# New Paterson field season ready to kick-off as region attracts strong interest from majors

Sipa gears up for new exploration push utilising two WA Government EIS grants

#### **HIGHLIGHTS**

#### Paterson North Copper-Gold Project – Western Australia

- Additional untested co-incident magnetic and IP targets confirmed by geophysical modelling along strike from the emerging Obelisk copper-gold discovery (ASX 20 October 2017).
- Newly-identified priority EM/magnetic target, Andromeda, being developed for drilling.
  Andromeda has geophysical characteristics comparable with the gold and copper mineralisation at Antipa Minerals' Magnum deposit.
- Sipa's 1,242km² ground holding in the North Paterson Province now surrounded by a large number of new tenement applications by Fortescue Metals Group and Rio Tinto Exploration.
- Sipa's planned exploration programs for the upcoming field season are co-funded by two WA government EIS drilling grants for up to \$300,000.

#### Kitgum Pader Base Metal Project – Uganda

- Shape and plunge of the main intrusion at Akelikongo successfully defined by an AMT survey with a number of untested low-resistivity features interpreted to coincide with sulphide mineralisation. Conclusions from the survey are that the intrusion and mineralisation extend down-plunge to the north-west.
- Further mapping and sampling together with gravity surveying will be used to define and prioritise drill targets.
- The work program aims to further refine the regional potential of the Kitgum Pader tenement package to host numerous intrusive-related nickel sulphide deposits in addition to Akelikongo and Akelikongo West.



# Paterson North Project, Western Australia)

The **Paterson North Copper-Gold Project** is located in the Paterson Province, Western Australia, one of the most highly endowed yet under-explored copper-gold mineral provinces in Australia.

Included in the Company's tenement package is the Great Sandy tenement (E45/3599), which hosts the Obelisk gold-copper (molybdenum, silver, tungsten) discovery, where Sipa can earn up to an 80% interest for expenditure of \$3 million over four years under a Farm-in and JV agreement with privately owned Ming Gold Limited (Ming). The other tenements outside E45/3599 are held 100% by Sipa.

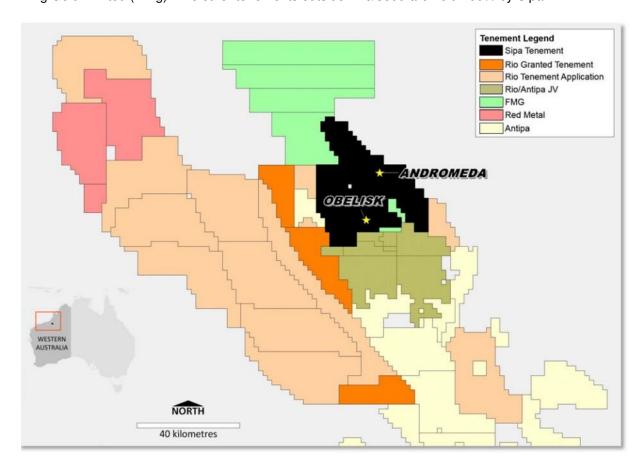


Figure 1: Location of Paterson North Tenement and surrounding tenement-holders.

In response to encouraging new gravity survey data gathered in November, Sipa expanded its land-holding in the Paterson Province, with the addition of ELA 45/5104 increasing its total land-holding to 1,242km² (Figure 1). The expansion of Sipa's land-holding preceded a significant increase in tenure held by Rio Tinto Exploration, to the west and south-west of Sipa's land-holding, and Fortescue Metals Group, immediately to the north-west and internal to Sipa's land-holding.

#### Obelisk Project EL 45/3599 (Sipa 51%, earning up to 80%)

During the quarter, a number of key technical studies were completed on the Obelisk discovery.

These studies included modelling of recent drilling data, petro-physical drill core measurements and geophysical interpretation of the magnetic data combined with down-hole mapping of the sulphide minerals pyrite and pyrrhotite.



The key conclusion from this work is that the extent of magnetic pyrrhotite alteration observed does not adequately explain the magnetic anomaly. Re-modelling of the magnetic data using magnetic susceptibility measurements on the core has defined additional magnetic model bodies of higher magnetic susceptibility which require further drill testing.

Drilling will now target along the north-west strike extension of the combined magnetic/gradient array IP target, immediately north-west of the 2017 drill holes, as shown in Figure 2.

The drilling is planned to commence in mid-to-late May following a heritage survey.

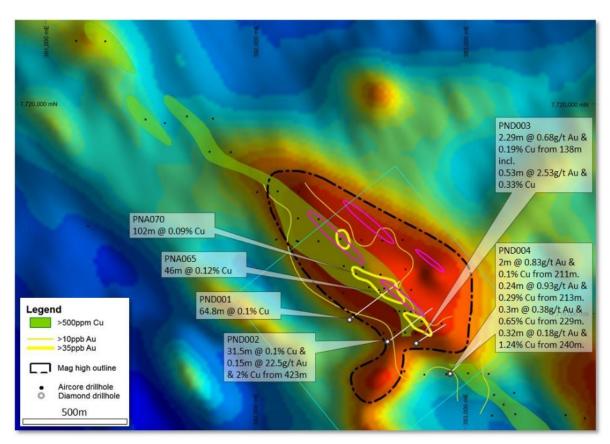


Figure 2: Obelisk magnetics and location of modelled magnetic bodies (pink) extending to the northwest of previously drilled RC and diamond holes.

The new phase of work will build on the encouraging results returned late last year from Sipa's maiden 4-hole/1,604m diamond drilling program over part of the Obelisk discovery.

The assay results were highly encouraging and indicate the presence of a large mineralised system with all holes intersecting zones of intense alteration and quartz, biotite and sulphide veining, including vein-hosted **gold of up to 22g/t Au, copper 2% Cu, and silver 16g/t** over narrow widths and supergene mineralisation **of up to 4.6% Cu and 7.48g/t Ag** (ASX 12 October 2017 and 20 October respectively).

The results demonstrate the potential of the system to host both discrete high-grade, high-value mineralisation within a much larger mineralised system containing continuous widths of copper (~0.1%) in PND001, PND002 and PNA070 over hundreds of metres.

The overprinting higher grade gold and copper results are hosted in quartz-biotite-chlorite-pyrite-pyrrhotite and chalcopyrite veins and fracture zones and indicate a multi-phase mineralising system (Figure 3) (ASX 20 October 2017).

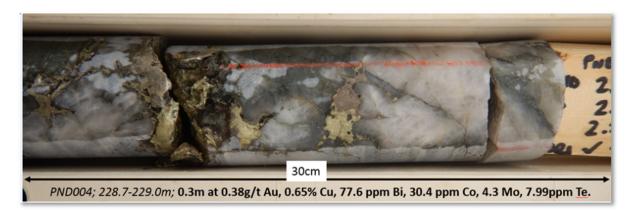


Figure 3: PND004; 228.7-229.0m; Quartz veining with pyrrhotite, pyrite and chalcopyrite

The substantial program of work completed in 2017 has confirmed the prospectivity of the Paterson North Project, which is further supported by the recent pegging by Rio Tinto and FMG. The mineral systems appear to be spatially related to granite intrusions of the same age (around 650Ma) as the gold systems of the Southern Paterson, i.e. Telfer, Thompsons, Minyari, etc. (Venus Metals 2013, Bagas 2013, GSWA).

The evolution of brecciation and brecciated quartz sulphide veining (as seen in Figure 3) is texturally similar to the Calibre copper gold deposit.

#### **Geophysical signatures of North Paterson mineral deposits**

The majority of known mineral systems and deposits in the Paterson Province exhibit consistent geophysical characteristics.

During the quarter, Sipa completed a wide-ranging review and assessment of geological and geophysical datasets over the broader Paterson North area, including public domain data over the nearby Calibre and Magnum deposits owned by Antipa. The aim was to benchmark Sipa's prospects against these deposits to define and rank priority targets for drilling.

The review has confirmed a spatial and probable genetic relationship between mineralisation and interpreted intrusive bodies. Importantly, the alteration and mineralisation defined by Sipa and others is both magnetic and moderately conductive, producing distinctive anomalies in magnetic and EM survey data.

As a result of the review, new targets, including Andromeda, have been identified which will be tested by further geophysics and drilling in the forthcoming field season.

Part of the review consisted of re-processing and interpretation of an extensive airborne EM survey conducted by BHP using GEOTEM in the early 1990s. At the time, BHP identified three priority EM anomalies: Andromeda, Magnum and one located to the east of Magnum.

Andromeda and Magnum were followed up at the time and confirmed with moving-loop EM. At Andromeda, the moderately conductive anomaly extends west to the boundary of the survey (Figure 4a and b).

The Andromeda EM target was not drill tested until 1996, when Croesus Mining NL and Gindalbie Gold in a Joint Venture with BHP attempted to test the EM anomaly with RC hole AKRC001. The hole returned anomalous bedrock copper, nickel and PGEs in an altered hornblende and olivine-bearing mafic intrusive. Given this drill hole did not test the peak of the GEOTEM/moving loop EM anomaly nor the adjacent distinctive magnetic anomaly, the results are encouraging and the target requires further drill testing. (see Figures 4a and 4b).

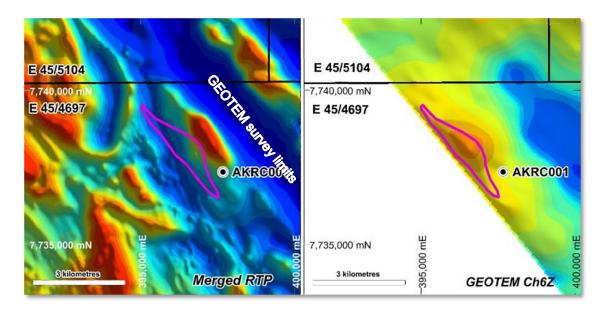


Figure 4a: Magnetics with GEOTEM Figure 4b: GEOTEM EM anomaly and target Target location (purple)

Further west of Andromeda (Figure 5), a domal feature identified in the magnetics will also be the subject of exploration this coming field season.

Several interpreted intrusions based on gravity and magnetics are inferred in this area. The evidence of large-scale folded domal stratigraphy provides potential mineralisation trap sites with magnetic anomalism interpreted due to the presence of alteration and sulphide mineralisation. These features make the area a priority target for follow-up.

A total of 116 soil samples have been sent to ALS for low level ionic leach assaying of gold, copper, and other multi-elements over this area. This technique has been successful in detecting mineralisation in covered terrains elsewhere. The technique combines the best in selective leach technology with the highly sensitive ICP-MS to achieve sub-ppb detection limits for critical elements in mineral exploration.

lonic Leach is suitable for gold, silver, PGMs, uranium and base metal exploration and is particularly useful for the resolution of subtle anomalies over 'blind' mineralisation. Analyses are currently outstanding. The technique, if successful, will further assist with drill targeting.



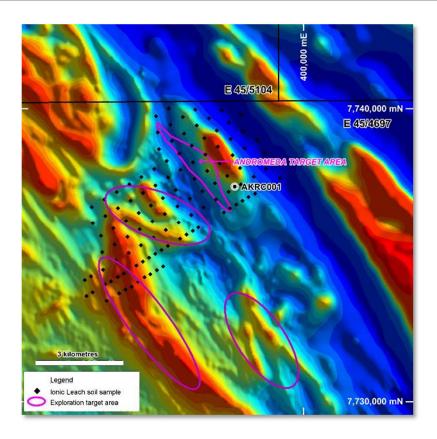


Figure 5: Location of Andromeda target soil samples and drill targets around domal feature.

In late 2017, Sipa secured a WA Government-funded Exploration Incentive System (EIS) grant to co-fund up to \$150,000 of drill testing of this area.

Sipa's plans for the upcoming field season include drill testing of the Andromeda EM anomaly and regional reconnaissance aircore/ RC drilling around the domal feature to the west of Andromeda. Locations of planned drilling and soil samples are shown on Figure 5.

#### Forward programs

Reconnaissance RAB/Aircore drilling is planned for the current (June) quarter. Funding of this program will be supported by two separate EIS grants. The first grant will be utilized within the Great Sandy Tenement (EL45/3599) to follow-up regional targets around Obelisk. The second grant will be used to target the domal area identified by the gravity survey and follow-up the historical drill-hole AKRC001 at Andromeda.

The WA State Government Exploration Incentive Scheme (EIS) grants provide a 50% matching subsidy (up to \$150,000 each) from the WA Government for the drilling component of exploration, and are funded by the Royalties for Regions program. Sipa would like to acknowledge the support of the WA Government in promoting early-stage greenfields mineral exploration.

Sipa has now secured four such grants since 2016, with a fifth application underway.

In addition to the planned work by Sipa, the Geological Survey of WA has reported on their web site that the Kidson extension 2.5 line km spaced airborne gravity survey commenced on the 2<sup>nd</sup> of April and is currently 50% complete. The data is expected to be release in June 2018. The survey covers Sipa's tenement holding in its entirety.



# Kitgum Pader Base Metal Project, Uganda – Sipa 100%



Figure 6: Kitgum Pader tenement location, Uganda.

The Kitgum-Pader Base Metals Project was secured by Sipa following a geological and metallogenic interpretation in 2011 of relatively new airborne magnetic and radiometric datasets over East Africa.

The Company's flagship project in Uganda is the Akelikongo intrusive nickel-copper sulphide discovery, which was made by Sipa in 2015, located on the north-eastern margin of the Congo super-craton.

Akelikongo comprises a sizeable body of nickel-copper sulphide mineralisation with strong similarities to 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).

While the majority of the recent exploration has been focused-at the Akelikongo prospect, there is strong regional prospectivity for further for nickel sulphide discoveries as indicated by geochemical anomalies including those at Goma, Katunguru, Waligo and elsewhere (see Figure 7).

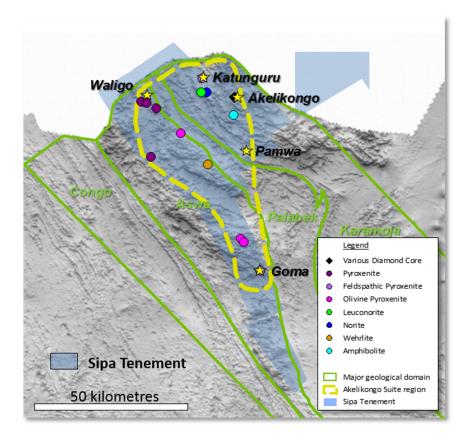


Figure 7: Kitgum Pader Project, Uganda showing location of the Akelikongo nickel-copper discovery and regional prospects with new "Akelikongo Suite" intrusions highlighted.

Field mapping undertaken in the previous two quarters identified "Akelikongo-like" intrusives over an 80km x 30km north-northwest trending corridor extending from Goma in the south-east through Akelikongo, and trending further to the north-west through the Sipa tenements. The work indicates the potential for additional nickel and copper sulphide mineralised intrusions similar to Akelikongo within the Sipa tenements.

During the quarter, the Company received highly encouraging whole rock litho-geochemistry results from sampling of these intrusions confirming the potential to discover multiple Akelikongo-style nickel-copper systems on its tenements.

The litho-geochemistry results show that these intrusions have similar base metal, rare earth element, trace element and platinum group element profiles and are therefore related. Field observations identified further key features confirming the prospectivity of Sipa's land package for multiple mineralised intrusions:

- 1) 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; 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.

Recent field reconnaissance mapping by the Company's consultant, Richard Hornsey, at the Goma nickel prospect, in the south of Sipa's tenement package 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 anomalous surface nickel geochemistry and contact metamorphosed margins. Figure 8 below shows the pXRF soil data used to build a 3D digital terrain model of the surface and constrain the intrusion extent.

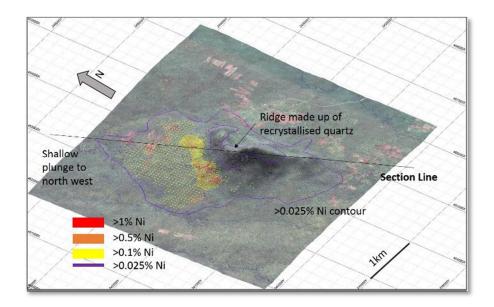


Figure 8: pXRF Ni soil data >0.025% contour at Goma showing extent and footprint of ultramafic intrusion (2x vertical exaggeration).

The data was contoured at greater than 250ppm nickel which defines a reasonably circular intrusion morphology that has a long axis oriented northwest to south-east.

The location of the strong surface nickel-in-soil anomaly appears to be at the contact between two intrusive phases within the conduit. Due to the extensive outcrop in the area further mapping and sampling of this and other close-by intrusions is planned This information will be combined with additional assaying of pXRF soils and ground gravity surveying to assist in defining future drill targets.

#### Geophysics Survey (Audio magneto-tellurics) at Akelikongo

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 9 is a 3D Leapfrog model of the mineralisation at Akelikongo showing the previously drilled disseminated mineralisation >0.25% Ni in red and the more massive mineralisation >1% Ni in yellow.



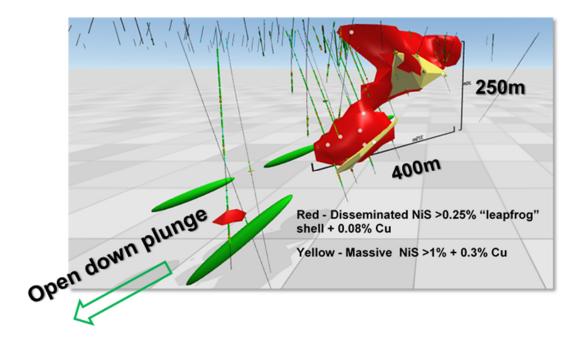


Figure 9 - Leapfrog model of Akelikongo nickel-copper sulphide mineralisation, looking south-east.

In February 2018, Sipa completed a natural source AMT (Audio Magneto Tellurics) survey over the Akelikongo intrusion. The principal 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 10), covering the Akelikongo deposits.

All lines of AMT data have been modelled, creating resistivity depth sections across the intrusive complex.

The results have confirmed that AMT can assist in the 3D definition of both the intrusion and likely sulphide mineralised portions and is likely will be a useful exploration tool, particularly in targeting down-plunge extents and orientation of intrusions.

The data shows a number of targets which may be related to further nickel and copper sulphide mineralisation and, importantly, shows further low resistivity targets down-plunge of the most northern line L4, which is beyond the drilled extent of the mineralisation (Figure 11).

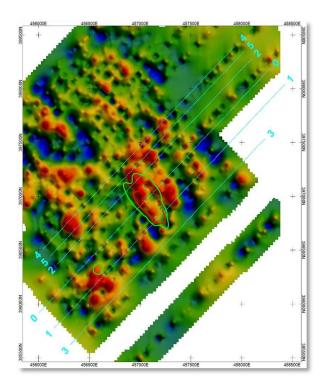


Figure 10 – AMT line locations over an image of the first vertical derivative of Bouguer gravity anomaly, with contours of Ni-in-soils 500ppm (green) and 1000ppm (red) outlining the surface expression of the drilled mineralisation.

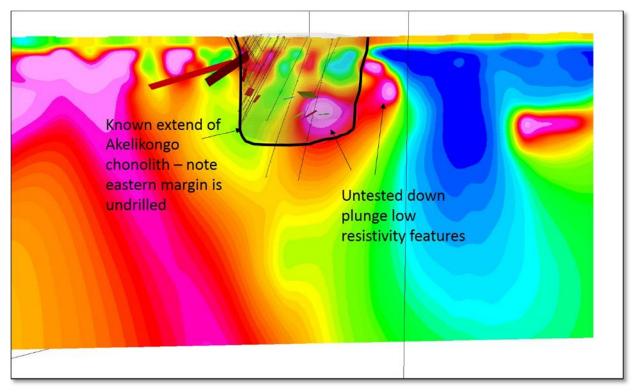


Figure 11 – Line 4 (most northern), AMT 2D resistivity depth model looking north-west down-plunge. Low resistivity features at the base and east of the intrusion may be due to further mineralisation down-plunge and on the undrilled eastern margin of the intrusion. EM plates shown on the diagram indicate the coincidence with the low resistivity features

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#### **Forward Programs**

Following the successful litho-geochemical data and mapping of Akelikongo suite intrusions, further work, including assaying of pXRF soils combined with ground gravity surveying is now underway to define drilling targets associated with these intrusions.

# Corporate

At the end of the quarter, the Company had \$1.51 million cash on hand.

# **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 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.

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 to 2016.

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) 43.7m @ 0.53% Ni and 0.18% Cu (AKCD006) including 7m @ 1.04% Ni, 0.35% Cu 0.05% Co. (Refer ASX Table p4 1 December 2016).





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# **Competent Persons Statement**

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.

Various information in this report which relates to Exploration Results reported within is extracted from the following previously released reports:

- 28 March 2018 New drill targets highlighted in recently completed geophysical modelling
- 21 February 2018 Potential for Large scale Ni sulphide province confirmed at Akelikongo
- 30 November 2017 Gravity identifies compelling new targets Paterson North
- 20 October 2017 Further High-Grade Vein Hosted Gold-Copper at Obelisk
- 12 October 2017 Initial Assays Confirm Large Bedrock Mineral System
- 22 September 2017 Progress Report Update on 2<sup>nd</sup> Diamond Hole
- 18 September 2017 Paterson North Drilling Update
- 19 June 2017 Paterson North Assays Confirm Large Copper System
- 24 May 2017 Initial Results Expand Potential of Paterson North
- 22 February 2017 Progress Report Akelikongo Geophysics Results
- 1 December 2016 Akelikongo Final Assays Discovery Continues to Grow
- 17 November 2016 Strong Nickel and Copper hits up to 2.4% Nickel and 2% Copper
- 22 April 2015 Progress Report Akelikongo

All of the above reports are available to view of <a href="www.sipa.com.au">www.sipa.com.au</a> and <a href="www.asx.com.au">www.asx.com.au</a>. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement



# **APPENDIX - ASX LISTING RULE 5.3.3**

# Mining Tenements Acquired during Quarter:

Tenement reference	Project	Nature of interest	Beneficial Interest at beginning of quarter	Beneficial Interest at end of quarter
TN2726	Kitgum-Pader	Application	0%	100%
TN2727	Kitgum-Pader	Application	0%	100%
TN2767	Kitgum-Pader	Application	0%	100%

# Mining Tenements Disposed during this Period:

Tenement reference	Project	Nature of interest	Beneficial Interest at beginning of quarter	Beneficial Interest at end of quarter
EL1487	Kitgum-Pader	Granted	100%	0%

#### Mining Tenements Held at End of Quarter:

Tenement reference	Project	Nature of interest	Beneficial Interest at beginning of quarter	Beneficial Interest at end of quarter
EL 1048	Kitgum-Pader	Granted	100%	100%
EL 1049	Kitgum-Pader	Granted	100%	100%
EL 1229	Kitgum-Pader	Granted	100%	100%
EL 1270	Kitgum-Pader	Granted	100%	100%
EL 1271	Kitgum-Pader	Granted	100%	100%
EL 1590	Kitgum-Pader	Granted	100%	100%
TN2661#	Kitgum-Pader	Application	100%	100%
TN2726	Kitgum-Pader	Application	0%	100%
TN2727	Kitgum-Pader	Application	0%	100%
TN2767	Kitgum-Pader	Application	0%	100%
E45/5104	Paterson North	Application	100%	100%
E45/4962	Paterson North	Application	100%	100%
E45/4963	Paterson North	Application	100%	100%
E45/4697	Paterson North	Granted	100%	100%
E45/3599*	Paterson North	Farm In	51%*	51%*

#TN2661 was previously identified as TN2659.

<sup>\*</sup> Sipa is earning an interest pursuant to a Farm-in and Joint Venture Agreement with Ming Gold Limited ("Ming") to earn up to 80% in Ming's Great Sandy Copper - Gold project (E45/3599), for expenditure of \$3 million over 4 years.



# **Summary of Royalties**

Project	Party	Summary Terms
Sulphur Springs (Currently under Scoping Study)	Venturex Resources	\$2 each tonne of ore from the Sulphur Springs Tenements processed to produce zinc concentrate up to \$3.7M; Project currently under scoping study by Venturex.
Panorama (Kangaroo Caves Deposit)	Venturex Resources	40% holder of uncapped royalty equivalent to \$2 per dry metric tonne of all ore mined and processed Project currently under scoping study by Venturex.
Enigma Copper (Thaduna)	Sandfire Resources NL	1.0% of the Net Smelter Return
Ashburton	Northern Star Resources Limited	1.75% Gross Royalty on all gold production from the Tenements, excluding the first 250,000 ounces of gold produced, and the Merlin Tenements;
		0.75% Gross Royalty on all gold production from the Merlin tenements, excluding the first 250,000 ounces of gold produced