EL28175 – HARRY CREEK
EL28271 – BALD HILL
EL28340 – BUSHY PARK

YAMBAH PROJECT

YEAR 4 ANNUAL REPORT

For the Period

01 October 2013 to 30 September 2014

Compiled by

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MAP REFERENCE: Alice Springs 250K - Sheet SG53-14
Target Commodities: Copper, Gold, Lead & Zinc

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All data provided is of GDA94 Datum, Zone 53.

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SUMMARY

This report presents the work completed during the thrid year of tenure on Harry Creek (EL28175), Bald Hill (EL28271), and Bushy Park (EL28340) tenements, collectively known as the Yambah Project.

Work completed during the reporting period included:

- Complete review of historical data
- Bushy Park Tenement Reduction

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1.0 Introduction

This is the fourth report for work completed on Mithril's Yambah Project, combining the Harry Creek (EL28175), Bald Hill (EL28271), and Bushy Park (EL28340) tenements, for the period ending 29 September 2014. The tenements are located to the north and north east of Alice Springs, as shown in Figure 1. They cover parts of five pastoral stations, namely Yambah, Bushy Park, The Garden, Bond Springs and Aileron.

Access to the tenements is via the Stuart and Plenty Highways, the Arltunga Tourist Drive and good station-tracks. The terrain varies from grassy and scrubby flats and plains to rugged hills rising some 300m above the surrounding plains, most of which cannot be traversed by vehicle.

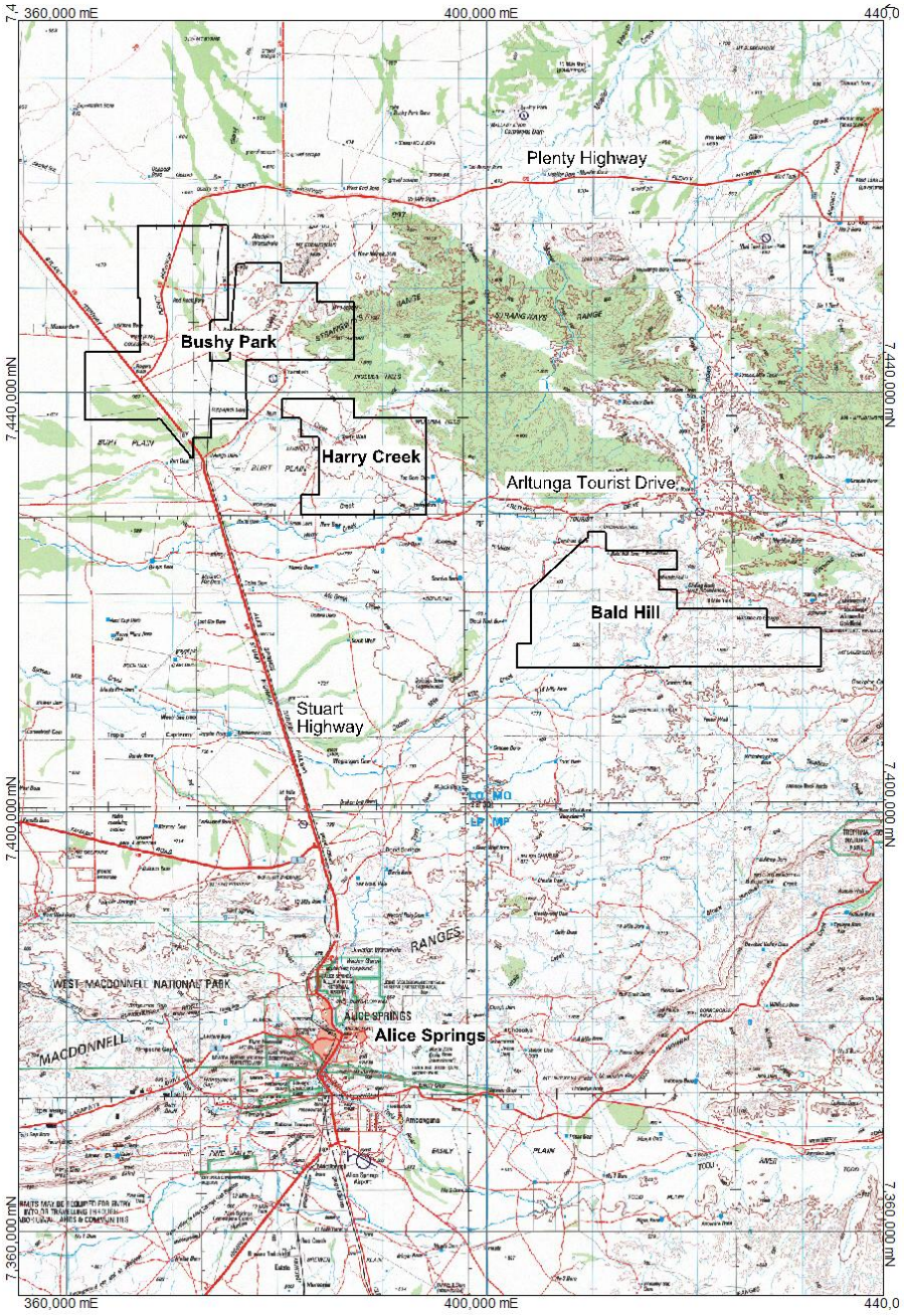

Figure 1: Location of Yambah Project.

2.0 TENURE

Tenure of the Yambah Project is summarised in Table 1.

Name	EL Number	Title Holder	Grant Blocks	Grant area (km^2)	Grant Date
Harry Creek	28175	Mithril Resources Ltd	36	114	9/2/2011
Bald Hill	28271	Mithril Resources Ltd	75	219	6/4/2011
Bushy Park*	28340	Mithril Resources Ltd	96*	290	4/7/2011

Table 1: Summary of Yambah tenure.

* Bushy Park was voluntarily reduced to 58 blocks on the 21/08/2014.

3.0 GEOLOGY

The Yambah Project lies within the Aileron Province of the Arunta Region. Outcropping and interpreted basement geology is comprised of the Palaeoproterozoic (1.8–1.7 Ga) Strangways Metamorphic Complex (SMC) and mafic intrusives. The SMC consists of felsic and mafic granulites, orthogneiss, paragniess, minor calsilicates, iron formations, and granitoids. Retrograde schists and mylonites are found in high-strain zones formed during the Palaeozoic Alice Springs Orogeny. Quaternary aeolian sands, alluvium, and calcrete generally cover low-lying areas and plains.

Known base-metal occurrences (Cu-Zn-Pb±Ag±Au) are stratabound and have largely experienced the same metamorphic history as their host rocks of the SMC. The protoliths to the host rocks are mostly considered to have been volcanics and there is evidence that the mineralisation was syngenetic (Hussey *et al*., 2006). Details of the known mineralisation can be found in Hussey *et al*. (2006).

Surface expressions of mineralisation vary from localised copper-carbonate coatings on joint surfaces (e.g., Tom Brauns, Harry Creek) to lode-horizons (±alteration) 1-20m thick with a strike length of a kilometre or more (e.g., Rankins, Coles Hill). Mineralisation intersected in drill holes at Harry Creek and Coles Hill occurs as sulphides in veins and disseminations (Hussey *et al*., 2006).

4.0 PREVIOUS EXPLORATION

Numerous companies and individuals have explored in the general area covered by the Yambah Project. Previous exploration has been undertaken for metamorphosed polymetallic (Cu-Pb-Zn-Ag-Au) massive sulfide deposits, while more recently, the potential for iron oxide copper gold (IOCG) mineralisation in the area has been recognised.

4.1 Bushy Park EL28340

- Mid 1960s: Northern Territory Mines Branch drilled three diamond holes into the Coles Hill Prospect. Disseminated Zn-Pb-Cu mineralisation was intersected.
- Mid 1970s: Planet Mining NL targeted the Coles Hill Prospect with geo-chemical surveys, costeaning, a ground magnetic survey and an Induced Polarisation survey.
- 1988: Macmahon Construction completed a ground electromagnetic survey of the Coles Hill Prospect. Weak anomalies were defined. Some were tested with costeaning only.
- 1995-1997: Roebuck Resources and Pasminco Exploration completed lag/ soil (MMI)/ stream sediment sampling and RAB drilling. 28 drill holes were drilled into the Coles Hill Prospect, including 2 diamond holes. Sub-economic Zn-Pb-Ag mineralisation was intersected over 1km of strike.
- 2002: Teck/ BHP conducted a single line of Ground EM over a discrete magnetic anomaly north of the Coles Hill Prospect. A potential basement conductor was detected at the southern margin of this magnetic anomaly.

4.2 Harry Creek EL28175

- 1950s: Baldissera sank a 2m deep pit into malachite stained gneiss at the Harry Creek Prospect.
- 1950s: Zinc Corporation collected grab samples at Harry Creek, with up to 22% Cu assayed.
- 1965: BMR conducted a low level aeromagnetic survey over the Strangeways Metamorphic Complex, which defined a zone of magnetic rocks coincident with malachite staining (Harry Creek Prospect).
- 1966: Northern Territory Mines Department drilled a 98m hole under Baldissera's Pit: 4.3m of cummingtonite gneiss was intersected, averaging 0.21% Cu, 0.27% Pb and 2.1% Zinc.
- 1975: Planet Mining NL tested the Harry Creek Prospect with a soil sampling program, a ground magnetic survey and an induced polarisation (IP) survey. Chargeable zones were detected but were not drill tested.
- 1989: Macmahon Construction conducted three fixed loops of Ground EM over the Harry Creek Prospect. Three key conductors were identified and drill tested. No significant mineralisation was intersected. Conductors were not explained.

4.3 Bald Hill EL28271

Rankins Cu-Au Prospect:

This prospect covers two separate base metal areas, separated by 300m. The local host sequence consists of quartz-magnetite rock, chlorite schist and calc-silicates.

Timeline of Previous Exploration:

- 1969-73: Central Pacific Minerals pitted for secondary copper mineralisation and tested Rankins with an IP survey. Chargeable anomalies were detected, some coinciding with outcropping mineralised iron formations. The southern area was drilled with two holes but weak mineralisation was encountered only. The northern occurrence was tested with one percussion hole: 1.9m @ 2.5% Pb, 1.2% Zn with up to 20% magnetite+pyrite+galena+sphalerite
- 1985: Aurotech assayed a suite of samples from Rankins with up to 0.4ppm Au in quartz-hematite rock
- 2007: Maximus completed a HoisTEM survey and defined early to mid time anomalies. These were followed up with three lines of GEM by Minotaur Exploration. Minotaur also completed a gravity survey over the tenement package, which included Rankins

Gecko Prospect

Gossans are associated with chert-hematite-carbonate horizons within amphibolitic schists, which are bounded by quartz-feldspar gneisses. Mineralisation is stratabound.

Timeline of Previous Exploration:

- 1971: Central Pacific Minerals drilled five percussion holes into the prospect and intersected low grade zinc and disseminated pyrite. Drill logs are not available
- 2003: Tanami Gold completed a measured geological section and a ground magnetic survey. The ground magnetic survey showed mineralisation is related to magnetisation
- 2007: Maximus completed a HoisTEM survey that identified a number of early to mid time anomalies.

Regional Exploration

- 1980s: BHP conducted a large stream sediment survey over the tenement. Little follow up of anomalous areas was conducted

5.0 MITHRIL EXPLORATION

5.1 2011

- Compilation and digitisation of historic data
- Acquisition and processing of ASTER data

5.2 2012

- Geochemical sampling
- Ground magnetic surveys across Red Rock Bore and Harry Creek Prospects
- Mapping at Turners Prospect

5.3 2013

- Ground magnetic surveys were conducted over the Red Rock Bore and Harry Creek Prospects in the previous reporting period, however, due to time constraints data interpretation did not occur. The Red Rock Bore survey successfully imaged the contact between the magnetic quartz-biotite-anthophyllite gneiss and mafic gneiss (magnetic low). The lode horizon projected to surface, sits at this contact and is a useful targeting platform going forward (Figure 2).

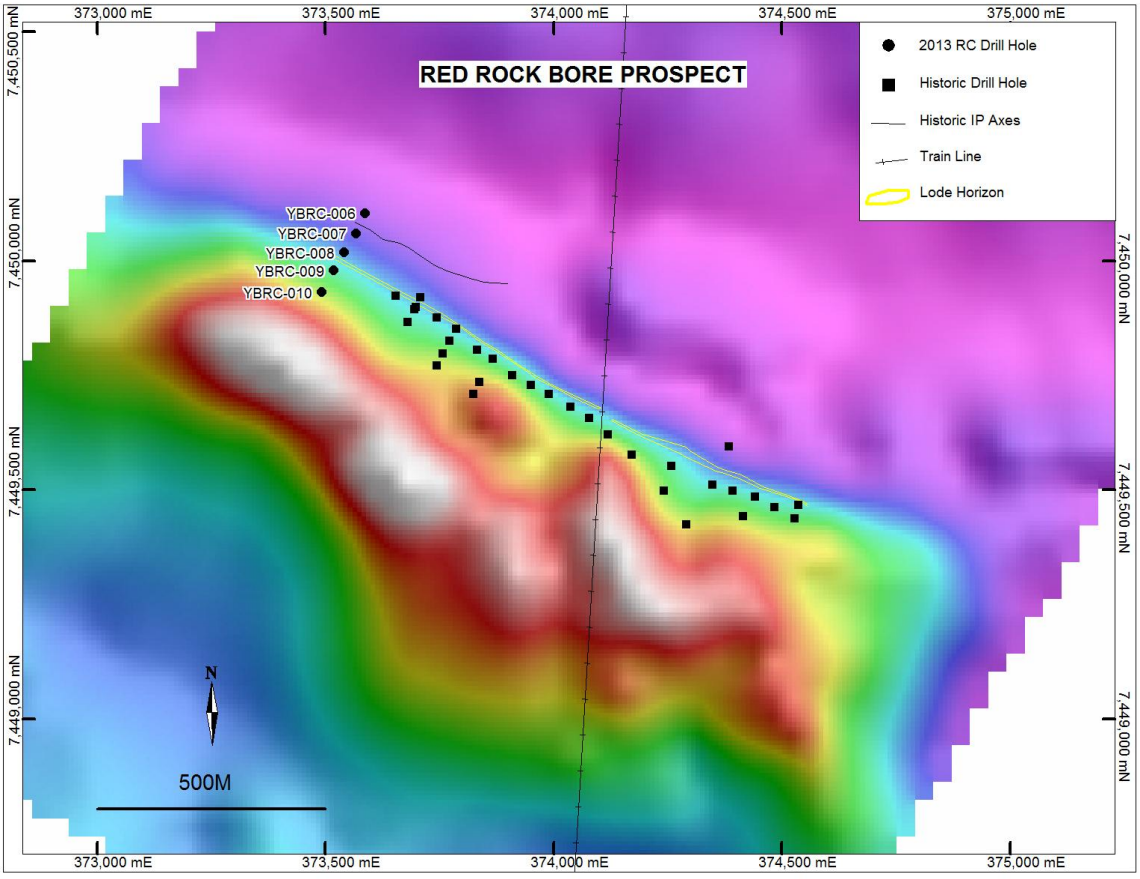

Figure 2: RTP image of Red Rock Bore. Mineralisation sits at the magnetic high-low contact.

At Harry Creek, the regional magnetic data shows the magnetic high associated with the mineralisation continuing to the east for an additional one kilometre. The aim of the ground magnetic survey was to better define this target. The data shows the Harry Creek magnetic feature is an isolated, 600m long WNW-ESE striking feature, possibly folded at its eastern extent (Figure 3). A more subtle, discontinuous magnetic package exists east of the Harry Creek Prospect and ground follow up work shows this is due to quartzofeldspathic-magnetite gneisses. A detailed soil sampling program was conducted over the quartz-feldspar-magnetite gneiss package and results are presented in Section 6.2.

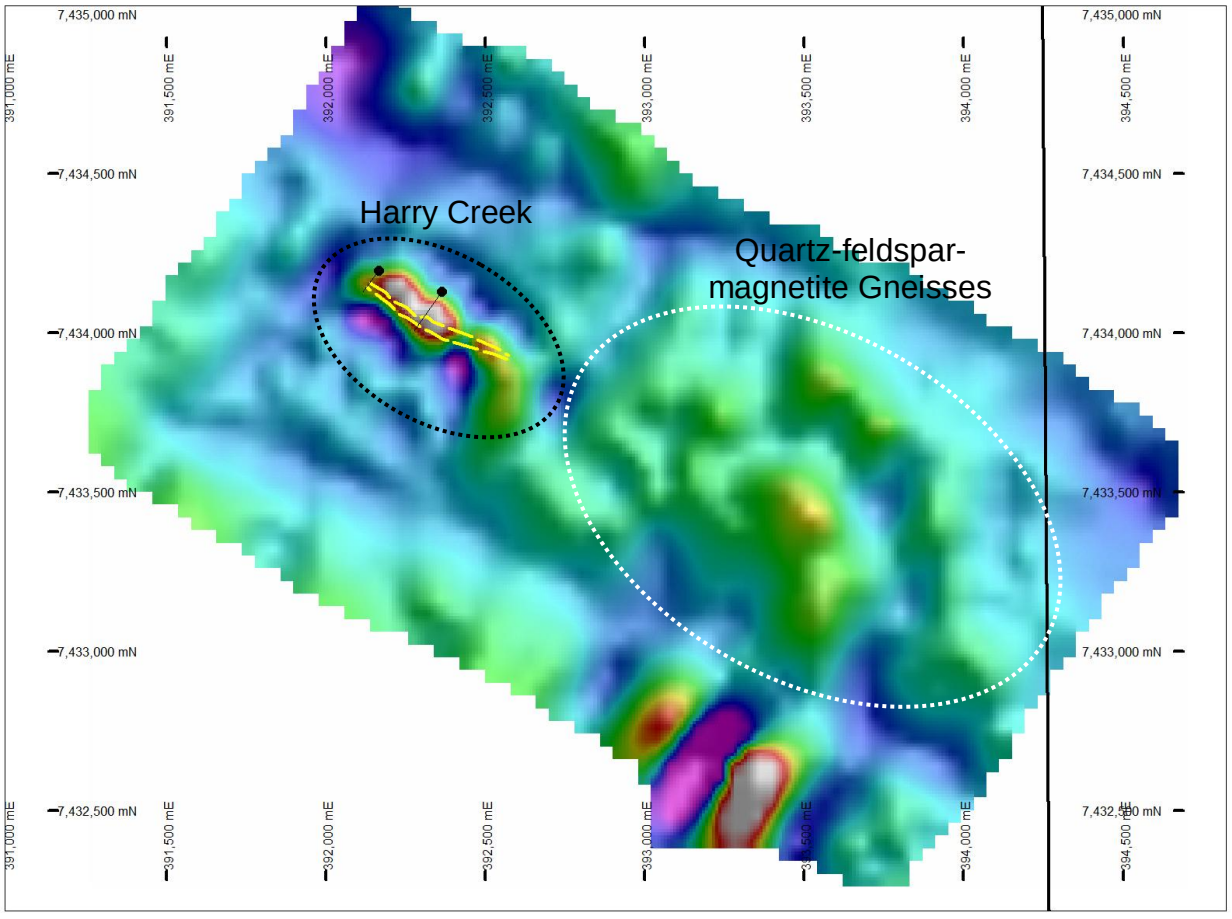

Figure 3: RTP image of Harry Creek Prospect. Harry Creek trend extends for 600m only and may be folded at its eastern extent. The more subtle, discontinuous magnetic package east of Harry Creek is due to quartz-feldspar-magnetite gneisses. The HW and FW contacts of mineralisation are shown as yellow lines. 2013 drill holes shown as black dots.

- Soil Sampling

Harry Creek

A detailed soil sampling program was conducted at 100mx100m centres east of the Harry Creek Prospect to test for possible extensions to mineralisation. Figure 4 is a gridded image displaying Zn. The Harry Creek mineralisation was detected in the NW sector of the survey. A dominant Zn anomaly is apparent at 393200mE/ 7432800mN; weakly altered basement was noted at this location.

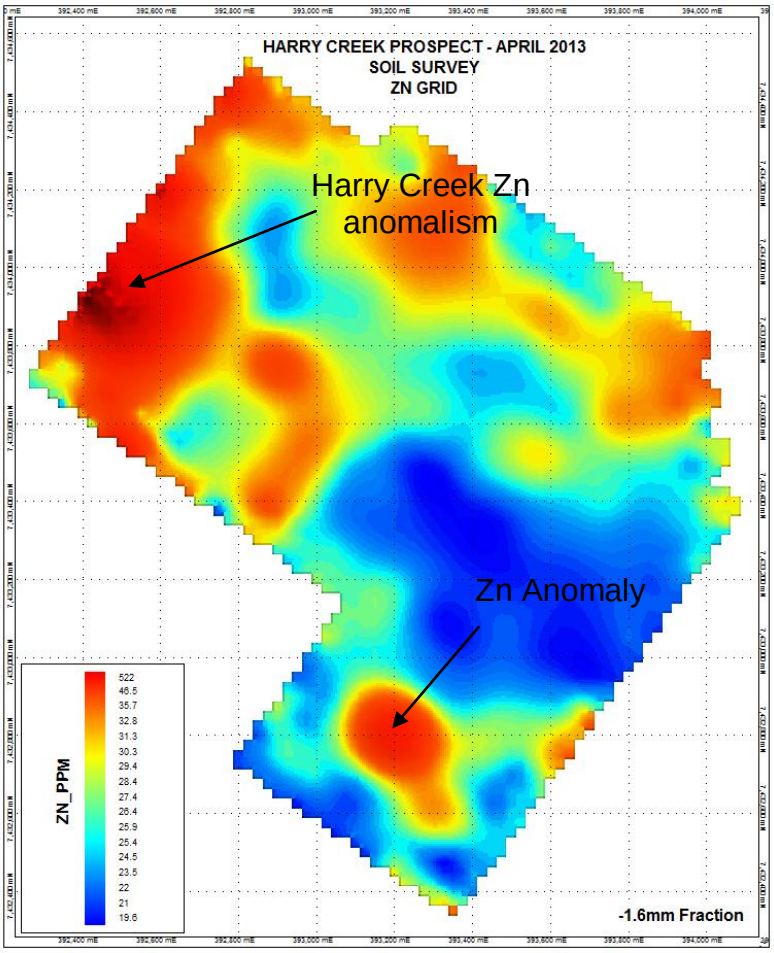

Figure 4: Gridded Zn image over eastern sector of Harry Creek Prospect

Red Rock Bore

Three broad spaced orientated soil sample lines were taken across the western extension to the Red Rock Bore mineralisation. Samples showed elevated Cu up to 44ppm, potentially extending the mineralised envelope by 150m. # Follow up drilling confirmed this.

Franks Find

Two orientated soil sample lines were acquired over the Franks Find Prospect, following up anomalous Zn-Pb float. No base metal anomalism was detected (Figure 5)

- Geochemical sampling

Several grab samples were collected across the project area. Two new prospects were discovered:

Franks Find: 250mx100m wide zone of Fe-Stone float anomalous in Zn and Cu. Sample 10005 returned: 1140ppm Cu, 703ppm Zn

Cu-Magnetite Gossan: Historic prospect located at 374422mE/ 7452528mN (Figure 5). As the name suggests this is a dominant magnetite horizon hosting secondary copper mineralisation over a strike length of ~100m. The unit is 5-10m wide. Grab samples returned up to: 2.96% Cu, 569ppm Zn and 0.12g/T Au

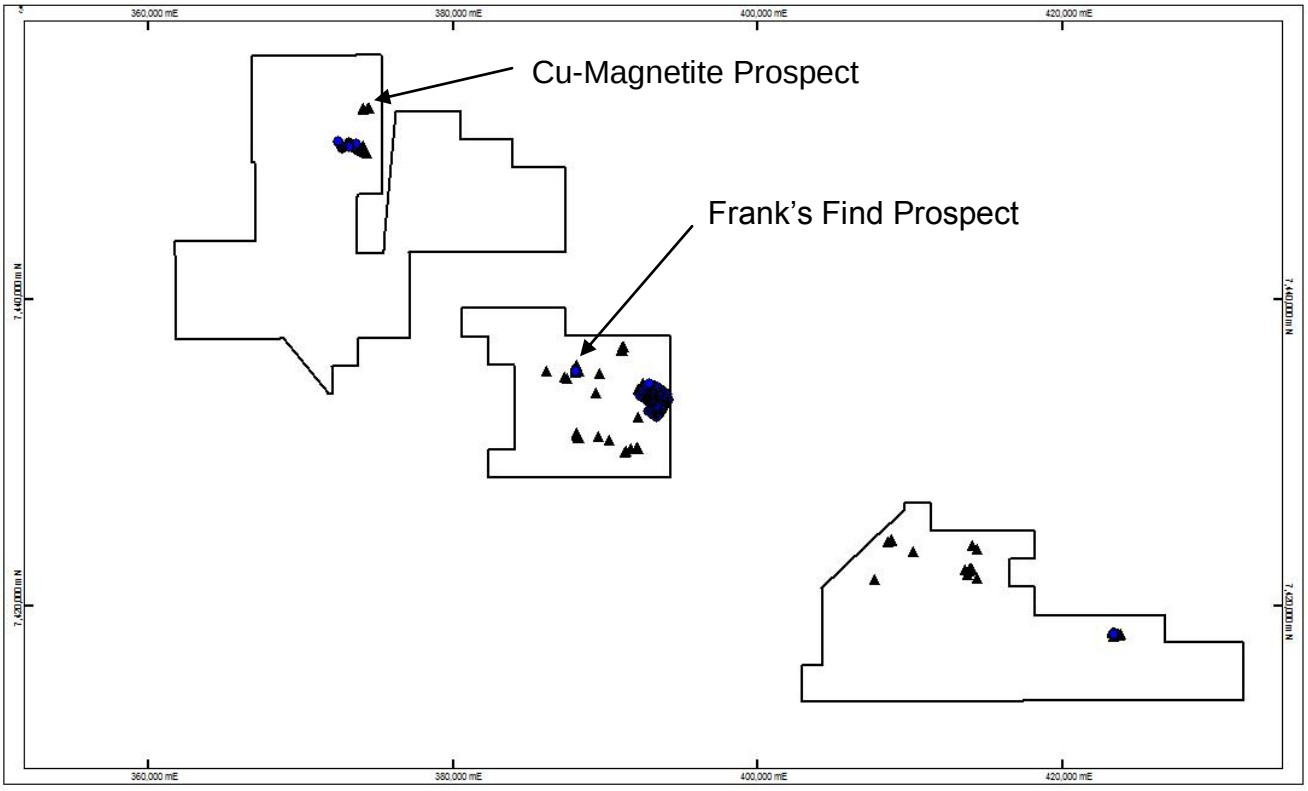

Figure 5: Soil and grab sample location taken over the life of the project. Soil samples = blue circles. Grab samples = black triangles.

- Drilling

During the 21/09/2013 – 25/09/2013, 13 RC holes were drilled across the Yambah Project for a total of 1639m.

Summary of results is presented below and drill locations are presented in Figure 5.

Harry Creek

YBRC-001

Target:

- Harry Creek Mineralisation

- Drill downdip of historic DDH1

Result: The HW stratigraphy consists of quartzofeldspathic gneisses, quartzites and thin quartz veins with variable magnetite alteration. Zn-Cu HW alteration was observed between 74-84m in a mafic gneiss or Amphibolite and graded into a Cummingtonite Gneiss +/- magnetite. The Cummingtonite Gneiss represents the lode horizon and returned 41m @ 0.31% Zn, 0.11% Pb, 0.12% Cu, 0.37g/T Ag and 0.01g/T Au (true width thickness of 34m) from 81m. No visible lead or zinc was observed in the drill cuttings and chalcopyrite was noted between 110-119m. The lode horizon has thickened at depth with historic DDH1 intersecting ~16m true width compared to YBRC-001 which intersected ~34m true width. This is probably the result of structural thickening. Zn grades appear to diminish with depth and this may be a function of supergene enrichment in DDH1, given the mineralisation was intersected above the base of oxidation. The mineralised package appears to be zoned, with a Zn dominant HW and Cu dominant FW. The FW stratigraphy consists of hornblende-magnetite gneisses and calc-silicates at EOH.

Recommendation: Given the low grades, Harry Creek is a second order priority. Any further work will be in the form of GPX surveying.

YBRC-002:

Target:

- Western extension of Harry Creek Mineralisation
- Drill downdip of historic PDHC-2
- Historic EM Feature

Result: HW stratigraphy consists of quartzite and quartz-hornblende-magnetite gneiss. Subtle Zn dispersion was recorded between 27-43m and this lies directly above the mineralised package. The lode horizon or Cummingtonite Gneiss was intersected over 30m from 39m and consisted of the following significant intercepts:

43-48m: 0.1% Zn, 0.17% Cu and 0.17g.T Au

54-66m: 0.12% Zn, 0.08% Cu and 0.02g/T Au.

Strongly weathered quartz-biotite-hornblende gneiss verging on clay was intersected between 80-86m and carried elevated Zn and Cu. This unit correlates with logged interval 32-40m in PDHC-2.

No semi-massive to massive sulphides were intersected that explain the historic EM feature. Without access to the original data it is difficult to come to any real conclusions here. Either the EM feature is deeper than tested or it does not exist.

Recommendation: Given the low grades, Harry Creek is a second order priority. Any further work will be in the form of GPX surveying.

Franks Find

Target: Gossanous float at surface with elevated Zn-Pb and Cu

Result: Gravel cover to a depth of ~3m. Weathered quartz sericite-plagioclase basement down to 39m. No base metal or Au anomalism.

Assume gossanous float at surface is transported.

Recommendation: No further work required

Red Rock Bore

YBRC-006-010:

Target:

Three parallel horizons:

- Western continuation of the lode horizon
- Historic chargeability anomaly A6
- Laterite horizon.

Result: Section line of five holes all drilled to the north, based on a steeply dipping system to the south.

YBRC-006 targeted the laterite. A strong weathering profile dominated the hole down to 73m. No base metal anomalism was detected in this hole.

YBRC-007 was planned to intersect the historic chargeability anomaly A6, however, failed to intersect the target. YBRC-008 intersected elevated Cu-Pb-Zn between 8-15m in basement clays. This horizon may represent FW alteration to the Red Rock Bore Lode or may represent the historic IP anomaly A6 (or both). NOTE: there was up to a 30m error in geo-rectifying the historic IP map.

The Red Rock Bore lode horizon was intersected in both YBRC-009 and 010. YBRC-009: 20m @ 0.11% Zn, 0.05% Cu from 34m in weathered basement. YBRC-010: 9m @ 0.24% Zn, 0.17% Cu 2.61g/T Ag from 97m in fresh rock. HW stratigraphy in YBRC-010 consisted of weathered clayey basement and a magnetic package consisting of

quartz- biotite-anthophyllite Gneiss. The lode horizon was either a quartzite +/- magnetite or garnetiferous gneiss. Chalcopyrite and pyrite were the only sulphide minerals observed – no galena or sphalerite. The FW stratigraphy consisted of weakly magnetic mafic gneisses and smokey quartzite.

The Red Rock Bore mineralisation clearly extends west along strike and continues to form at the magnetic high to magnetic low contact. Mineralisation remains open in all directions.

Recommendation:

RRB requires thicker and higher grade mineralised intervals to be economic. Structural traps or thickening associated with folding are an obvious way to facilitate this. Further ground magnetic surveying is needed to better refine the magnetic high to low contact to the west, with a view to interrogate areas that appear complex/ folded etc.

Review existing ground magnetic data.

Gradient Array IP Survey following ground magnetic survey OR aircore drilling program following ground magnetic survey

Coles Hill North:

Target: Broad EM feature that sits in a similar structural setting to the Red Rock Bore mineralisation. Aim of ascertaining whether or not the rock types in this area are analogous to the Red Rock Bore Prospect

Result: Three angled holes were drilled on average down to 80m. All holes intersected a strong weathering profile to end of hole, typically consisting of transported cover and wet plasticine clays with a mottled profile. No base metal or Au anomalism detected.

Recommendation: Unlikely to explore this deep undercover especially given the lack of geochemical support. No further work required.

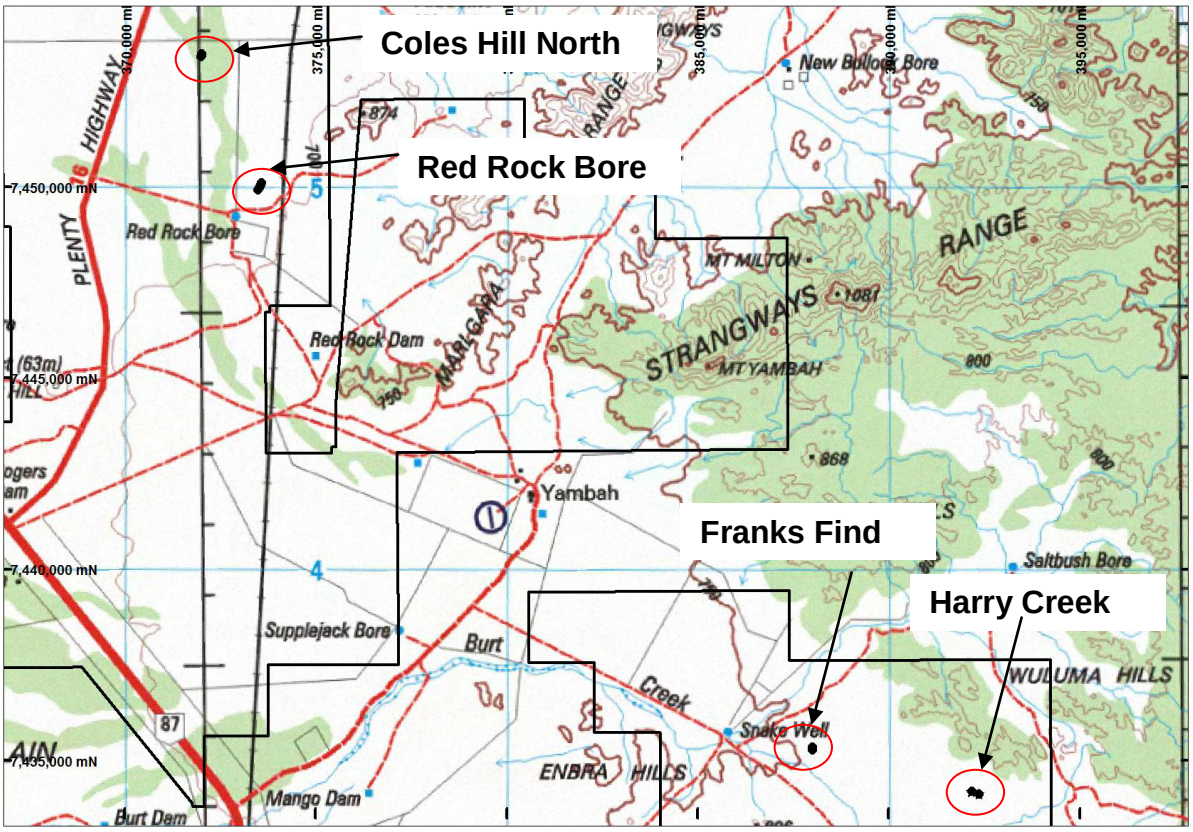

Figure 6: Location of the 2013 drill campaign

6.0 WORK COMPLETED DURING THE REPORTING PERIOD

A complete review of the combined tenement package was undertaken with a view to reduced exploration ground that was not considered prospective for base metal and or gold mineralisation. As a result Bushy Park (EL28340) was voluntarily reduced by 38 blocks on the 21/08/2014 (Figure 7).

No ground exploration work was conducted during the reporting period.

Figure 7: Bushy Park Tenement – area surrendered shown in red

7.0 CONCLUSIONS AND PLANNED WORK

Following the project review conducted this year key targets going forward are:
Red Rock Bore - given the success of the previous ground magnetic survey in imaging the lode horizon, further ground magnetic surveys will be undertaken west of Red Rock Bore. An induced polarization survey will then help generate drill targets.

Further work is required at Gecko and Turners. A detailed geological map will be constructed at Gecko and electrical geophysics is planned at Turners.

REFERENCES

Hussey, K.J., Huston, D.L., and Claoué-Long, J.C., 2006. Geology and origin of some Cu-Pb-Zn (-Au-Ag) deposits in the Strangways Metamorphic Complex, Arunta Region, Northern Territory. *Northern Territory Geological Survey, Report 17.*

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