



## Deep drilling intersects IOCG-style alteration at Paterson North Project

**Drilling intersects previously unobserved alteration and mineralisation style with main IP anomaly remaining untested; Airborne EM planned for early 2019**

### Highlights

- Results from the **recently completed 500m diamond hole** PND005 show that it has intersected **a style of oxidised alteration and mineralisation** which has not previously been observed at the **Obelisk Prospect**, at Sipa's Paterson North Copper-Gold Project. The alteration and mineralisation is similar in style to IOCG (iron-oxide-copper-gold) systems which is structurally controlled and spatially associated with red hematitised intrusions and quartz epidote veining, with peak assays of 84ppb gold and 1630 ppm copper from character sampling within this zone.
- The drillhole did not identify the source of the **IP pole-dipole chargeability anomaly** at Obelisk. Further Pole-Dipole IP will be necessary to provide sufficient 3D spatial resolution prior to further drill testing next year.
- A review of surface ionic leach sampling at Obelisk and Andromeda **shows the technique is detecting anomalous metals** which appear spatially related to known mineralisation beneath 70-100m of cover.
- **Airborne EM survey planned to commence in 2019** over key areas of Sipa's Paterson North Copper-Gold Project ahead of the resumption of drilling in the new field season. This will assist in defining new drill targets and refining existing ones including **Obelisk** and the newly-discovered copper zone at **Aranea**, 20km to the north-west.
- Sipa has recently been awarded a new EIS grant from the WA Government to co-fund the planned drilling of these targets. Sipa's successful EIS grant was the only one made for the Paterson Province in the current round of grants.

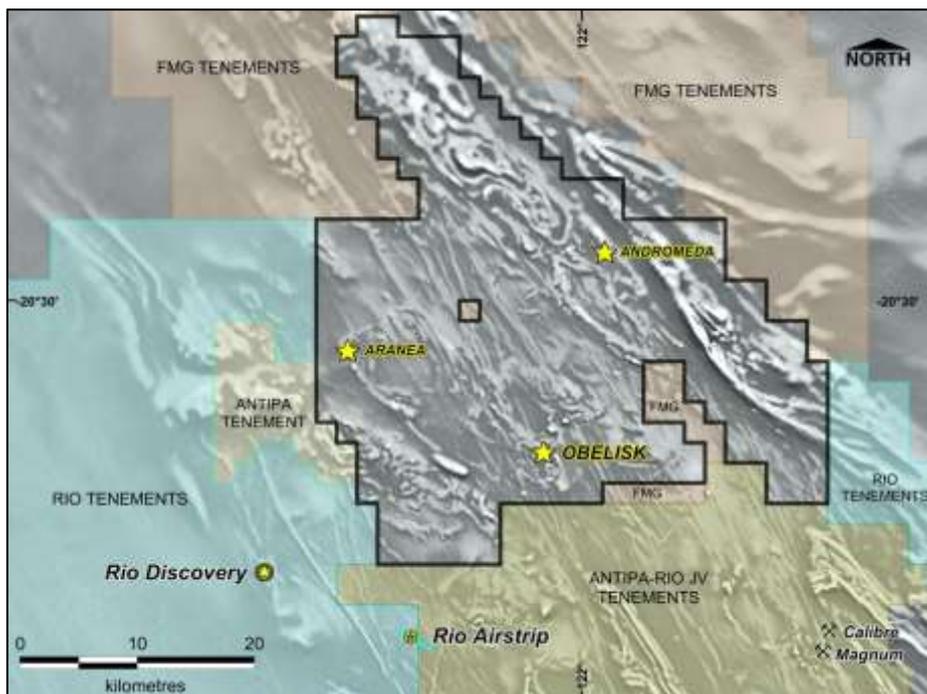


Figure 1: Paterson North magnetics RTP image showing prospect locations.



Commenting on the results, Sipa Resources Managing Director, Lynda Burnett, said: “Coming on the back of our 2018 reconnaissance Aircore/RC campaign which successfully extended the mineralisation at Obelisk and defined a new copper zone at Aranea, the results of the deep diamond hole have added a significant and potentially exciting new dimension to our Paterson exploration program. The identification of a potential IOCG mineralisation style which is quite different to anything we’ve seen in the area before shows that the mineral system at Obelisk has strong zonation and is potentially even more complex and prospective than we thought previously.

“Given its proximity to the reported Rio Tinto discovery just 10km from our tenement boundary and the potential scale of the discovery opportunities in this area, we are very much looking forward to the next phase of exploration – which will include an airborne EM survey commencing early next year before we get the drill rig back next field season. We are continuing to learn a huge amount technically and geologically with each successive drill campaign, and we are confident that we are getting closer each time to cracking the code.”

Sipa Resources Limited (ASX: **SRI**) is pleased to advise that recently completed deep diamond drilling at the Obelisk prospect, part of its Paterson North Copper-Gold Project in the Paterson Province of northern Western Australia, has intersected a style of alteration and mineralisation which has not previously been observed at the project and which is considered to be similar in style to large-scale iron-oxide copper-gold (IOCG) mineral systems.

The diamond drill hole was designed to test a chargeability anomaly identified in a single line pole-dipole IP survey. The anomaly was located east of the main IP gradient anomaly which has been the subject of previous drilling and shown to be associated with copper mineralisation.

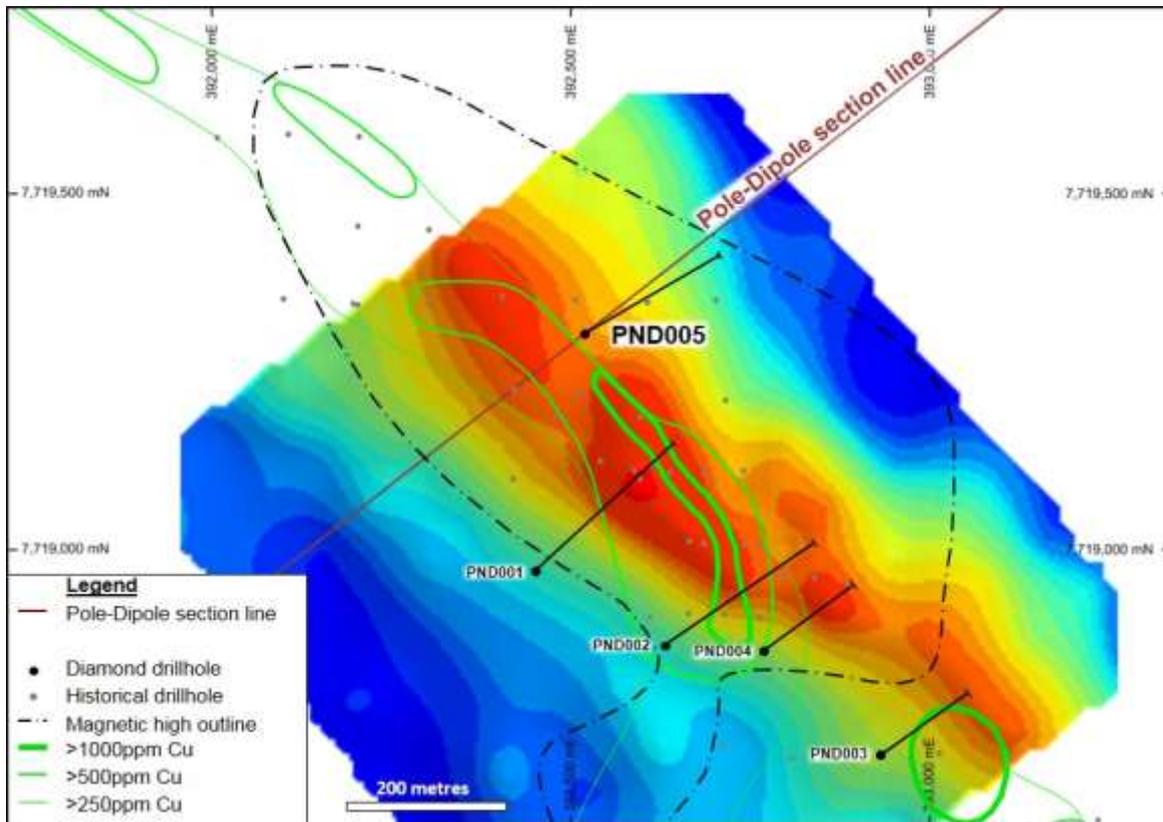


Figure 2: IP gradient array chargeability with the Pole-Dipole section and drill-hole shown. Copper contours represent average values within Proterozoic bedrock.

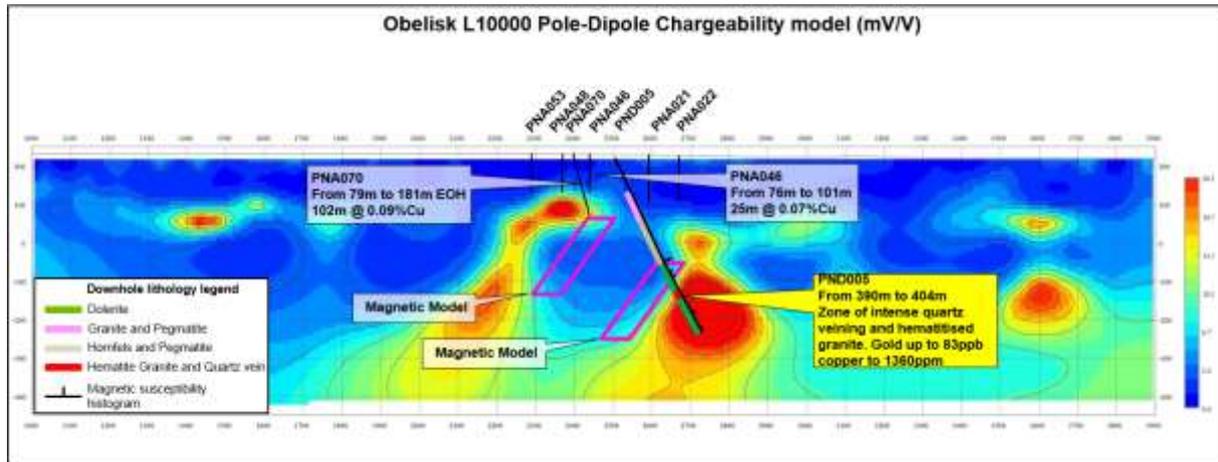


Figure 3: Pole-Dipole chargeability model section showing north-eastern deeper (about 400m below surface), stronger chargeable zone (30mV/V) drilled by PND005 and a south-western shallower (about 140m below surface) and slightly weaker chargeable zone (21mV/V).

Pole-dipole IP geophysics provides depth information on anomalous domains along a 2D section – in contrast to gradient array IP, which produces only a map of anomalous zones with no depth information.

Figure 3 shows the chargeability section of the pole-dipole survey. It contains two anomalous zones: a deeper, stronger chargeable zone in the north-east (about 400m below surface) with a chargeable response of 30mV/V and a shallower zone in the south-west (about 140m below surface) with a slightly weaker chargeable zone (21mV/V).

The shallower chargeable zone in the south-west corresponds to that detected on the IP gradient array survey conducted earlier in the year. The zone between the two chargeable anomalies is highly resistive and has been interpreted to represent either a granitic intrusion or a zone of strong silicification. The two modelled magnetic plates (marked in pink on Figure 3) are located at the contact between the chargeable zones and the central resistive zone.

Two drill holes, PNA070 and PNA046, located about 60m off-section and completed prior to the Pole-Dipole survey, recorded intersections of 102m @ 0.09% Cu and 25m @ 0.07% respectively, but did not intersect the shallow chargeable anomaly in the south-west, as seen in Figure 3 (refer to ASX 19 June 2017).

Prior to the newly-completed diamond drill hole PND005, the deeper and stronger chargeable anomaly had not been tested by any drilling.

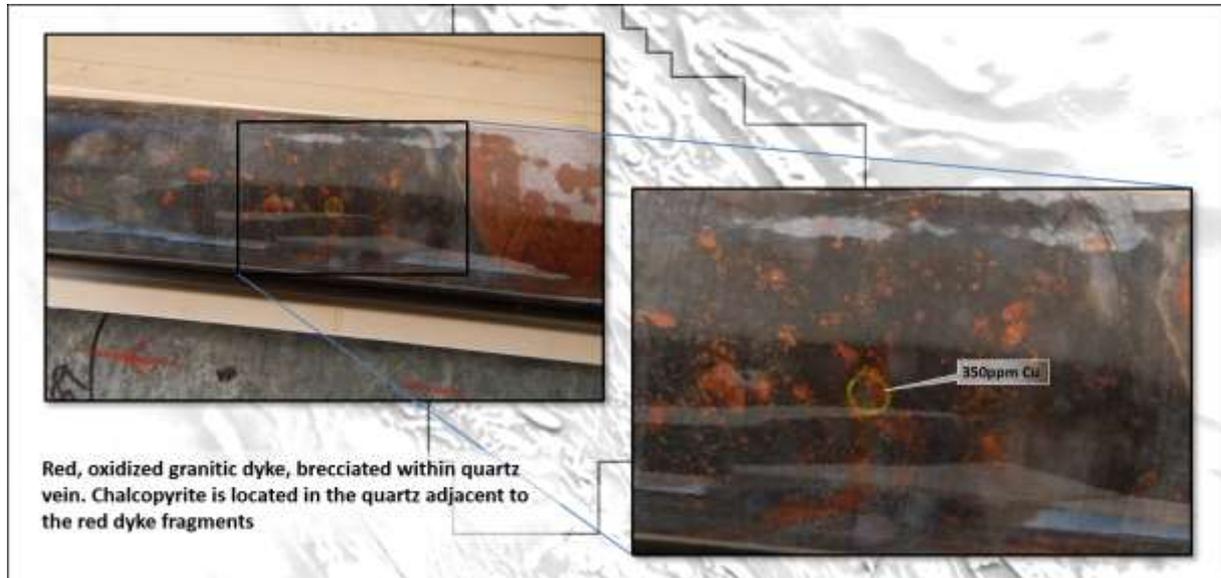
PND005 intersected granite and pegmatite from 96m to 174m down-hole before advancing into a zone of abundant pegmatitic dykes intruding fine-grained and hornfelsed metasediment and minor gneisses from 174m to 298m down-hole. The hole then intersected dolerite from 298m with very minor pegmatitic and granitic dykes to the end of hole at 510.5m. Table 1.

Hole Number	Hole Type	Prospect	Grid_ID	East	North	RL	Total Depth (m)	Dip degrees
PND005	Diamond	Obelisk	MGA94_51	392516	7719304	220	510.5	-60

A zone of intensely hematite altered, red and oxidized granitic dykes and grey quartz veins was intersected between 390m and 404m at the edge of the IP anomaly (section shown in Figure 3). The red granitic dykes are locally brecciated with red granitic clasts and a dark grey quartz matrix which contains fine chalcopyrite grains adjacent to the red granitic clasts (Figure 4).



Although the drillhole did not contain any significant reportable intercepts, character sampling for specific geological features of interest returned maximum copper and gold assays from this part of the hole, of 1630ppm copper and 83 ppb gold.



*Figure 4: Close up of a zone of intensely hematite altered, red and oxidized granitic dykes and grey quartz veins. Chalcopyrite is located in the quartz adjacent to the red dyke fragments.*

This style of alteration, which has similarities to IOCG systems, has not been observed in previous drilling by Sipa and contrasts with the mineralisation intersected in earlier drilling which is associated with biotite, quartz, pyrite, pyrrhotite and chalcopyrite.

**These two distinct styles of alteration and associated mineralisation suggests that Obelisk is a complex zoned system.** Complexity and zonation of oxidized and reduced mineralisation is regarded as an indicator of enhanced prospectivity as change in oxidation state often leads to precipitation of mineralisation.

The large IP anomaly which was the target of PND005 was not been explained by the drill hole. Further Pole-Dipole IP will be necessary to provide sufficient 3D spatial resolution prior to further drill testing.

### **Ionic Leach Sampling**

Ionic leach assaying is a powerful assaying technique designed for surface samples and is able to detect very low amounts of elements in the soils. The technique is being widely trialed in the exploration industry with reported success in detecting anomalous metallic element signals through transported cover. It is possible that such techniques will revolutionise geochemical exploration under transported post mineral cover.

Following an initial orientation low level ionic leach sampling line over Obelisk in 2017, a further three programs totalling around 200 samples have been collected and assayed from the Obelisk and Andromeda prospects. Results show anomalism in a number of elements, including copper, which appear reasonably associated with drilled bedrock mineralisation at both Obelisk and Andromeda, around 20km north-west of Obelisk.

At Obelisk, a north-west trending copper zone adjacent to the drilled copper anomaly is present. It remains a distinct possibility that the area which is not anomalous is due to regolith impact and additional sand dune dilution of the samples (Figure 5). Other anomalous elements which are coincident with the anomaly are As, Ba, Ce, Li, Nd, Pb, Se, Sm, Th U and Zn.

Importantly, the soil copper anomaly is largely untested by drilling and where tested by recent aircore drilling corresponded to bedrock copper mineralisation in drill holes PNA090 and PNA091 (refer to ASX announcement of 14 Sep 2018).

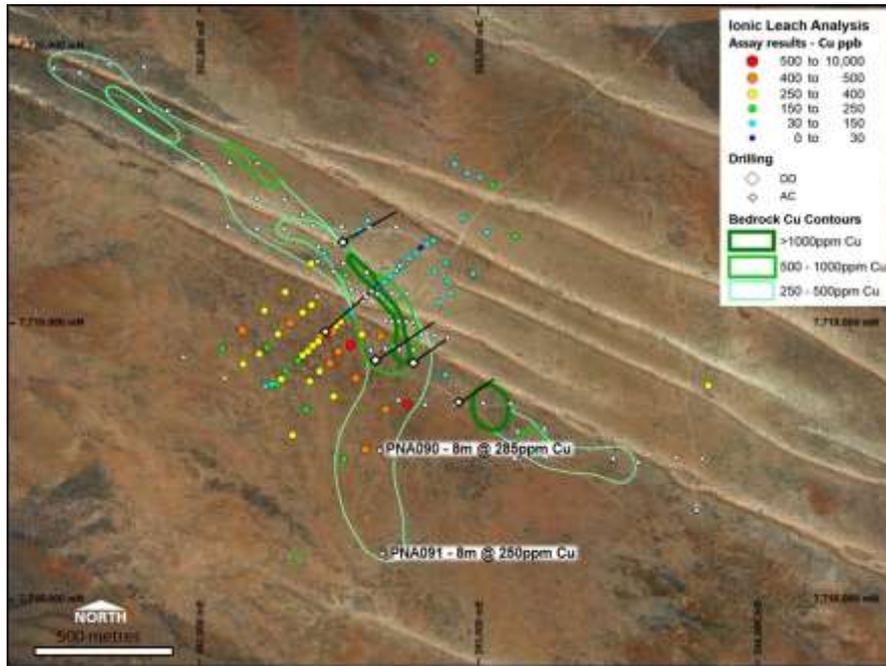


Figure 5: Ionic leach surface sampling results on topographic image with location of Proterozoic bedrock copper anomalism shown as copper contours at Obelisk.

At Andromeda, an area which returned anomalous nickel from a single sample point has been confirmed by follow-up sampling as a multi-point nickel, copper and cobalt anomaly.

Drill hole (AKRC001) completed by previous explorers is located around 200m to the north-west of the soil anomaly (Figure 6) and the bottom-of-hole sample is anomalous in nickel, copper and PGEs.

The soil anomaly is subtle but, given the proximity of the anomalous drill-hole AKRC001, is considered to likely reflect bedrock mineralisation (see Figure 6). Other anomalous elements are Ba and Ce.

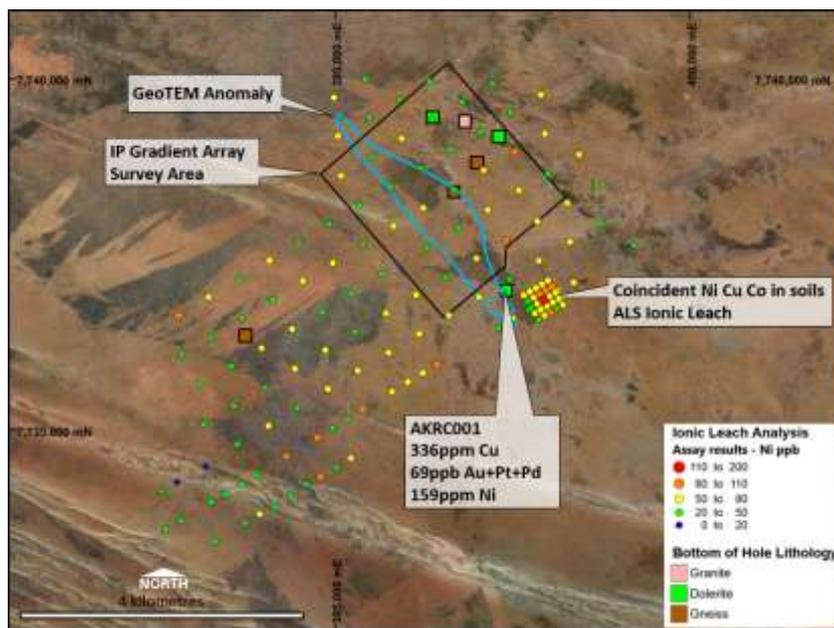


Figure 6: Ionic leach surface sampling nickel results on topographic image with location of RC hole AKRC001, BHP geoTEM anomaly and IP gradient array survey at Andromeda.



## Plan Forward

Extensive work on the drill core is being undertaken to understand the geological context, geochemistry and geophysical aspects of the deep diamond hole with a view to resolving the nature of this apparent zoned system.

The results of the hole have increased the complexity of the system by adding a further style of alteration and copper mineralisation. A further Pole-Dipole IP survey is currently being planned.

An airborne EM survey is also planned for 2019 to cover key areas of Sipa's extensive tenement holding. It is understood that airborne EM played a significant part in Rio Tinto's rumoured Weenoo discovery, located 10km to the west of Sipa's land-holdings.

Follow-up ionic leach sampling is planned to confirm and test the extent of anomalism defined to date.

## Background Information

The North Paterson province is increasingly emerging as one of the most active and prospective new exploration frontiers in Australia, with exploration programs underway by major mining companies such as Rio Tinto, FMG, and Newcrest and a number of junior exploration companies including Sipa, Antipa Minerals and Encounter Resources (under agreement with IGO). In recent weeks, Greatland Gold have announced some of the most spectacular exploration results to come out of Australia with the drilling of quartz carbonate breccia hosted copper and gold mineralisation at Havieron, 45km east of Telfer.

This high level of activity, combined with recent reports of exploration success by Rio Tinto at Weenoo 10km west of Sipa's tenements, highlight its world-class potential and under-explored nature.

Since entering a Farm-In and Joint Venture with Ming Gold Ltd in June 2016, Sipa has successfully progressed exploration on its large ground-holding, resulting in the discovery of a significant copper-rich polymetallic mineral system at Obelisk.

The Obelisk prospect is a co-incident magnetic, IP and gravity high feature. Aircore/Reverse Circulation and diamond drill testing of the prospect by Sipa in 2016 and 2017 defined a large >4km copper-plus-polymetallic system in Proterozoic bedrock.

The target area has now been covered with detailed ground gravity, gradient-array IP and reconnaissance Aircore/RC drilling which successfully defined the initial bedrock target.

In 2017, three RC drill holes and four deep diamond holes were completed with broad bedrock copper results returned including 102m @ 0.09% Cu in PNA070 and 64.8m @ 0.1% Cu in PND001 (see ASX 19 June 2017 and 12 Oct 2017).

In addition, high-grade vein-hosted mineralisation returned narrow intersections of gold grading up to 22g/t Au and copper grading up to 4.6% Cu.

Broad bedrock zones have been confirmed over more than 4km at greater than 0.05% copper including discrete higher-grade gold-copper zones. In addition, Sipa has now identified a new copper anomaly co-incident with modelled magnetic alteration and a gravity high called Aranea with bedrock grades averaging in excess of 250ppm copper over an area of over 2km of strike.

Sipa has now earned its 80% equity in the project with Ming Gold electing not to contribute further funds. Their interest will dilute to a royalty using dilution provisions within the Farm-In and Joint Venture agreement.

## About Sipa

Sipa Resources Limited (ASX: SRI) is an Australian-based exploration company aiming to discover 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 an intrusive-hosted nickel-copper sulphide discovery at Akelikongo, one of the most significant recent nickel sulphide discoveries globally.



In May 2018 Sipa announced a Landmark Farm-in and JV Agreement with Rio Tinto to underpin accelerated nickel-copper exploration at the Kitgum Pader Base Metals Project in Northern Uganda in which Rio Tinto can fund up to US\$57M of exploration expenditure and make US\$2M in cash payments to earn up to a 75% interest the project.

In Australia, Sipa has an 80% interest in Joint Venture with Ming Gold at the Paterson North Copper Gold Project in the Paterson Province of North West Western Australia, where polymetallic intrusive related mineralisation was intersected at the Obelisk prospect.

The Paterson Province is a globally recognized, strongly endowed and highly prospective mineral belt hosting the plus 25Moz world-class Telfer gold and copper deposits, Magnum and Calibre gold and copper deposits, Nifty copper and Kintyre uranium deposits and the O'Callaghans 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.*

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