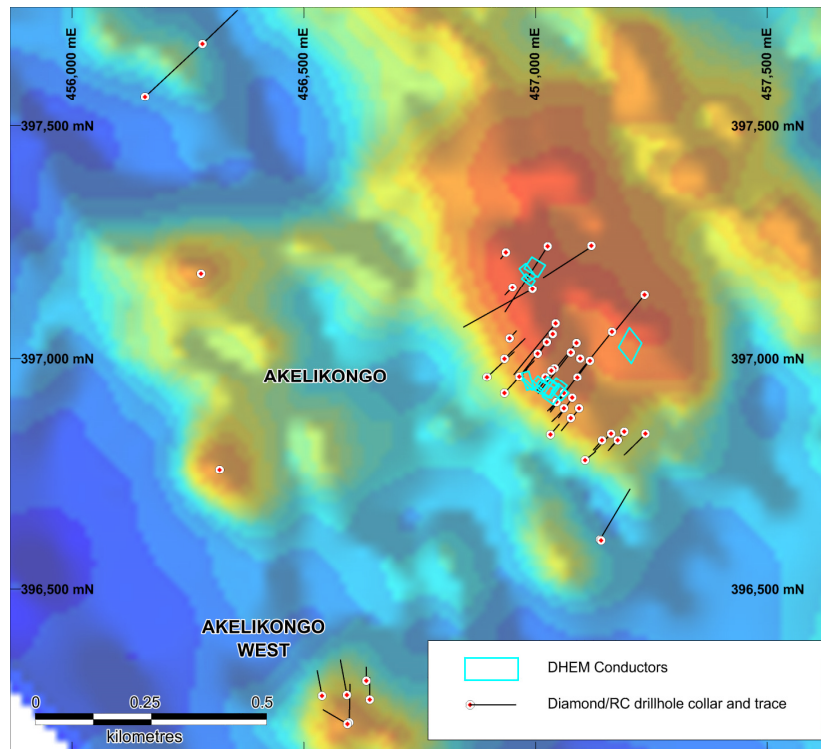
This data combined with previous surveys confirm that a number of moderate-to-high conductance (up to 10,000 siemens) plate models are aligned along a northwest-southeast trend correlating with the magnetic and gravity models.

The ground magnetic data shows the ultramafic peridotite hosting the nickel-copper sulphide mineralisation may extend to the north-west and to the south-west of where it has been intersected to date.

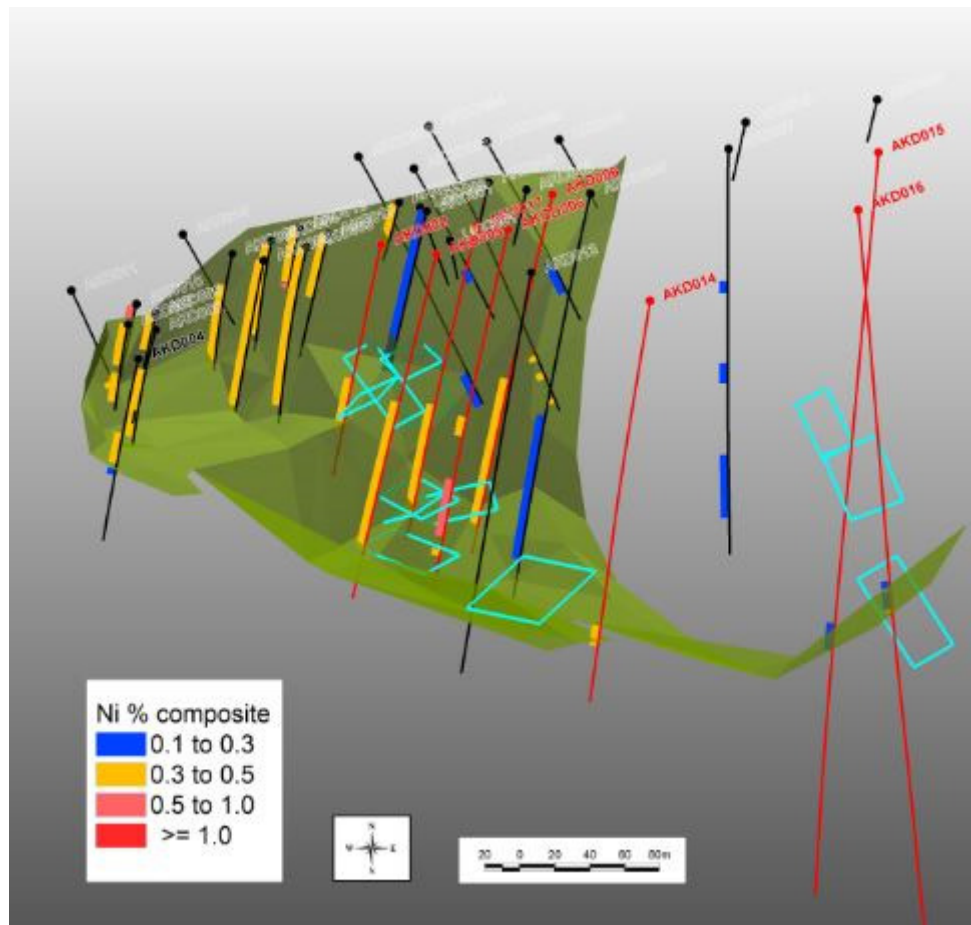


Importantly, the magnetic data shows that there are similar and, in some cases, more intense magnetic anomalies to the west and north-west of the Akelikongo system which may represent more mafic and ultramafic prospective geology.

Physical property measurements of the drill core (conductivity, magnetic susceptibility and density) are currently being completed and these data will be used to improve the modelling and understanding of the project.



*Figure 3 Plan showing the DHEM Plates on gravity image. (Note: not all holes have been surveyed.)*



*Figure 4 Long section showing DHEM plates, note only red holes were surveyed (due to issues with blockages)*

25m by 25m infill soil sampling over the Akelikongo main gravity anomaly shows a very strong correlation between the main Akelikongo gravity high with nickel and chrome indicating the intrusive complex comes to surface further to the east and south than previously recognized with the rounded shape representing the surface expression of the pipe. Figure 5 shows the gravity data and the infill soils superimposed on this image. The soils confirm the pipe like nature of the shallowly plunging intrusive complex.

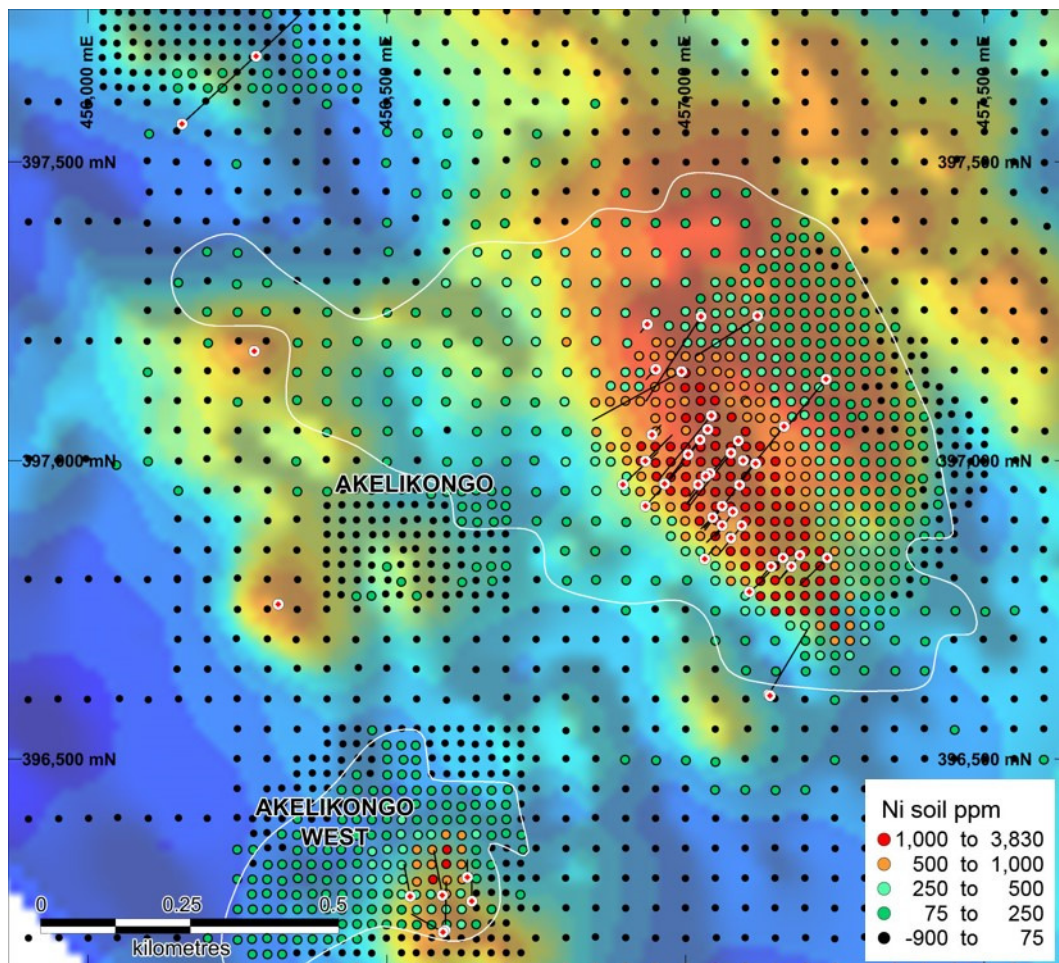


Figure 4 Residual Gravity with infill soil data points coloured by pXRF nickel content in ppm. Note strong correlation with central gravity high. The slight offset to the south also confirms the north west plunge of the intrusive complex or pipe

## Forward Program

The additional geophysical survey data, infill soils and petrophysical measurements collected will now be incorporated into the geological model in order to assist the definition of the next phase of drilling which will test the extent of the semi-to-massive sulphides at Akelikongo and surrounds.

This drilling is planned to commence in the June Quarter once drilling at the Paterson North Copper-Gold Project in Western Australia has been completed.

## About Sipa

Sipa Resources Limited (ASX: SRI) is an Australian-based exploration company which is targeting the discovery of significant new gold-copper and base metal deposits in established and emerging mineral provinces with world-class potential.

In Northern Uganda, the 100%-owned Kitgum-Pader Base Metals Project contains two new mineral discoveries, Akelikongo nickel-copper and Pamwa lead-zinc-silver, both made by Sipa during 2014 and 2015.



The intrusive-hosted nickel-copper sulphide mineralisation at Akelikongo is one of the most significant recent nickel sulphide discoveries globally.

At Akelikongo, Sipa has delineated intrusive-hosted chonolith style nickel-copper sulphide mineralisation which is outcropping and plunges shallowly to the north-west for a distance of at least 500m and open to the northwest. More recently, in December 2016 strong zones of up to 7m of semi-massive sulphide interpreted to dip shallowly to the northwest were intersected with strong off-hole conductors associated with them. These intercepts occur beneath large thicknesses over 100m of disseminated nickel and copper sulphide.

In Australia, Sipa has a Farm-in and Joint Venture Agreement with Ming Gold at the Paterson North Project in the Paterson Province of North West Western Australia, where extensive primary copper anomalism was intersected at the Obelisk prospect in primary bedrock north of Rio/Antipa's Magnum Citadel Project.

The Company's maiden drill program in August 2016 successfully delineated a major gold-copper mineral system over a 4km strike length at the Obelisk prospect, within the Great Sandy Tenement. The drilling confirmed that the anomaly is continuously developed over the entire strike length, including a 1.5km long zone where strongly anomalous copper and gold results were returned. This represents an outstanding target for follow-up exploration.

Of the 45 holes, **26 returned strongly anomalous copper values of >250ppm and gold values of >20ppb**. The strongest results of >1000ppm or 0.1% Cu returned over more than 1.5km with gold values up to 1.26g/t. Summary assays from the August program (ASX Release 5 September 2016) included:

- **4m at 0.42g/t Au from 85m in PNA007; and**
- **8m at 0.28g/t Au, 0.44g/t Ag, 0.11% Cu 36ppm Mo and 141ppm W, from 86m including 1m at 1.26g/t Au from 89m in PNA014**

The Paterson Province is a globally recognized, strongly endowed and highly prospective mineral belt for gold and copper including the plus world-class Telfer deposits, Antipa Minerals' Magnum and Calibre gold and copper deposits, the Nifty copper and Kintyre uranium deposits and the O'Callaghans skarn hosted tungsten deposit.

*The information in this report that relates to Exploration Results was previously reported in the ASX announcement dated 1 December 2016, 5 September 2016 and 2 June 2016. The Company is not aware of any new information or data that materially affects the information included in that relevant market announcement.*

**For more information:**

Lynda Burnett  
Managing Director  
Sipa Resources Limited  
+61 (0) 8 9388 1551  
[info@sipa.com.au](mailto:info@sipa.com.au)

**Media Inquiries:**

Nicholas Read  
Read Corporate  
+61 (0) 8 9388 1474  
[nicholas@readcorporate.com.au](mailto:nicholas@readcorporate.com.au)



## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

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

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>• See Sub sampling techniques (for drilling)</li><li>• Soil samples are taken initially at 1km line and 100m sample spacing. Infill soil sampling to 200m line and 50m sample spacing and where appropriate down to 25m by 25m. The samples are taken from about 30cm depth and sieved with a 250# sieve. Soil Sample size is around 150g. If samples are wet or unsieved, the samples are brought back to camp, dried, then crushed and sieved to -250um.</li><li>• The sample is then placed in a small cup with a mylar film on the bottom and analysed by XRF</li><li>• One in eight soils were sent for laboratory analysis as a check.</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>	
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>•</li></ul>



Criteria	JORC Code explanation	Commentary
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>•</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>	



Criteria	JORC Code explanation	Commentary
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>• For soils and field analysis of RC and aircore samples, an Olympus Innov-X Delta Premium portable XRF analyzer was used with a Rhenium anode in soil and mines mode at a tube voltage of 40kV and a tube power of 200µA. The resolution is around 156eV @ 40000cps. The detector area is 30mm2 SDD2. A power source of Lithium ion batteries is used. The element range is from P (Z15 to U (Z92). A cycle time of 180 seconds Soil Mode was used and beam times were 60 seconds.</li><li>• Selected high samples were analysed in Mineplus Mode. A propylene3 window was used. Standards are used regularly to calibrate the instrument.</li><li>• For the samples selected for laboratory analysis multielement assaying is done via a commercial laboratory using a four Acid digest as a total technique with and ICP-AES finish. For selected samples additional assaying for Au Pt and Pd is by and 30g Fire Assay with ICP finish</li><li>• Lab Standards were analysed every 30 samples</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>• The soil data is reviewed by the independent consultant Nigel Brand, Geochemical Services, West Perth The data is audited and verified and then stored in a SQL relational data base.</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>• Drill holes and soil and rock points have been located via hand held GPS.</li></ul>



Criteria	JORC Code explanation	Commentary
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>• No Mineral Resource or Ore Reserve Estimation has been calculated</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>•</li></ul>
Sample security	<ul style="list-style-type: none"><li>• The measures taken to ensure sample security.</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>•</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 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 results reported in this Announcement are on granted Exploration Licences held by Sipa Exploration Uganda Limited, a 100% beneficially owned subsidiary of Sipa Resources Limited.</li><li>• At this time the tenements are believed to be in good standing. There are no known impediments to obtain a license to operate, other than those set out by statutory requirements which have not yet been applied for.</li></ul>



Criteria	JORC Code explanation	Commentary
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 previous mineral exploration activity has been conducted prior to Sipa.</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>The Kitgum-Pader Project covers reworked, high grade metamorphic, Archaean and Proterozoic supracrustal rocks heavily overprinted by the Panafrican Neoproterozoic event of between 600 and 700Ma. The tectonostratigraphy includes felsic ortho- and para-gneisses and mafic and ultramafic amphibolites and granulites and is situated on the northeastern margin of the Congo Craton. The geology and tectonic setting is prospective for magmatic Ni, Broken Hill type base metal and orogenic Au deposits</li></ul>
Drillhole 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>Reported in Text</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</li></ul>	<ul style="list-style-type: none"><li></li></ul>



Criteria	JORC Code explanation	Commentary
	aggregations should be shown in detail. <ul style="list-style-type: none"><li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</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>•</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>•</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>•</li></ul>



Criteria	JORC Code explanation	Commentary
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>	<p><b>Ground magnetics survey</b></p> <p>Line Spacing: 50m</p> <p>Stn Spacing: 1m</p> <p>Magnetometer.: Overhauser GSM-19 with integrated GPS.</p> <p><b>Down Hole Electromagnetics</b></p> <p>Loop :400m</p> <p>Loop Current :Typically 30 Amps.</p> <p>Transmitter TerraTEM TX50</p> <p>Receiver SmartEM</p> <p>Sensor DigiAtlantis 3Component</p> <p>Reading interval 10m and 5m through anomalies.</p> <p>Frequency: 0.5Hz</p> <ul style="list-style-type: none"><li></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>As reported in the text</li></ul>