

# Drilling Intersects Further Nickel Copper Massive Sulphides at Akelikongo

# Kitgum-Pader Project, Uganda Highlights

- Diamond Drilling at Sipa's Akelikongo project has intersected further Nickel and Copper Sulphide mineralisation in hole AKD004, 200m southeast of the previously reported AKD002 (ASX 20 Feb 2015). The mineralisation extends from surface to more than 80m below surface and is open in all directions.
- The sulphide mineralisation is mostly disseminated within an ultramafic pyroxenite, ranging generally from 5 to 10% from the fresh rock interface at 36.5m to 95.5m. From 94.3m to 97.5m a 3.2m wide breccia zone contains intersections of massive and semi-massive sulphide (Figure 1).
- The initial program at Akelikongo is now complete and the drill rig will now commence testing the Pamwa Zn-Pb zone identified in soils and shallow drilling.
- Results continue to infer that a significant deposit of disseminated and massive sulphide is developing at Akelikongo. The awaited assays will determine the grade of these zones.



Figure 1 AKD004 showing brecciated zone below granite dyke at 94.3 to 96.4m



Sipa Resources Limited is pleased to announce drilling progress at its Kitgum Pader base and precious metals project, now 100% owned by Sipa. The drilling is a part of an initial program to test both the Akelikongo Ni-Cu target and the Pamwa Zn-Pb target.

Drilling commenced on the 1st February 2015. To date four diamond holes have been completed at Akelikongo. Figure 2 shows a plan of all the drilling and the modelled EM plates.

				Total	Azimuth	Dip
Hole	Easting	Northing	RL	Depth		
AKD001	457139	396608	967	235.3	022	-60
AKD002	457090	396959	952	177.1	220	-60
AKD003	456281	397677	960	180.9	022	-60
AKD004	457237	396837	972	142.5	220	-60

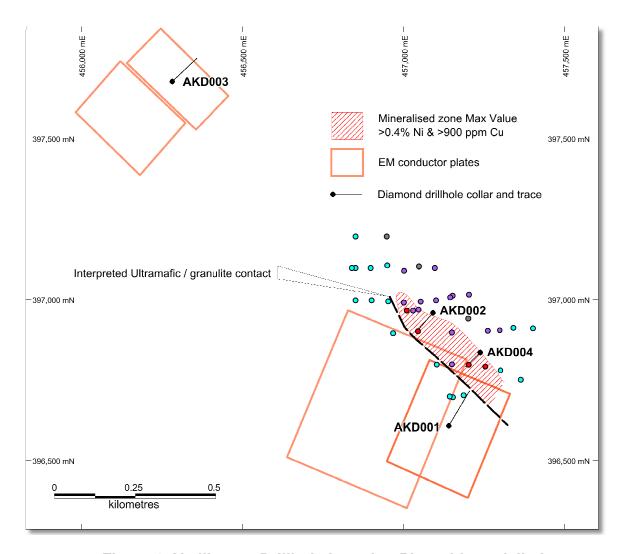


Figure 2 Akelikongo Drillhole Location Plan with modelled EM conductor plates

(Refer Figure 3 for Drill Hole Legend)

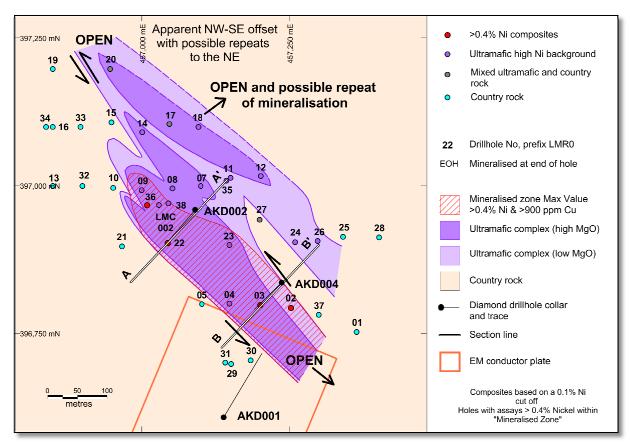


Figure 3 Plan showing drillholes AKD001, AKD002 and AKD004 in relation to known mineralised zone and EM targets.

**AKD003** was drilled to test the strong EM conductor 1.5km to the north of the known Akelikongo mineralised zone (Figure 2). This conductor appears to be related to an extensive intersection of up to 5-10% disseminated pyrrhotite in a felsic biotite rich granulite gneiss with 1% to 10% disseminated graphite. XRF spots indicate some of the pyrrhotite is anomalous in nickel and visible chalcopyrite was observed. It is interpreted at this stage that the pyrrhotite observed in the hole explains the EM anomaly. Further work needs to be done to understand the relationship of the EM anomalies, the disseminated pyrrhotite and the mafic ultramafic hosted mineralisation.

**AKD004** was drilled underneath RAB hole LMR003 which previously intersected 46m at 0.65% Ni and 0.19% Cu to the end of hole (refer ASX 18 August 2014) (Figure 3). The hole collared in weathered ultramafic and at 36.5m intersected fresh disseminated pyrrhotite, pentlandite and chalcopyrite in pyroxenite with a mineralised gabbroic unit also intersected from 57.3 to 64.1m. Two zones of post mineralisation granite and pegmatite dykes of around 4m width occur between 81.5 and 94.3m.

From 94.3m to 97.5m a 3.2m zone of brecciation with large clasts up to 10cm and veins of massive and semi massive sulphide with pyrrhotite and pentlandite is present. The zone is similar to that intersected in AKD002. The footwall is a similar granulite gneiss to that intercepted in hole AKD001 and 2 with some sulphide mineralisation present. Figure 4 is a section B-B' drawn in the plane of AKD004.



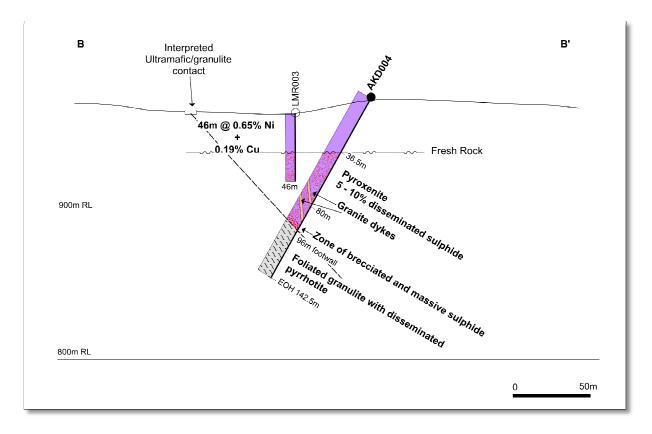


Figure 4 Section in the plane of AKD004 showing interpreted geology.

Assays for all holes are awaited.

### **Forward Program**

The rig will now travel to Pamwa where at least two holes are planned to test the Zn-Pb mineralisation intersected in LMC010 where the last 5m intercept of the 25m deep hole intersected 2% Zn.

Down Hole EM will be conducted immediately upon completion of the initial program.



### **Background**

The Kitgum-Pader Base metals & Gold Project comprises 16 exploration licences, covering 6,490 square kilometres in central northern Uganda, East Africa. The Project was generated following the acquisition in 2011 of relatively new airborne magnetic/radiometric data sets over East Africa, and the subsequent geological/metallogenic interpretation of the data sets.

During field reconnaissance in December 2011, rocks were recognised as being strikingly similar to the host 'Mine Series' sequence at the giant Broken Hill Lead-Zinc-Silver Deposit in NSW, Australia, to the northwest of Kitgum, Uganda. Upon application and subsequent granting of mineral tenements, fieldwork commenced in early 2013. By the end January 2015, over 45,000 soil samples had been collected, along with geological mapping by Nick Archibald. The results of the field work and subsequent drilling of soil targets have led to the discovery of 2 potentially economic mineral systems.

- The Broken Hill-style Lead-Zinc-Silver, at Pamwa; and
- the Intrusive hosted Nickel-Copper sulphide mineralisation at Akelikongo.

**Akelikongo** is one of the standout Ni-Cu-PGE soil anomalies identified to date. The element association and shape of the anomaly led Dr Jon Hronsky to interpret this as a possible "chonolith" being a fertile host for nickel sulphides within a maficultramafic intrusive complex.

At **Akelikongo**, the first pass RAB drilling results confirmed a mineralized Nickel Copper sulphide system, related to an ultramafic intrusive complex. Almost all the RAB intersections are open to the depth of drilling.

The most significant intercepts from composite sampling returned results such as

- LMR002 38m at 0.27% Ni from 0 to EOH including 8m at 0.43% Ni from 30m to EOH
- LMR003 46m at 0.45% Ni and 0.15% Cu from 0 to EOH
- LMR022 55m at 0.52% Ni and 0.15% Cu from 0 to EOH

The recent petrological report by Dick England describes and confirms the ultramafic intrusive host rocks to the mineralisation with the fresh sulphides being confirmed as pyrrhotite and pentlandite which host the nickel and minor chalcopyrite hosting the copper, typical of many intrusive hosted nickel sulphide systems.

All of the above results were previously reported in ASX reports dated 23 June and 18 August 2014.

The **Pamwa** Zn, Pb, Ag & Cd soil anomaly was drilled during July and resulted in the discovery of a Broken Hill Type Zn Pb, Cd, Ag mineralised system.



#### Results included

- LMC010 5m\* @ 2.00% Zn, 0.23% Pb, 97 ppm Cd and 2.4 ppm Ag from 20m
- LMC004 38m\* @ 0.12% Zn, 0.04% Pb, 1.9 ppm Cd from 5m
- LMC014 15m\* @ 0.11% Zn, 0.03% Pb, 2.6 ppm Cd from 10m

These intercepts are located within a wider Zn, Pb, Ag, Cd anomalous zone defined by a 1000ppm Zn contour and an even larger 1000ppm Manganese (Mn) anomalous zone defined as the "geological host sequence".

The host sequence to the mineralisation has a north-northwesterly trend and extends for over a kilometre. The mineralisation occurs in both weathered and fresh quartz-biotite schist extending over 600m with garnet characterised in both footwall and hanging wall sediments. The regional tectonostratigraphy dips moderately to the north east (striking northwest) oblique to the mineralisation indicating the mineralisation is structurally controlled. The recently completed IP data confirms this interpretation.

The laboratory data shows a strong association between Zn-Pb-Cd-Mn a characteristic element suite of Broken Hill style of mineralisation. The sulphides present in LMC010 also show the association with Ag. The drilling conducted so far is very shallow and hence there are limitations with our understanding of the complex geology and element interaction. However, the drilling has clearly indicated that **Pamwa** is a Broken Hill Type Zn-Pb mineralised system.

Major mining houses have scoured the world for decades in an attempt to discover the next Broken Hill Type Deposit. Sipa has demonstrated that such world class deposits could be discovered at **Pamwa** and within the extensive Zn rich **Ayuu Alali** soil horizons defined by soil sampling during 2013. These horizons contain many of the characteristics described as being typically associated with Broken Hill type SEDEX deposits, via local geochemical associations, geological observations, and the broader interpreted tectonostratigraphic setting of a rifted reactivated mobile belt of probable lower to mid Proterozoic age.

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled by Ms Lynda Daley, a who is a Member of The Australasian Institute of Mining and Metallurgy. Ms Daley is a full-time employee of Sipa Resources Limited. Ms Daley 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 Daley consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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<sup>\*</sup> These shallow holes all ended in Zn mineralisation (refer ASX 26 August 2014)



# **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> <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>	No sample results are reported.
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Drill type is diamond. HQ coring from surface then reduced to NQ from fresh rock. Core oriented using Spear for AKD001 and AKD002 and Reflex from AKD003 onwards</li> </ul>
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>Sample recoveries measured using tap measure.</li> <li>Occasional core loss. mostly 100% recovery. Core loss marked on Core blocks</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>Logging has not yet been completed.</li> </ul>



Criteria	JORC Code explanation	Commentary
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>	Sampling has not been completed
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>	No assay data are reported.
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>	No assay data are reported.
Location of data points	<ul> <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>	No assay data are reported.
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>	No Mineral Resource or Ore Reserve Estimation has been calculated
Orientation of data in relation to geological	<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>	To early to comment on. This is an initial drilling program



Criteria	JORC Code explanation	Commentary
structure		
Sample security	The measures taken to ensure sample security.	No sample results are reported.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No sample results are reported.

# **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>Extensive searches for previous exploration have not identified any previous mineral exploration activity.</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 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
Drill hole	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information</li> </ul>	Reported in Text



Criteria	JORC Code explanation	Commentary
Information	for all Material drill holes:	
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>	No assay results are reported.
Relationship between mineralisati on 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>	No assay results are reported.
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>	Reported in Text.
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</li> </ul>	No assay results are reported.



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <li>Exploration Results.</li> <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>	As Reported within the text of the announcement
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