

# Potential for large-scale nickel sulphide province confirmed at Akelikongo

Recently commenced AMT survey proving to be successful in modelling down-plunge extensions to the north-west

#### **HIGHLIGHTS**

- Initial processing of data from the Audio Magneto Telluric (AMT) survey at Akelikongo has demonstrated its effectiveness and that it will assist in targeting mineralisation down plunge and elsewhere.
- Potential for additional nickel and copper mineralised intrusions similar to Akelikongo is confirmed by recently completed litho-geochemistry with results confirming that these rocks contain base metal, trace element and rare earth element content and characteristics which are genetically related to Akelikongo suite intrusions.
- The broader project area has now been confirmed as having the potential for multiple nickel sulphide discoveries, providing a strong pipeline of exploration opportunities.
- Sipa is currently formulating the next phase of exploration at Akelikongo, which may including drilling to test down-plunge extensions of Akelikongo and other regional ultramafic targets, in parallel with upcoming work at its Paterson North Project in WA.

Sipa Resources Limited (ASX: SRI) is pleased to report on its current activities on its 100%-owned **Akelikongo Nickel-Copper Sulphide Project** in northern Uganda (Figure 1a) including a successful AMT survey at Akelikongo and lithogeochemistry and mapping of other emerging prospect areas Figure 1b





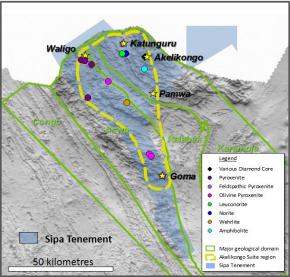


Figure 1b. Detailed tenement holding with interpreted Akelikongo "suite" occurrences noted with some known prospects noted.

The project is continuing to develop as a potential district-scale exploration opportunity with the potential for multiple intrusive-related nickel-copper systems.



#### Geophysics Survey (Audio magneto tellurics)

#### Akelikongo Geophysics Target

Akelikongo and Akelikongo West are conduit style intrusions that host well developed, continuous disseminated sulphide mineralisation within the central part, and lenticular to elongate bodies of semi-massive and massive sulphide adjacent to the intrusion margins and internal contacts. This indicates a dynamic, possibly long lived intrusion history, including multiple intrusive pulses of mafic to ultramafic magmas. Figure 2 is a 3D model of Akelikongo showing the previously drilled disseminated mineralisation in red and the more massive mineralisation in yellow.

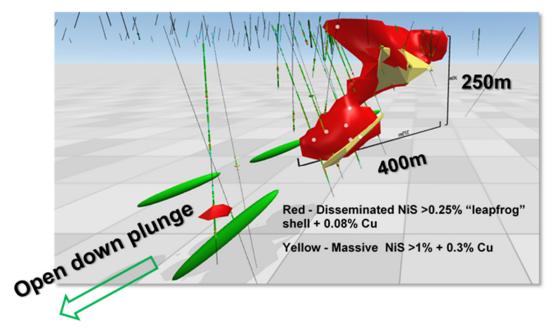


Figure 2 – Leapfrog model of Akelikongo nickel-copper sulphide mineralisation, looking south-east.

Sipa completed a natural source AMT (Audio Magneto Tellurics) survey in early February 2018 over the Akelikongo and Akelikongo West intrusions. The principle aim of the survey was to determine if the method could be used to establish if conductive semi-massive to massive sulphides within the ultramafic host can be mapped at the base and margins of the resistive Akelikongo intrusive complex.

This technique has been shown to be highly effective in delineating similar mineralised intrusions including the Jacomynspan nickel deposit in South Africa, where AMT detected the intrusion down to 1km below the surface.

The AMT survey was completed at a station interval of 50m on six lines (Figure 3), covering the Akelikongo and Akelikongo west deposits and potential extensions.

All lines of AMT data have been modelled, creating resistivity depth sections across the intrusive complex. Figure 4 shows the relationship of the modelled resistivity depth section for line 2 to mineralisation and the Akelikongo intrusive complex.

The results are promising and have confirmed that AMT is likely to be a useful exploration tool, particularly in targeting depth extents of the intrusions. Additional processing and interpretation work is currently underway.

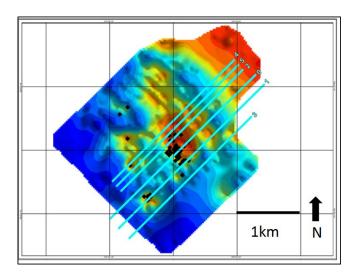


Figure 3 Plan of location of AMT lines over Akelikongo prospect gravity and drill hole plan.

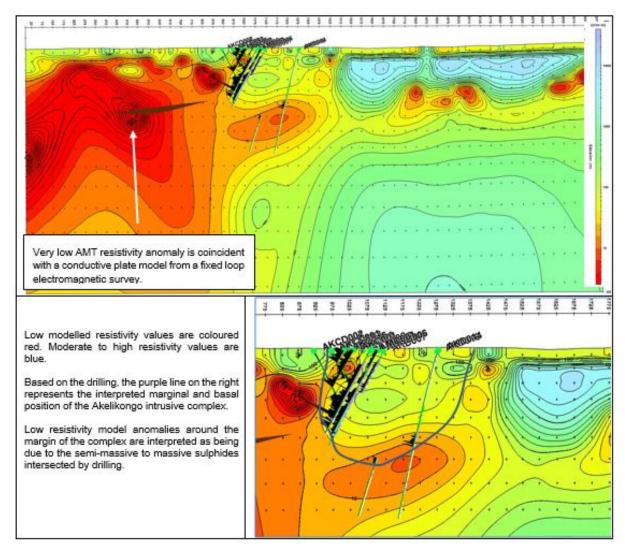


Figure 4: Line 2, AMT 2D resistivity depth model. Intersections of significant Nickel sulphides are plotted on the hole traces as black histograms. Mineralized ultramafic units are coloured purple on hole traces.



In addition to the AMT results, the Company has received highly encouraging whole rock lithogeochemistry results from regional sampling conducted late last year which have confirmed the potential to discover multiple Akelikongo-style nickel-copper systems on its tenements.

As previously advised, more than 10 potential additional Akelikongo "suite" intrusions had previously been identified as a result of soil sampling and recent field mapping. The intrusions are located in a north-north west-trending zone extending over an area of some 80km by 30km, from the Goma intrusion and associated geochemical anomaly in the south to the northern boundary of the tenements (Figure 1b).

The litho-geochemistry results show that these rocks have similar base metals, rare earth elements, trace elements and platinum group element content and characteristics and the intrusions are therefore related. Field observations identified some very important features which are critical in determining that Sipa's land package is prospective for multiple mineralised intrusions:

- Intrusion margins are chilled against the country rock, a strong indicator that the intrusions were emplaced into already-deformed country rock. In addition, the observation that intrusions also host intact or partially disaggregated xenoliths of deformed country rock, provides definitive confirmation that the intrusions post-date the deformation event. Therefore the entire land package, not just the eastern domain, is considered to be prospective (Figure 1b); and
- 2) Further, contact metamorphism in surrounding rocks to the intrusions show recrystallization and large crystal growth, indicating high heat flow over an extended period of time. This is important as long-lived dynamic intrusion conduits are a key component to large sulphide-rich magmatic deposits.

One such intrusion that has strong anomalous nickel geochemistry and is outcropping is the Goma intrusion in the south of Sipa's tenement package (Figure 1b). Recent field reconnaissance mapping by the Company's consultant, Richard Hornsey, at the Goma nickel prospect indicates that it is another non-deformed pipe or conduit-style intrusive complex.

The Goma intrusive complex displays many features that are consistent with the ultramafic intrusions at Akelikongo. These include litho-geochemistry, lithology, primary magmatic features, gross morphology and orientation of the intrusion, as well as the presence of contact metamorphosed margins. Figure 5below shows the pXRF soil data used to build a 3D digital terrain model of the surface and constrain the intrusion extent.

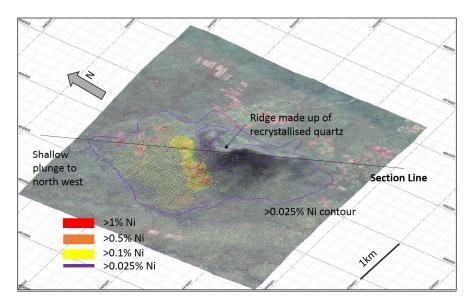


Figure 5: pXRF Ni soil data >0.025% contour at Goma showing extent and footprint of ultramafic intrusion (2x vertical exaggeration).



This is particularly relevant for Goma, as it is a relatively large area of ultramafic outcrop, and also is one of the few areas on the project where there is significant elevation variation. The data was contoured at greater than 250ppm nickel. This defines a reasonably circular intrusion morphology that has a long axis oriented northwest to south-east.

A section line through the hill (Figure 6) was then cut using the intrusion long axis. The south-east side of Goma Hill has very well pronounced terracing, which is typical of sub-cropping layered mafic-ultramafic intrusions. The terracing also very clearly helps define the dip of the body. The upper and lower contacts of the intrusion are very well defined by the geochemical data.

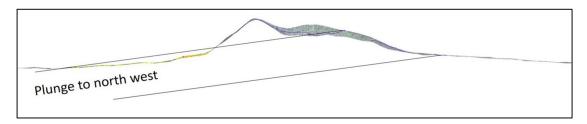


Figure 6: Section through Goma hill (2x vertical exaggeration) showing shallow plunge of ultramafic intrusion interpreted from geology and soil data

The model indicates that the Goma intrusion plunges shallowly at around 6° to azimuth 319°, and is approximately 200m thick. These features will assist with follow-up exploration as the shallow plunge of the intrusion will substantively expand the potential search space for geophysical exploration and make it more accessible to explore by drilling down-plunge.

The location of the strong surface nickel-in-soil anomaly appears to be at the contact between two intrusive phases within the conduit. Further mapping and sampling of this and other close by intrusions is planned as much more information can be acquired prior to any drilling campaign due to the extensive amount of outcrop.

#### Plan forward

The Company is highly encouraged by the new exploration data being generated from Akelikongo and is currently evaluating a number of options to progress the next phase of exploration.

Likely next steps will include further drill testing of the down-plunge extent at Akelikongo and initial reconnaissance diamond drilling at both the Goma and Katunguru intrusions before planning more intensive follow-up drilling.

Further information about the forward pathway at Akelikongo will be provided in due course, along with an update on upcoming exploration activities at the Company's Paterson North copper-gold project in Western Australia.

#### **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, exhibiting strong similarities to major intrusive-hosted nickel orebodies such as Nova, Raglan and Voisey's Bay.



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 north-west. 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 up 113m of disseminated nickel sulphide >0.25% and copper sulphide 0.1%, with intercepts of 84.5m @ 0.37% Ni and 0.16% Cu (AKD017) 38m @ 0.51% Ni and 0.17% Cu (AKCD006) including 7m @ 1.04% Ni, 0.35% Cu 0.05% Co.

In Australia, Sipa has a Farm-in and Joint Venture Agreement with Ming Gold at the Paterson North Copper Gold Project in the Paterson Province of North West Western Australia, where extensive primary copper-gold-silver-molybdenum and tungsten mineralisation was intersected at the Obelisk prospect in primary bedrock. The project is in an intrusion-related geological setting similar to other deposits in the Paterson and those in the Tintina and Tombstone Provinces of Alaska and the Yukon.

The Company's maiden drill program in August 2016 successfully delineated a major copper plus gold, silver, molybdenum and tungsten 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 an 800 by 200m long zone where highly anomalous copper (greater than 500ppm Cu) and gold results up to 1.26g/t Au were returned. This represents an outstanding target for follow-up exploration. Drilling in late 2017 has further defined the strong hydrothermal alteration and importantly the presence of gold up to 22g/t Au and 2% copper in narrow, high-grade veins showing that the system has strong similarities to others in the district.

The Paterson Province is a globally recognized, strongly endowed and highly prospective mineral belt for gold and copper including the plus 25Moz world-class Telfer gold and copper deposits, the 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 is based on, and fairly represents, information and supporting documentation compiled by Ms Lynda Burnett, who is a Member of The Australasian Institute of Mining and Metallurgy. Ms Burnett is a full-time employee of Sipa Resources Limited. Ms Burnett has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she 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'. Ms Burnett consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### For more information:

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

#### **Media Inquiries:**

Nicholas Read Read Corporate +61 (0) 8 9388 1474 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.)

<ul> <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</li> </ul>
a check.



Criteria	JORC Code explanation	Commentary
	logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	
	<ul> <li>The total length and percentage of the relevant intersections logged.</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/secondhalf 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> <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> <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> <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 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> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole 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>	Drill holes and soil and rock points have been located via hand held GPS.



Criteria	JC	DRC Code explanation	Commentary
Data spacing and distribution	•	Data spacing for reporting of Exploration Results.  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.  Whether sample compositing has been applied.	No Mineral Resource or Ore Reserve Estimation has been calculated
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  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.	
Sample security	•	The measures taken to ensure sample security.	
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	



## **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> <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>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>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>No previous mineral exploration activity has been conducted prior to Sipa.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	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 orthoand 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
Drillhole Information	<ul> <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> <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> </ul> </li> </ul>	Reported in Text



Criteria	JORC Code explanation	Commentary
	<ul> <li>dip and azimuth of the hole</li> <li>down hole 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>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>	
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 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>	
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 drill hole collar locations and appropriate sectional views.</li> </ul>	
Balanced reporting	<ul> <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>	

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <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</li> </ul>	Natural source audio magneto telluric survey
		Lines: 200m or 100 spaced (see plan)
		Survey stations along lines 50m
	contaminating substances.	(acquisition report not yet received)
Further work	<ul> <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>	As reported in the text