

Hammer Hill AC Drilling Program

The Hammer Hill Project is located approximately 250 km NE of Alice Springs off the Plenty Highway. A ground magnetic survey was conducted over the Project during April-May 2009 to assist in targeting the drilling. Magnetic data was collected along proposed drilling traverses to assist in the locating of magnetic stratigraphy. A total of 7.9 km of magnetic readings were collected at 1m intervals along 10 lines. The data were collected in house by Mithril Resources field staff.

An aircore drilling program targeting magnetic stratigraphy was completed on the Hammer Hill ELs 9725 and 10136 during mid-May. 52 AC holes were drilled for a total of 1630m. The holes were drilled to depths varying between 9 and 72m.

Access to the sites was not difficult. Where possible existing station tracks were utilized or upgraded.

Following a heritage survey, additional tracks and lines were cleared with a front end loader avoiding thick scrub where possible. A small temporary drilling camp was established off an existing station track.

Drilling was completed in five days with few operational problems.

The drill cuttings were collected at one metre intervals and placed in heaps near the drill hole. The holes were sampled in 2 metre composites (each heap was sampled by an aluminium scoop to produce a sample of 1kg-2kg in mass). Each 2m interval was measured for magnetic susceptibility and geologically logged. Representative chips from each 2m interval were collected in chip trays.

All samples were submitted to ALS in Alice Springs for preparation and analysis for precious metals and major and minor elements. Analysis by ICPAES following fire assay was carried out for precious metals (Au, Pt, Pd) and ICPAES following a four acid digest was done for the other elements (33).

Each hole, not drilled directly into outcrop, intersected one to six metres of aeolian sand followed by one to thirty metres of transported sandy clays and gravel. Depth to base of bedrock weathering varied greatly from six metres to sixty-six metres and appeared to be controlled by stratigraphy and structure.

Variations on the following rock types were encountered: amphibolite, calc-silicate, mafic and felsic gneiss and peridotite. In most cases these rocktypes were weathered.

Magnetic susceptibility (ms) measurements were taken (using a handheld KT-9 Kappameter) on 2m composite samples during the drilling program and were used to interpret whether or not the targeted modelled magnetic features were intersected. Background field readings for non-magnetic rocks in the area appear to be <1 SI and >2 SI is being considered anomalous for this interpretation.

Traverse 1, which included drill holes HHAC 001-008, intersected intervals of significant magnetic susceptibility ($2 < ms < 8.25$) in drill holes HHAC 002, 003, 004, 006 and 007. These intersections match the magnetic models. Magnetically susceptible intersections in drill holes HHAC 002, 003 and 004 correspond to ultramafic and silicified ultramafic in the geological logs. Magnetically susceptible intersections in drill holes HHAC 006 and 007 correspond to amphibolites and felsic gneiss in the geological logs.

Traverse 2 which included drill holes HHAC 009-016 intersected only one interval of significant magnetic susceptibility ($2 < \text{ms} < 3.94$) at the base of drill hole HHAC 014. This intersection does match the most significant modelled magnetic body however none of the other modelled magnetic bodies were represented by the magnetic susceptibility data on this traverse. The magnetically susceptible intersection in drill holes HHAC 014 corresponds to garnet rich felsic gneiss in the geological log. No ultramafic rock was intersected on this traverse.

Traverse 3 which included drill holes HHAC 017-020 intersected only one interval of significant magnetic susceptibility ($2 < \text{ms} < 2.63$) at the base of drill hole HHAC 018. This intersection does match the most significant modelled magnetic body however the other minor modelled magnetic body is not represented by the magnetic susceptibility data on this traverse. The magnetically susceptible intersection in drill holes HHAC 018 corresponds to amphibolite in the geological log. No ultramafic rock was intersected on this traverse.

Traverse 4 which included drill holes HHAC 021-025 intersected intervals of significant magnetic susceptibility ($2 < \text{ms} < 18.1$) in drill holes HHAC 021, 022, 023, and 024. These intersections match the magnetic models. Magnetically susceptible intersections in drill holes HHAC 021, 022, 023, and 024 correspond to amphibolite in the geological logs. No ultramafic rock was intersected on this traverse.

Traverse 5 which included drill holes HHAC 026-030 intersected only one interval of significant magnetic susceptibility ($2 < \text{ms} < 2.81$) at the base of drill hole HHAC 027. This intersection does match a significant modelled magnetic body however the other modelled magnetic bodies, which have a broader more intense magnetic response, are not represented by the magnetic susceptibility data on this traverse. The magnetically susceptible intersection in drill holes HHAC 027 corresponds to pelitic gneiss in the geological log. No ultramafic rock was intersected on this traverse.

Traverses 6 and 7 which included drill holes HHAC 031-042 intersected intervals of significant magnetic susceptibility ($2 < \text{ms} < 5.57$) in drill holes HHAC 033, 039 and 042. These intersections do not appear to match the magnetic models and this can be attributed to the ground magnetic survey being conducted 50-100m to the west to avoid interference from a wire fence. Drilling was required to be conducted on/near the road along this fence line due to restrictions from a heritage exclusion area. Drill hole HHAC 033 which intersected significant magnetic susceptibility ($2 < \text{ms} < 4.91$) corresponds to ultramafic and silicified ultramafic in the geological log. Drill hole HHAC 039 which intersected significant magnetic susceptibility ($2 < \text{ms} < 5.57$) corresponds to weathered ultramafic in the geological log. Drill hole HHAC 042 which intersected significant magnetic susceptibility ($2 < \text{ms} < 3.31$) corresponds to amphibolite in the geological log.

Traverses 8 and 9 which included drill holes HHAC 043-048 intersected no intervals of significant magnetic susceptibility. Basement drilled in holes HHAC 043-046 was variable weathered felsic gneiss. Basement drilled in holes HHAC 047 and 048 was weathered sillimanite gneiss. No ultramafic rock was intersected on this traverse.

Traverse 10 which included drill holes HHAC 049-052 intersected no intervals of significant magnetic susceptibility. Basement drilled in all holes was logged as weathered felsic gneiss. No ultramafic rock

was intersected on this traverse, however analytical results indicate elevated La, Ag, P, Ba, Sr and Th over some intervals. This may suggest the presence of some REE/skarn? mineralisation, possibly associated with a magnetic intrusive body not intersected in the drilling.

The drill testing of the targeted of magnetic stratigraphy was successful. Failure to hit intervals of significant magnetic susceptibility down drill holes on some of the traverses is largely considered to be an outcome of the depth of weathering and its effect on the alteration of magnetite.

Anomalous La and Ag plus the maximum assay for Th are recorded in a 2m interval from HHAC 052 at 24 to 26m. Base metals are all at background levels. Elevated Ni, Mg and Cr correspond to intersections of ultramafic rock but do not suggest the presence of magmatic sulphide mineralisation. Fresh peridotite was intersected in HHAC 003 and samples for the interval 40 to 52m were sent for whole rock and REE analysis. Volatile free MgO for this interval averaged 40% confirming peridotite. Moderate Ba and Sr anomalism occurs over 14m near surface in weathered basement in HHAC 050 - max of 4840ppm against a background of 500ppm. Assays for Pt, Pd and Au are all negligible. All maximum elemental assay results are contained in the table below.

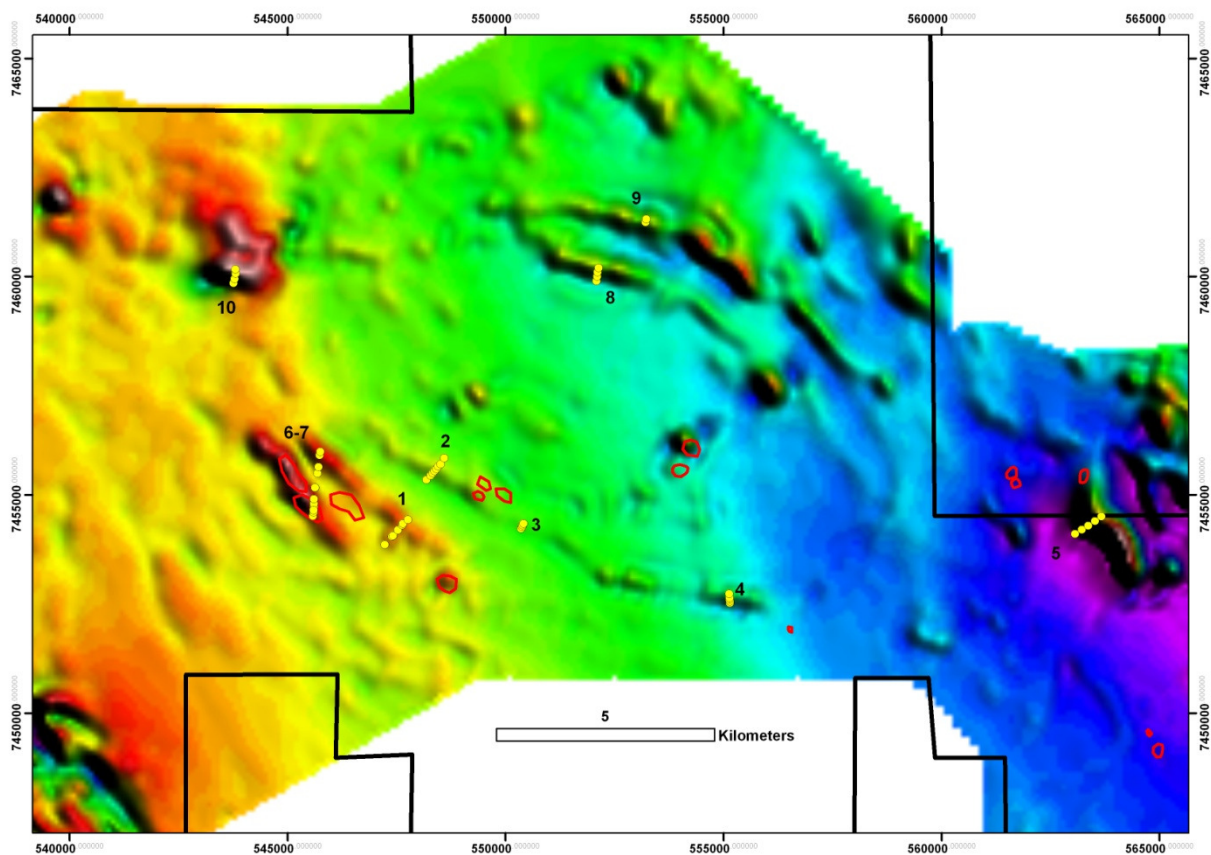


Figure 1: Drillhole (traverse) locations on magnetics. Red polygons indicate outcropping UM.

Element

Ag	ppm	9.5
Al	%	12.5
As	ppm	19
Ba	ppm	4840
Be	ppm	5.7
Bi	ppm	16
Ca	%	19.9
Cd	ppm	0.9
Co	ppm	100
Cr	ppm	2520
Cu	ppm	184
Fe	%	10.65
Ga	ppm	40
K	%	4.02
La	ppm	3580
Mg	%	20.6
Mn	ppm	8330
Mo	ppm	11
Na	%	2.41
Ni	ppm	2040
P	ppm	8440
Pb	ppm	188
S	%	4.33
Sb	ppm	12
Sc	ppm	100
Sr	ppm	3520
Th	ppm	140
Ti	%	3.34
Tl	ppm	10
U	ppm	30
V	ppm	380
W	ppm	40
Zn	ppm	392
Au	ppm	0.013
Pt	ppm	0.013
Pd	ppm	0.005

Maximum assay per element.

