

# EL 25643 – MT ISABEL AND EL 25653 – ACACIA BORE SAMMY JV PROJECT GROUP TECHNICAL REPORTING STATUS

# ANNUAL TECHNICAL REPORT

# For the Period

20<sup>th</sup> August 2012 to 19<sup>th</sup> August 2013

**Compiled By** 

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MAP REFERENCE: Illogwa Creek 250K - Sheet SG53/15

Target Commodities: Nickel, Copper and Gold

Report submitted on: 17<sup>th</sup> October 2013 All data provided is of GDA94 Datum, Zone 53.

#### SUMMARY

This report summarises work completed on Mithril Resources Sammy Project Exploration Licences (EL 25643 and 25653) for the year ending 19<sup>th</sup> August 2012.

The project area is located approximately 160 km east of Alice Springs, south of the Plenty Highway and straddles the Illogwa Creek 250,000-scale map sheet.

Work completed over the tenement area during the reporting period included the following:

- 76 rock chip samples
- Geological mapping
- 612 soil samples
- 24 line km of gradient array IP and 1.2km of dipole-dipole IP
- 2 diamond drill holes
- 4 reverse circulation drill holes

Geological mapping on EL 25643 continued to identify extensively altered basement granites and metasedimentary rocktypes containing primary and secondary copper mineralisation, consistent with an IOCG mineralising system. Further mineralisation/ alteration was identified at the Ivana and the South East Copper Occurrence Prospects.

Key drill results included:

#### MIRC-008: 14m @ 0.34% Cu, 1.26g/T Ag and 0.04 g/T Au from 18m

#### and

#### MIRC-012: 10m @ 0.34% Cu from 10m

Please note, the 2012 drill campaign took place over the 2011-2012 and 2012-2013 reporting period. As such, all drill data pertaining to this program has been submitted as part of this annual report and is summarised below.

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# 1 INTRODUCTION

This report summarises work completed on Mithril Resources Sammy Project Exploration Licences (EL 25643 and 25653) for the year ending 20<sup>th</sup> August 2013. These two tenements comprise the Sammy Joint Venture.

The Sammy Project is located approximately 160 km east of Alice Springs. Access to the area is via the Numery Road, which passes east from Alice Springs (Figure 1). The tenement is contiguous with Mithril's Huckitta Project.

Mithril entered into a Joint Venture with Cazaly Resources as they interpreted that mafic and ultramafic rocks may extend onto the Sammy Project and that these rocks were prospective for magmatic Ni/Cu/PGE sulphides. This interpretation was proven correct with the identification of Ni-Cu-PGE fertile mafic intrusions within EL25653 in 2010. In the current reporting year the southern tenement (EL25643) was shown to have significant potential for IOCG styles of mineralisation within the proterozoic basement and this has been the focus for the reporting period.

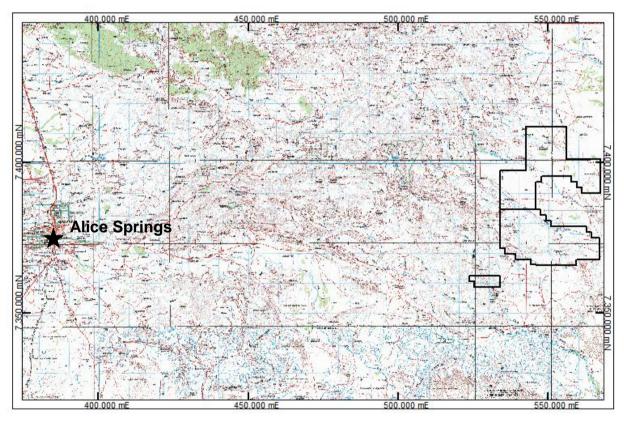


Figure 1: Location of Sammy Project EL 25643 and 25653

# 2 TENURE

Leasing details for the project are detailed in Table 1 below. Mithril Resources entered a Headsof-Agreement with Sammy Resources to farm-in to EL 25643 and 25653. The agreement covers all minerals and Mithril may earn an 80% interest in the tenements by completing expenditure of AUD\$2M within 5 years of the commencement date. Prior to reaching this agreement Sammy Resources have held the tenement in their own right.

In July 2012 Mithril served notice to Sammy outlining that Mithril had spent the \$2M and now the project is subject to a 80:20 Mithril:Sammy Joint Venture where parties fund pro rata.

Project	Tenement Name	Tenement No	Application Date	Grant Blocks	Area (km <sup>2</sup> )	Grant Date	Grant Period
Illogwa	Mt Isabel	25643	6/10/2006	438	1330	26/07/2007	6 years
Illogwa	Acacia Bore	25653	18/10/2006	225	680	20/08/2007	6 years

Table 1: EL 25643 (Mt Isabel) and EL 25653 (Acacia Bore) tenure.

EL 25643 was reduced by the required 50 % at the end of Year 2 to 218 sub blocks. On the 19/07/2013 the tenement was reduced by a further 60 blocks to 158 blocks.

EL25653 was reduced by 62 blocks on the19/09/2013 to 163 blocks.

# 3 GEOLOGY

#### 3.1 Regional Geology

The Project lies within Illogwa Creek 250K Sheet (Figure 2). The Project area is located along the north eastern margin of the Amadeus Basin in a zone of complex deformation and interaction between basement structures and the sedimentary sequence.

The Amadeus Basin sediments overlie the metamorphic rocks of the Arunta Block and postdate the intrusion of the Harts Range pegmatites and dolerites inferred to be part of the Stewart Dyke Swarm. The stratigraphy and geological evolution of the basin is well document in Korsch and Kennard (1991).

The Amadeus Basin in the Illogwa Creek area has a number of important geological differences to the northern margin of the Amadeus Basin south and west of Alice Springs:

- It is characterized by a thin-skinned tectonic style (thrusts and nappes) with intense folding and thrusting that contrasts with a thick-skinned tectonic style further to the west.
- Only the lower stratigraphic section is preserved (up to the Arumbera Sandstone) and lithological facies are markedly different to those further east.
- There is a wide zone of interaction between the sedimentary sequence and basement structures that verge to the south and southwest.
- Alice Springs age shear zones deforming the basin sequence are associated with widespread greenschist facies retrogression or alteration and these zones are similar to those associated with gold mineralisation at Winnecke and Arltunga (Mackie, 1986; Dirks and Wilson, 1991).

The margin of the basin is structurally complex. In the Oolera Fault Zone, the Heavitree Quartzite, Gillen Member of the Bitter Springs Formation and rocks of the underlying Arunta block are inter-sliced in numerous thrust blocks. Basement cored folds may represent the cores of thrust nappes. A second major zone of overthrusting coincides with the Illogwa Schist Zone and is inferred to represent the lowest thrust-nappe of the Arltunga Nappe Complex (Shaw and Freeman, 1985; Mackie, 1986). Slivers of Heavitree Quartzite have been overridden by retrogressed schists in this zone and the alteration (retrogression) and deformation is similar to that spatially associated with mineralisation at Arltunga (Mackie, 1986; Dirks and Wilson, 1991)

and is coeval with that at the base of the White Range Nappe on the Alice Springs 1:250K sheet. Quartz veins with associated sulphides are common in these zones and a single gold bearing copper occurrence in quartz veins in the basement is reported in the vicinity of the Hale River (Shaw and Freeman, 1985). Associated deformation in the cover sequence is complex and appears to be thin skinned in character.

The Arunta Province has been subjected to several regional orogenic events. Significant gold mineralization occurs in extensively deformed zones of faulting, shearing and greenshist metamorphism marking the boundary between the Arunta Province and Amadeus Basin.

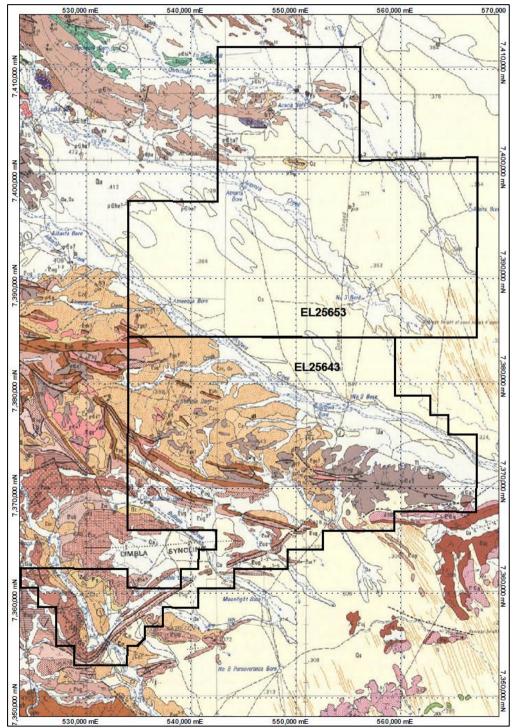


Figure 2: Sammy Project with respect to geology

# 3.2 Project Geology

The Sammy Project area is predominantly covered by a veneer of aeolian and colluvial sand and gravel. Strongly weathered biotite, garnet-biotite and quartzofeldspathic gneiss, calcsilicate rocks and amphibolite are sporadically exposed, particularly in the northern portions of the project area. In addition Mithril has located a number of Ni-Cu-PGE rich mafic intrusions in this northern area which have been the focus of exploration to date. There are numerous ferricrete, calcrete and silcrete rises, some of which may be indicative of the targeted mafic and ultramafic rocks. No detailed mapping has been undertaken in the area with the best regional maps compiled prior to detailed aeromagnetics and the current understanding of the geological history.

The area is considered prospective for Ni-Cu-PGE mineralisation associated with mafic and ultramafic intrusions.

More recently extensive haematite – silica altered granites were identified during remapping of the Limbla 100K sheet and altered granites were located on EL25643. This alteration, as well as significant outcropping copper (and gold) mineralisation was found in a number of areas during the current reporting period, confirming the presence of a significant IOCG mineralising system. Both secondary (malachite) and primary sulphides (chalcopyrite) were located at surface at a number of previously unrecorded areas late in 2011 and in 2012.

# 4 HISTORICAL EXPLORATION WORK COMPLETED

There have been several explorers in the region previously, exploring a range of commodities including gold, uranium, base metals and diamonds. Some of the more significant exploration efforts are summarised below. Gutnick Resources took a total of 27 stream sediment samples in the main regional program covering EL 10269 which partially overlaps EL 25653. Only the top 5 cm of sand from across the active stream channel was sampled. A sample density of 1 sample per 5 sqkm was used. The best result was 0.25 ppb Au. Rio Tinto explored the Casey Bore area in 1998 covering the eastern Amadeus Basin, an intracratonic basin which began to form about 900 Ma, and the Palaeoproterozoic Arunta Block. The contact between the Arunta Block and the Amadeus Basin in the north of the tenement area is marked by a series of east-west trending thrust zones. The southern end of the Woolangi Lineament, a northwest - southeast trending structural zone, marked in the area by a basement high, the Casey Inlier, also occurs within the tenement area. Rio conducted detailed geophysical surveys, stream sediment sampling, RAB and RC drilling. Anomalous Cu, Pb, Zn was returned from several phases of drilling.

# 4.1 Mithril Resources Work Completed 2009

During the 2008-9 reporting period Mithril undertook field work which included

- Reconnaissance geological mapping
- Rock chip sampling
- Minor soil and stream sediment sampling.
- In Addition a VTEM survey covering ~128 sqkm at 200 m line spacing was completed.

These programs identified multiple gabbroic intrusions containing magmatic Ni/Cu sulphides. The VTEM survey identified a number of targets that were followed up in the 2009-10 reporting year.

# 4.2 Mithril Resources Work Completed 2010

Work completed over the tenement area during the 2009-2010 reporting period included the following:

- Airborne Geophysical surveying (VTEM covering 24 sqkm at 200 m line spacing)
- Ground EM (4 lines for 5 km)
- Geological mapping
- Rock chip Sampling (7 samples)
- Heritage surveys
- RC Percussion Drilling (5 holes for 536 m)

# 4.3 Mithril Resources Work Completed 2011

Work completed over the tenement area during the 2010-2011 reporting period included the following:

- 164 Aircore drill holes for 2915 m
- 2 Reverse Circulation (RC) drill holes for 320 m
- 133 rock chip samples
- Geological mapping
- 870 soil samples
- Ground gravity survey
- VTEM Survey: 110 line kilometres of data was collected
- 2 drillholes were surveyed for DHEM

# 4.4 Mithril Resources Work Completed 2012

• Geological mapping / Rockchip sampling

Significant geological mapping and rock sampling was conducted. This work resulted in the discovery of a number of areas containing significant accumulations of primary and secondary copper mineralisation named the Austin, El Gordo, Nigel and Mini Me prospect areas (Figure 3). This mineralisation is associated with intense silica +-hematite+-chlorite+-fluorite alteration which is consistent with there being an IOCG system at play. Significantly these mineralised occurrences were found to be intimately associated with large scale (10's km) ENE-WSW / E-W demagnetised shear zones and similarities to the Cloncurry IOCG deposits have been suggested. A summary of each prospect is below:

At **Austin** intense hematite and silica alteration has been mapped at surface for over 2km of strike and secondary copper mineralisation has been identified at a number of locations. Reconnaissance Induced Polarisation (IP) lines completed at Austin identified multiple IP anomalies for drill testing, one of which is coincident with outcropping copper mineralisation.

At **Mini Me**, geological mapping has located outcropping mineralisation and alteration sporadically over 2,000 metres strike length with widths ranging from 2 to 50 metres. Significantly, veinlets (up to 15 centimetres wide) of primary copper sulphide mineralisation (chalcopyrite) has been observed at a number of locations with rock chip sampling of the mineralisation returning values ranging from 0.13% to **7.8% copper** and 0.01 g/t to **1.4 g/t gold**.

At **El Gordo**, outcropping mineralisation and alteration has been previously identified sporadically over 800 metres strike length with widths ranging from 2 to 10 metres. Rock chip sampling of mineralised surface outcrops has returned values ranging from 0.7% to 12.6% copper, 0.1g/t to 1.0g/t gold and 1.6g/t to 12.5g/t silver.

At **Nigel**, outcropping copper mineralisation primarily associated with intense silica alteration has returned values of 1.7% copper from grab samples.

At **Powers** although no copper mineralisation has been identified (Max Cu in rockchips ~500ppm) there is significant hematite altered granites in the area mapped sporadically over 1km of strike. There is also fluorite evident here.

A further prospect called **Goldmember** was rediscovered after consultation and a short field visit by the original person who found it in the early 1980s. This is a small outcrop (20m x 50m) surrounded by sand and soil cover of intense secondary silica and iron alteration (ferricrete and silcrete) that has returned elevated values of copper, gold and arsenic at surface.

The recognition of multiple outcropping occurrences of copper – gold mineralisation and alteration over a broad area at Illogwa reinforces the potential of the area to host a large structurally controlled iron-oxide-copper-gold mineral system.

• Soil sampling

Soil sampling (-5 mm + 1.6 mm fraction) was completed over areas of outcrop and subcrop in EL 25643. This survey was completed on a 400 m x 400 m or a 400 m x 200 m grid.

• Airborne Magnetic Survey

A 100 m spaced airborne magnetic survey covered the entire interpreted basement and identified significant demagnetised E-W and ESE-WNW structures. Through geological mapping these structures are shown in places to host copper and or gold mineralisation as well as significant alteration such as hematite, silica and fluorite.

• IP Survey

8.8 line km (6 lines) of dipole / dipole IP conducted over Austin (4 lines), a line over the Powers prospect and a line over a gravity anomaly to the south of Powers.

### • Drilling

2 diamond holes for 385m were drilled at the Austin Prospect and 73 AC/RC holes were drilled across the project. This drilling formed part of the broader drill program and was ongoing at the end of the reporting period. See Section 5 for summary of all drill results

#### 5 MITHRIL WORK COMPLETED DURING REPORTING PERIOD

Please refer to Figures 3, 4 and 5 for drill collar locations

### 5.1 Drilling

#### Diamond Drilling

4 holes for 790.5m were drilled. Summary of drill results is presented below.

#### APDD\_001

*Target*: Austin IP anomaly and surface alteration (quartz-hematite-pyrite)

*Drilling Analysis*: The dominant lithology was a Mylonitic, K-feld+Qz rich Granite, with Magnetite and Red Rock alteration that increases with depth. Some large (10s of meters) sections dominated by cm scale Quartz, Haematite and Magnetite veins were intersected, interpreted to align down dip with surface alteration. One of these sections in particular of intense veining (134.7-161 m) displayed a significant magnetic response and was associated with barren sulphide (pyrite) mineralisation. This pyritic mineralisation lies beneath the interpreted chargeability anomaly. The IP anomaly was not explained.

#### APDD\_002

*Target*: Austin IP anomaly beneath surface copper mineralisation in an intensely hematitequartz-carbonate altered shear zone.

*Drilling Analysis*: The dominant lithology was a K-feld+Qz rich Granite, with Chlorite, Haematite, Red Rock alteration and occasionally fluorite veining. This main lithology was dissected by a Quartz and Chlorite vein rich section over 53m from 65-117 m down hole. This section subsequently coincided with the bulk of sulphide mineralisation. There were two intersections of significant Cu mineralisation, these being 12m @ 1726ppm Cu from 56 m, with a maximum value of 6470ppm Cu (65-66 m) and 5m @ 1706ppm Cu from 15 m, with a maximum value of 5720ppm Cu (18-18.7 m) respectively. The larger of the two intercepts (12 m @ 1726ppm Cu) also correlates with a spike in MAG sus values, suggesting a possible magnetic response to mineralisation. The smaller of the two (5m @1706ppm Cu) is directly related to a Quartz vein within the Granitic host rock. Immediately beneath the lower Cu mineralised zone is an interval of 11m (from 67-77 m) containing significant disseminated and stringer pyrite in a mylonite zone that is barren of copper mineralisation.

#### APPDD\_003

*Target:* Austin IP anomaly

#### Drilling Analysis:

The dominant lithology was a K-feld+Qz rich Granite, with Chlorite, and strong Red Rock alteration. This main lithology was interrupted by a small section of Granodiorite of a similar composition from 52-69 m. No significant base metal mineralisation was intersected and the IP anomaly was unexplained. The IP anomaly is proximal to a fence line and is assumed cultural.

#### MMDD\_001

Target: Down dip extension of copper bearing veins at the Mini Me Prospect

*Drilling Analysis*: The two main lithologies intercepted in this hole included:

- An occasionally layered, commonly quartzite rich, partially melted, Metasediment package, which hosts Carbonate veining and common Epidote alteration.
- A Plag+K-feld rich Granite, hosting minor Carbonate and Chlorite veining with common Epidote and Red Rock alteration.

A transitional zone was noted between these two major lithologies over 10 m from 116-126 m, consisting of "faulted" Granite and Metasedimentary packages with late Carbonate veining. The two Feldspar Granite then continues to 232 m where the lithology differs slightly, changing to a complex mix of Mafic dyke (pyroxenite?) and Granite (as before), approximately 50:50 of each unit. Contacts were noted to be both sharp and brecciated, with the presence of minor sulphides (trace Chalcopyrite). The Mafic unit was up to 1m thick in some places. Despite the presence of trace sulphides, the Mini Me hole failed to intersect mineralisation of any significance at depth, despite there being significant mineralisation at surface (grab samples up to 7% Cu), with the two best intercepts being 0.6m @ 814ppm Cu from 59.2 m and 4m @ 801ppm Cu from 21m.

#### Reverse Circulation Drilling

13 holes for 658m were drilled. Summary of drill results is presented below.

#### **MIRC-008:**

Target: El Gordo mineralisation (west)

Result: This was one of the more promising percussion holes, returning 14m @ 0.34% Cu, 1.26g/T Ag and 0.04g/T Au from 18m. The host rock was predominantly granite with quartz veining coinciding with the mineralised interval. Hematite alteration is present from 43m to EOH and is typically mylonitic. Base of oxidation is approximately at 28m.

#### MIRC-007 & MIRC-009:

Target: El Gordo mineralisation (discovery outcrop)

Result: Scissor holes were drilled into the eastern extension of the El Gordo mineralisation. No economic mineralisation was intersected at depth. Weak heamatite/ limonite alteration was intersected in Plan RC001 between 15-38m which is roughly coincident with the downdip projection of surface mineralisation. Mineralisation may be pinching out or perhaps it is depleted at depth. # Note: Holes did not reach the base of oxidation.

#### MIRC-001-005:

Target: Mini Me Mineralisation (oriented section traverse)

Result: Five percussion holes were designed to test the various mineralised lodes of the Mini Me prospect. Several copper bearing quartz veins were intersected, however, these intervals were typically less than 2m and carried trace gold (up to 0.03g/T). These veins appear to be steeply dipping ( $65^{0}$ - $75^{0}$ ), which is steeper than the  $50^{0}$  dip at surface. Host rocks were typically sheared granites with subtle red rock alteration occurring as 'halos' around some of the mineralised quartz veins. Carbonates and amphibolites were also intersected.

#### **MIRC-006:**

Target: Mini Me Mineralisation (discovery outcrop)

Result: This hole was drilled directly under the main Mini Me horizon where two lodes of strong copper mineralisation are evident at surface, separated by a 2m wide carbonate vein. Two, thin quartz veins were intersected carrying trace copper only. The carbonate vein was not intersected in the drilling. No notable base-metal or gold mineralisation was intersected throughout the hole. Base of oxidation occurs at 24m.

#### **MIRC-010:**

Target: 2x Fe-Stone horizons at Goldmember

Result: A dominant 2m wide Fe-stone horizon was intersected at 8m, carrying 0.23% Cu and 0.018g/t Au. Chlorite alteration halo was noted around this horizon to a depth of 22m. The remaining ironstone horizon was not intersected.

Dominant lithologies were sheared granites, mafic pods and magnetic granite +/- pyrite in the last 7m of the hole.

#### MIRC-011:

Target: 2x Fe-Stone horizons at Goldmember

Result: A 4m wide Fe-stone was intersected with trace Cu and Au only. The remaining hole intersected sheared granitic gneisses with no mineralisation. The remaining ironstone horizon was not intersected.

#### MIRC-012 & 013:

Target: Nigel mineralisation

Result: MIRC-012 intersected the targeted horizon with 10m @ 0.34% Cu from 10m. MIRC-013 stepped back 35m and attempted to intersect this horizon below the base of oxidation. No mineralisation was intersected. Dominant rocktypes were sheared granites/ granitic gneisses +/- epidote, pods of amphibolites and a norite +/- cubic pyrite (last 7m of MIRC013). Mineralisation is either faulted out or pinching at depth. Drill collar locations shown in Figure 3.



Figure 3: Location of drill collars at Nigel Prospect.

#### Aircore Drilling

62 holes for 419.5m were drilled. Summary of drill results is presented below.

#### AC03 (drill holes 001-005)

Target: Magnetic low in between two magnetic highs

*Drilling Analysis*: The dominant lithology was interpreted to be a K-feld+Qz rich Granite. The deepest hole along this transverse only went to 9 m, and results returned a lack of anomalous base metal values.

#### AC04 (drill holes 001-007)

#### Target: 'Bullseye' Magnetic high

*Drilling Analysis*: The dominant lithology recorded was a mica rich K-feld+Qz Granitic schist, along with a slightly magnetic Amphibolite. The highest assay result returned was 3 m @ 218ppm Cu from surface in hole AC04\_001. There was a slight rise in mag sus values as the traverse approached the peak of the magnetic high and the values subsequently fell away afterwards.

#### AC05 (drill holes 001-021)

Target: Varying Magnetic terranes along with a high value Cu grab sample at surface.

*Drilling Analysis*: The lithology was dominated by a felsic, mica rich, medium to coarse grained Granite, a Mica rich schist, Quartz grains (both milky and glassy) and minor occurrences of metasediments. The highest Cu value was 3 m @ 230ppm from 0 m in hole AC05\_012, being the highest for all the air core program. The mag sus values failed to indicate or replicate that magnetic terrane seen in the magnetic data and there was no replication of the high value Cu (9880ppm) grab sample.

#### AC07 (drill holes 001-007)

*Target*: Magnetic low and associated mafics

*Drilling Analysis*: Drilling was unable to encompass the whole magnetic low due to inaccessible ground. The dominant lithology was Saprolite and Granite. This drill traverse was designed to test the presence of mafics associated with the magnetic low, however no anomalous Ni or Cr values were returned.

#### AC10 (drill holes 001-013)

#### *Target*: IP anomaly

*Drilling Analysis*: The dominant lithology consisted of a Bio+Qz+K-feld Granite, which was mylonitic in places and was associated with a late stage carbonate. No anomalous base metal values were returned and the IP anomaly was not explained. The IP anomaly is proximal to a fence line and is a possible cause to the anomaly.

#### AC11 (drill holes 001-009)

*Target*: Discrete Mag high and extension of surface mineralisation

*Drilling Analysis*: The dominant lithology was a mylonitic, K-feldspar rich, Epidote altered Granite, with minor Haematite dusting and shearing. Despite surface grab samples of up to 4.6% Cu within the vicinity, no anomalous base metal values were returned from assay results.

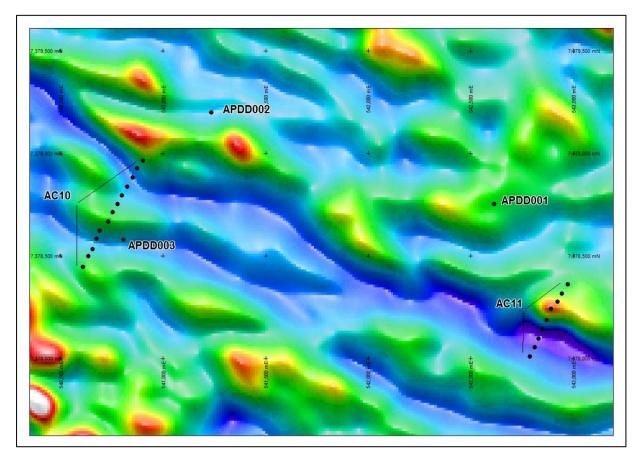


Figure 4: Location of drilling at the Austin Prospect. RTP magnetic image shown in backround.

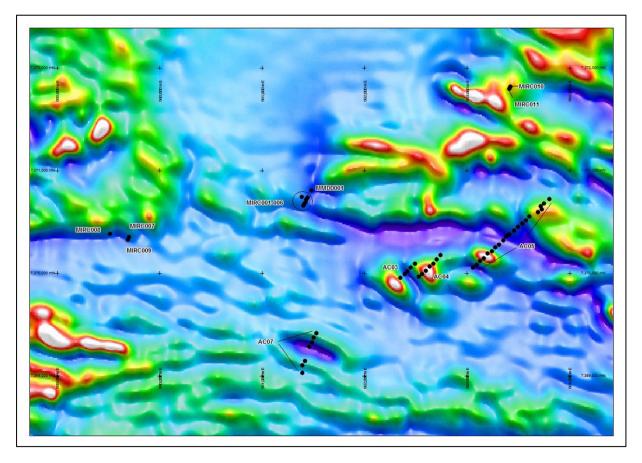


Figure 5: Location of drilling at the El Gordo, Mini Me and Goldmember Prospects. RTP magnetic image shown in backround.

#### 5.2 Induced Polarisation Survey

#### Refer to Appendix 13 for geophysics report

Gradient array and dipole-dipole IP/resistivity surveying was conducted over the West Austin and Mini Me prospects during November 2012. The IP surveys were designed to follow up a good VTEM response along strike from the known Cu mineralisation at Austin and a string of more subtle fault style VTEM anomalies in the vicinity of structurally hosted Cu mineralisation mapped at Mini Me.

The main aim of the surveys was to test for chargeable responses coincident with the VTEM anomalies and/or mapped mineralised trends. Surveying was conducted between the 14th and 25th November 2012 by Search Exploration. Four blocks of gradient array data were acquired, comprising 24 lines (24 linekm) and 480 readings. A single line of 2D dipole–dipole IP/resistivity was also acquired over a strong gradient array IP anomaly on the western part of Mini Me, which constitutes an additional 1.2km of data.

Overall the aims of the IP program were achieved. The VTEM anomalies were found to be coincident with resistivity lows in the gradient array data, but unfortunately did not display an associated chargeable response. These coincident VTEM/resistivity anomalies are attributed to ground water within fault/shear zones.

The positive outcome of the survey program is that there are strong chargeable responses in the gradient array data (up to 10 x background) coincident with mapped surface mineralisation in a structurally interesting area in the western part of MiniMe (Mini Me West Prospect). The main chargeable trend is about 800–900m long, although there may be some discontinuity along strike. The dipole-dipole IP line acquired over the best part of this trend confirms the presence of a strongly chargeable body (50–60 mV/V) extending at depth. The interpreted dip of the main chargeable body in both the gradient and dipole-dipole IP data is to the southeast, which is contrary to the dip of the modelled VTEM anomalies in this area.

The Mini Me West IP feature was drill tested during September of 2013.

#### 5.3 Soil Survey

An additional 612 soil samples were taken over the eastern portion of EL25643 (Figure 6). The majority of these samples were infill samples over areas of interest. As a result of this, a new prospect called Ivana was discovered after following up a 240ppm Cu anomaly. Ivana sits on a major ESE-WNW trending structure, parallel to the Mini Me Structure and consists of chert and hematite alteration in granite, on a small sub-cropping rise.

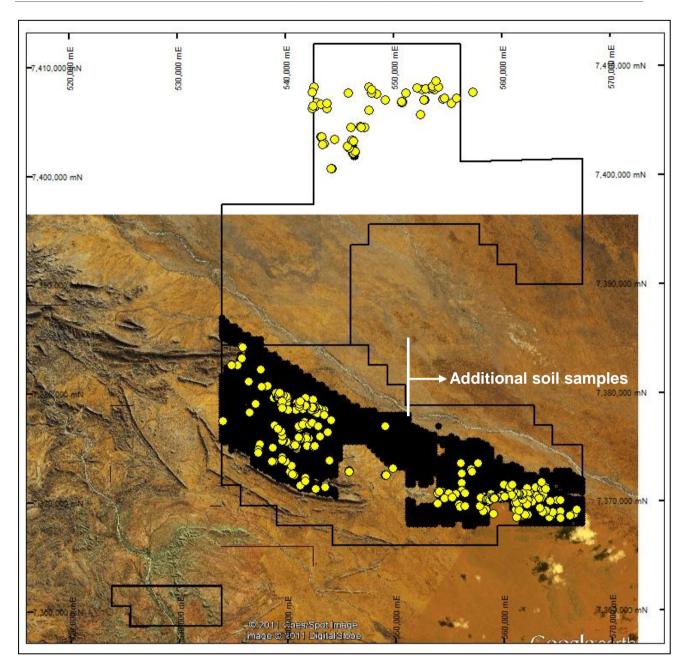


Figure 6: Total combined surface sample assay data (yellow dots) and soil samples (black dots) shown across the Sammy Project.

#### 5.4 Geological Mapping/ Sampling

Geological mapping and sampling was conducted at the Mini Me West Prospect. This mapping overlapped with the 10x backround chargeability features detected in the IP survey (Figure 7). A series of thin copper bearing quartz veins were mapped in a package of granitic and amphibolite rocktypes. A 20x20m zone of intense silica hematite + secondary copper mineralisation is coincident with the peak chargeable feature.

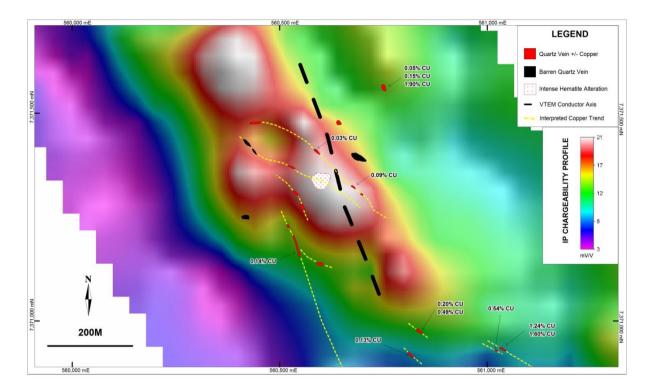


Figure 7: Chargeability anomaly with geological mapping

#### 6 CONCLUSIONS AND PLANNED WORK 2012-13

Drilling intersected thin veinlets of copper sulphides and alteration assemblages consistent with IOCG style mineralisation. These results are encouraging and further drilling will be conducted during the following reporting period, particularly at the Mini Me West Prospect where mapped copper mineralisation is coincident with a large 800m long chargeability anomaly.

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#### 7 References

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