EL 22440

6th Annual Report for Exploration Licence 22440
Period ending 26 February, 2010.

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LIST OF CONTENTS

Page No

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ENCLOSURES

SUMMARY

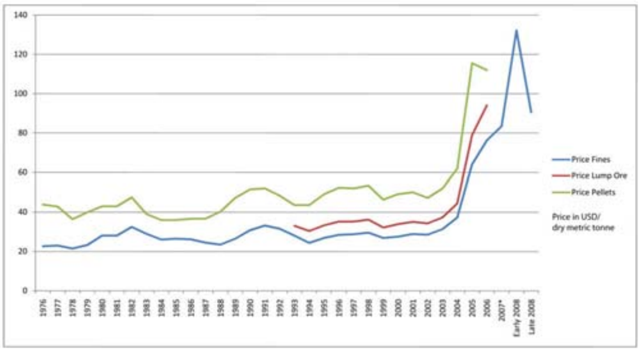
Exploration licence 22440, originally consisting of 25 graticular blocks was granted on the 27th February, 2004. Relinquishments have reduced the area to the current 11 blocks. The licence encompasses the abandoned McCarthy's silver-lead mine and several historical prospect areas bearing variations of that name. Early Proterozoic metasediments of the Mt Partridge, South Alligator and Finnis River Groups are exposed by asymmetrical folds along north-westerly trending axes that are abruptly truncated by the McCarthy Granite of the Cullen Batholith. Mineralisation styles being investigated are consistent with types known throughout the Pine Creek Orogen with a particular focus on copper, lead, zinc, silver and gold. At the end of the last active phase of consolidated exploration in 1995 it was concluded that the area remained prospective for base & precious metals. More recently the iron ore potential of the area has also been noted. Historical exploration has pursued extensive surface sampling and some limited drilling and costeaning. The current exploration methodology has extensively used various geophysical techniques and some targeted rock-chip sampling programs to define prospective areas. During the current reporting period a mapping and sampling program was conducted to define the extent and characteristics of the Frances Creek style hematite rich reefs of the Wildman Siltstone. A total of 90 rock-chip samples were collected along the 1300m strike length reef system which measured 200m at its widest point. XRF analysis results showed an average iron content of 57.5% with only 10.7% silica and 0.084% phosphorus. Other mapping and sampling work was conducted for base and precious metal anomalism where geophysical responses were considered favourable. Results from the 108 samples were generally of low tenor with the exception of several samples taken from close proximity to McCarthy's mine. The potential for significant iron-ore mineralisation appears favourable, and drilling, which is required to further delineate the mineralisation, will be contingent on removing the restrictions currently imposed by the AAPA Authority Certificate. Additional ground geophysical surveys and integration of existing surveys will be required to ensure features at depth can be accurately targeted for drill testing. Preliminary discussions regarding the prospectivity of the EL with various mining entities have been held and commercial options including farm-ins and JV's are being considered.

INTRODUCTION

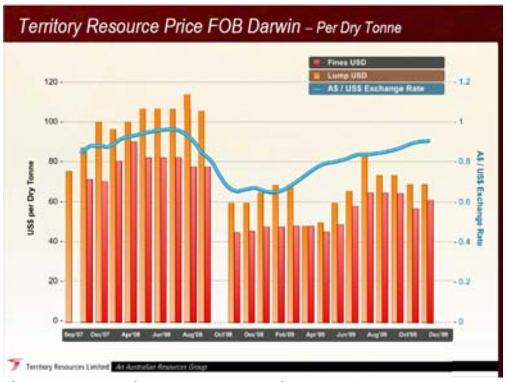
At the end of the last active phase of consolidated exploration in 1995 the conclusion was reached that the base metal and gold potential of the McCarthys area has not been fully tested. Additionally, the potential for iron ore deposits had not been investigated in any meaningful way.

Impetus to re-evaluate the prospectivity of the area for base metals, precious metals and iron ore stemmed from this conclusion, together with that lack of exploration since 1995 and the upward trend over the past decade of relevant metal prices.

Current market demand for Iron Ores is on a continuing upward trend, due predominantly to the relatively recent emergence of the Asian countries, particularly China, as major players in the world economy. Rapid industrialisation of these countries is underpinning the demand for raw steel producing products and prices have risen accordingly. This can be clearly seen in the historical price charts for Iron Ores (Figure 1) with the trebling of prices between 2003 and 2005.



(Source: Advanced Explorations)



(Source: Territory Resources)

Figure 1 – Historical Iron Ores price charts; 1976 to 2008 (left) and 2008 to 2010 (right).

In 1974 the near-by Frances Creek Iron Ore mine ceased operations prematurely after only 7 years of operation due to a combination of factors that made the economics of production un-viable. This remained the case until prices began to rise in 2003 at which time a company, Territory Iron, was established to re-evaluate and develop mining operations within the Frances Creek Iron Ore field. In 2006, after successfully completing the necessary studies and additional exploration the company requested and was granted mining rights to commence production from several partly depleted resources. As part of the arrangement the NT government, via the Darwin Port Corporation, established a bulk-loading facility at the newly developed deep-water port in Darwin. Since 2007, Territory Iron (now Territory Resources) has been ramping up production to its target 1.5Mtpa level and is currently actively looking for additional resources to sustain that level of production beyond the current three year mine life.

The re-establishment of the Frances Creek mining operations has elevated the priority of fully assessing the Iron Ore potential of the EL such that any resource discovery would have the maximum opportunity for development in the near future. In line with this objective, preliminary discussions have been held with Territory Resources to ascertain the level of commercial interest and the timeframe requirements around the discovery and definition of any resource.

1 CONCLUSIONS AND RECOMMENDATIONS

Prospectivity of EL 22440 for base & precious metals remains high with numerous targets requiring drill testing already identified.

The Iron Ore potential of the lease has been realised and confirmed through rigorous mapping and sampling work. Good potential exists for an Iron Ore resource that may be of interest to Territory Resources or other resource companies.

Drilling programs that have been designed, costed, financed and proposed for a number of years remain on hold while access issues are resolved.

A recommendation was made to apply for a two year renewal of EL 22440 and the submission made on the 22nd February 2010. The outcome of the renewal application is unknown at the time of writing the annual report.

Year 7 work recommendations are given in section 8 and are centred on gaining drilling clearances and the completion of a substantial drilling program to identify a resource and move rapidly toward development in conjunction with other parties.

2 LOCATION AND TENURE

Exploration Licence 22440 falls within Pastoral Lease No. 1134, Mary River Cattle Station, and is located 30 kilometres east-north-east of Pine Creek, within the Cullen Mineral Field. It is located on the Ranford Hill 1:100,000 map sheet, and the Moline and Wandie 1:50,000 map sheets. Access is via the Stuart Highway to Pine Creek and then via the Kakadu Highway and along station tracks (Figure 2). These tracks are only accessible by 4x4 vehicles in the dry season.

The tenement, consisting of 11 graticule blocks, 36.7 square kilometres in area, lies between latitudes 13°42’ south and 13°48’ south and longitudes 132°02’ east and 132°08’ east. EL 22440 was granted on the 27 of February, 2004 for a period of six years. Reductions were made after years 1 and 2, followed by reduction deferrals after years 3 and 4 than a final reduction after year 5 and in the current reporting period.

Relinquishment of 1 graticular block on the westernmost edge of the tenement was made at the start of the current reporting period and is shown in Figure 2.

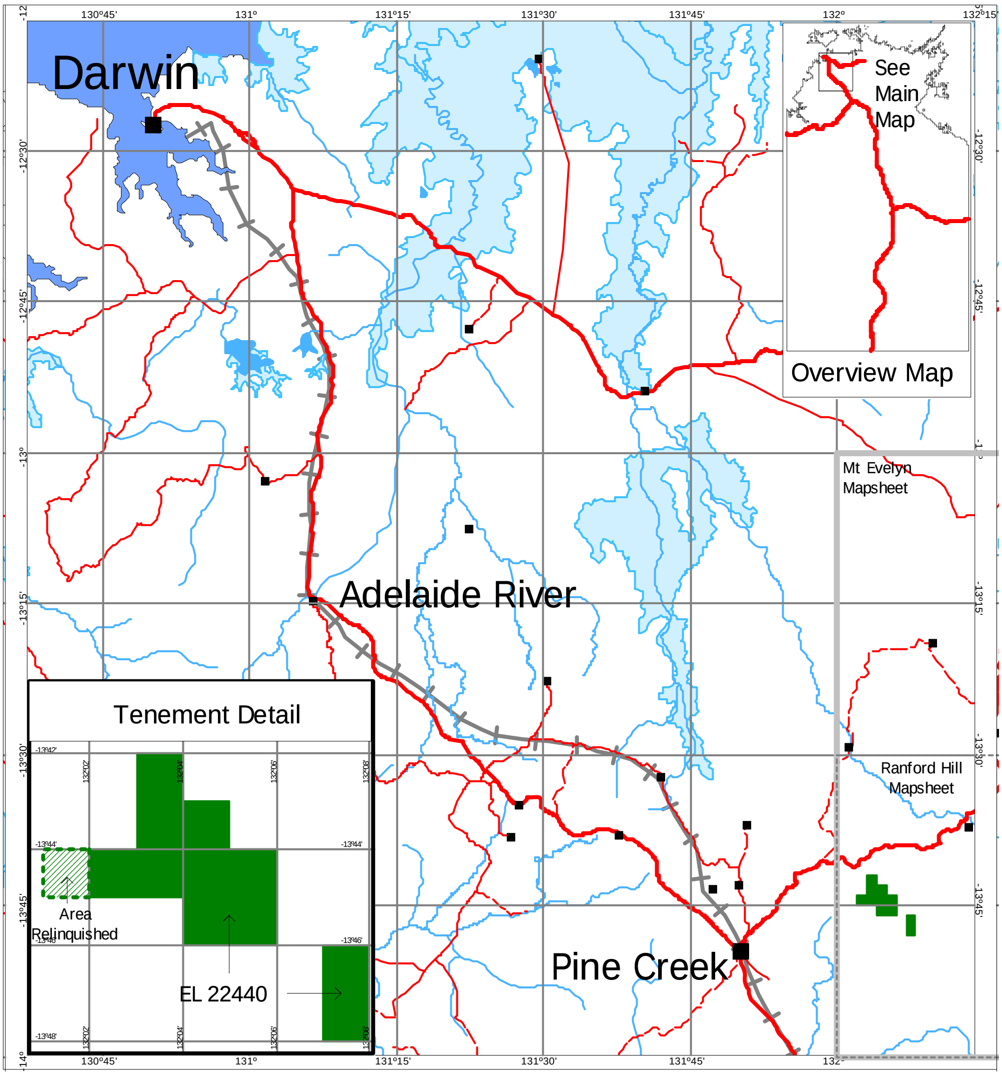


Figure 2 – EL 2240 Location Diagram

3 REGIONAL GEOLOGY

Exploration Licence 22440 is located near the centre of the Pine Creek Geosyncline with Early Proterozoic metasediments of the Mt Partridge, South Alligator and Finnis River Groups exposed in the area.

Within the southern portion of the licence, the Cullen Batholith outcrops and is comprised of the McCarthy's Granite, which is a coarse grained porphyritic hornblende biotite rock. The granite is generally well exposed in the area and forms low undulating hills, well incised by numerous perennial streams. The intrusive contact with the sedimentary rocks to the north is often marked by a zone of quartz, pegmatite and aplite veining, rafts of sedimentary rocks within the granite and slivers of granite within the sedimentary rock pile.

Directly north of the granite contact, the Early Proterozoic sedimentary sequences of the Mt Partridge, South Alligator and Finnis River Groups have been folded into an asymmetrical sequence along a north-westerly trending axis: Two anticlines, called the McCarthy's and Spider

Anticline, (Goldfield, 1988) form the prominent features within this folded sequence. These anticlines expose Mundogie Sandstone in the core and Wildman Siltstone and Koolpin Formation along the limbs of the structure. Further to the north, the folding exposes stratigraphically higher units of the South Alligator and Finnis River Groups (Figure 3)

4 LOCAL GEOLOGY

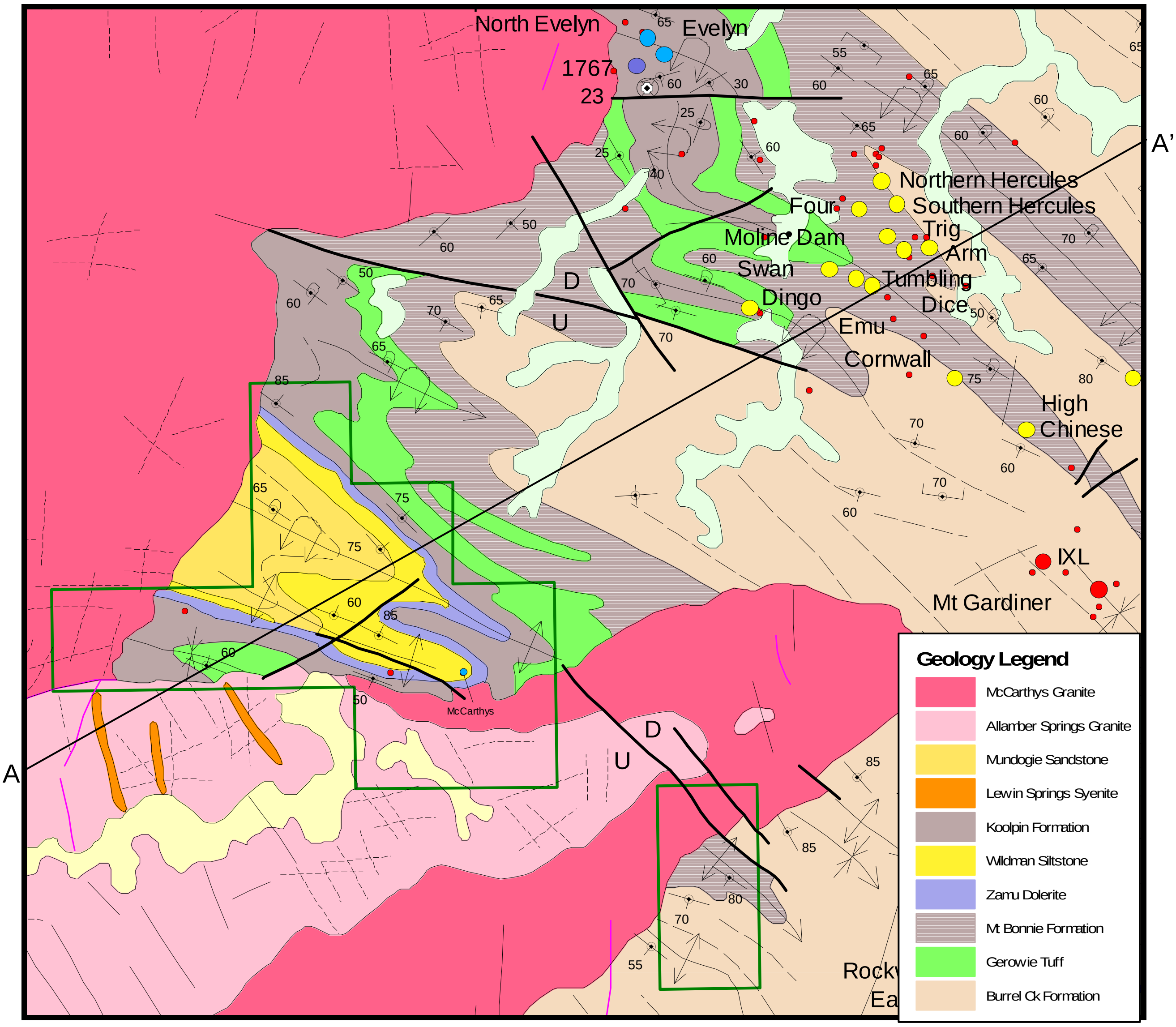
The following is a description of the lithological units occurring within EL 22440 (Melville, 1995). The lithologies are related stratigraphically as shown in Figure 4.

Mundogie Sandstone

The Mundogie Sandstone consists of coarse grained felspathic quartz sandstones and pebble conglomerate. It forms a prominent topographic high feature with rugged and deeply incised streams draining from it. On the contact with the Wildman Siltstone a strongly ferruginous, brecciated, gossanous and quartz veined horizon is occasionally developed. Secondary ferruginisation is ubiquitous in these instances, often forming the framework within the sandstones and breccias. This horizon is conformable and can be mapped over a considerable strike length. It is interpreted to be a décollement structure. A relic boxwork texture is observed at times and contributes to the strong ferruginous alteration. Quartz veining in this horizon is multi-phased and stock-worked in appearance and also often affected by later tectonic brecciation.

Wildman Siltstone

This unit predominantly comprises siltstones and carbonaceous phyllite, and forms areas of relatively gentle undulating relief. A strong cleavage is developed in these rocks and exposed bedrock is typically stained by iron oxide. The McCarthy's deposit is hosted by the Wildman Siltstone. A distinctive haematite rich horizon can be traced within the unit over most of the licence area. It is interpreted to be a lateral equivalent of the iron ore deposits at Frances Creek and is locally termed, 'Frances Creek beds'.



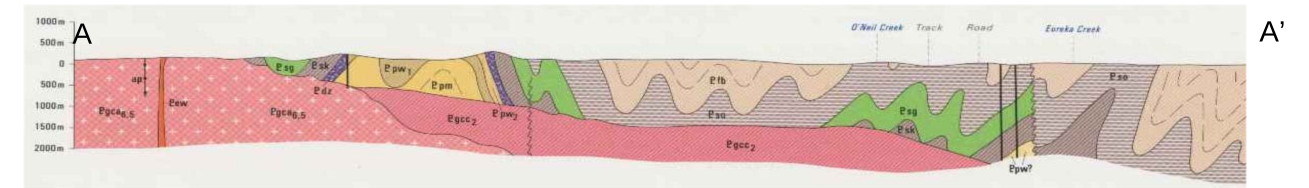


Figure 3 – Regional Geology (from NTGS 1:250k Mt Evelyn Geology Map, 2004). Cross section from NTGS/BMR 1:100k Ranford Hill Geology Map, 1986.

Koolpin Formation

The Koolpin Formation forms the topographic high ridge lines. On the limbs of the Spider Anticline, these ridges are flat topped and have cliff like drop offs along the edges. Silicification as a result of weathering phenomena has strongly altered these rocks, although the original texture and nature can still be discerned. The Koolpin predominantly comprise carbonaceous mudstone but has chert, ironstone and phyllite interbeds. A commonly exposed ironstone interbed is characterised by the presence of sugary and nodular cherty bands which resemble the 15 ironstone horizon as known within the Middle Koolpin Formation in the Mt Bonnie and Burrundie Dome regions. The nodular chert ironstone horizon often forms the steep drops along the edges of the ridge. Strong secondary silicification in conjunction with ferruginisation within this bed make it particularly resistant to erosion. Ferruginisation within the Koolpin Formation is a common feature. Box work textures as disseminations and within fractures are often observed throughout, but are particularly concentrated along cherty and ironstone horizons.

Gerowie Tuff

The Gerowie Tuff comprises light brown siliceous siltstones, argillites and albitic cherts. These rocks, along with the Mt Bonnie Formation, form a series of relatively low undulating hills that are well incised by a perennial drainage system. Very thin skeletal soils develop over the Gerowie Tuff and rock types are difficult to discern through the effects of weathering on similarly textured and coloured lithologies.

Mt Bonnie Formation

The Mt Bonnie Formation superficially, at least, resembles the Gerowie Tuff in its occurrence and nature. Siliceous siltstones, slates, argillites, cherts, and greywackes are observed. Areas of well incised but low relief are formed and thin skeletal soils are commonly developed.

Burrell Creek Formation

The Burrell Creek Formation is typified by felspathic greywacke, slates and siltstones.

Zamu Dolerite

The dolerite occurs as a medium to coarse grained sill intruding the Koolpin Formation. It can occur as a distinctive series of resistant outcrop and rubble or become preferentially weathered and be obscured under soil and regolith cover. Distinctive dark red clay-rich soils are developed over the dolerites in these instances.

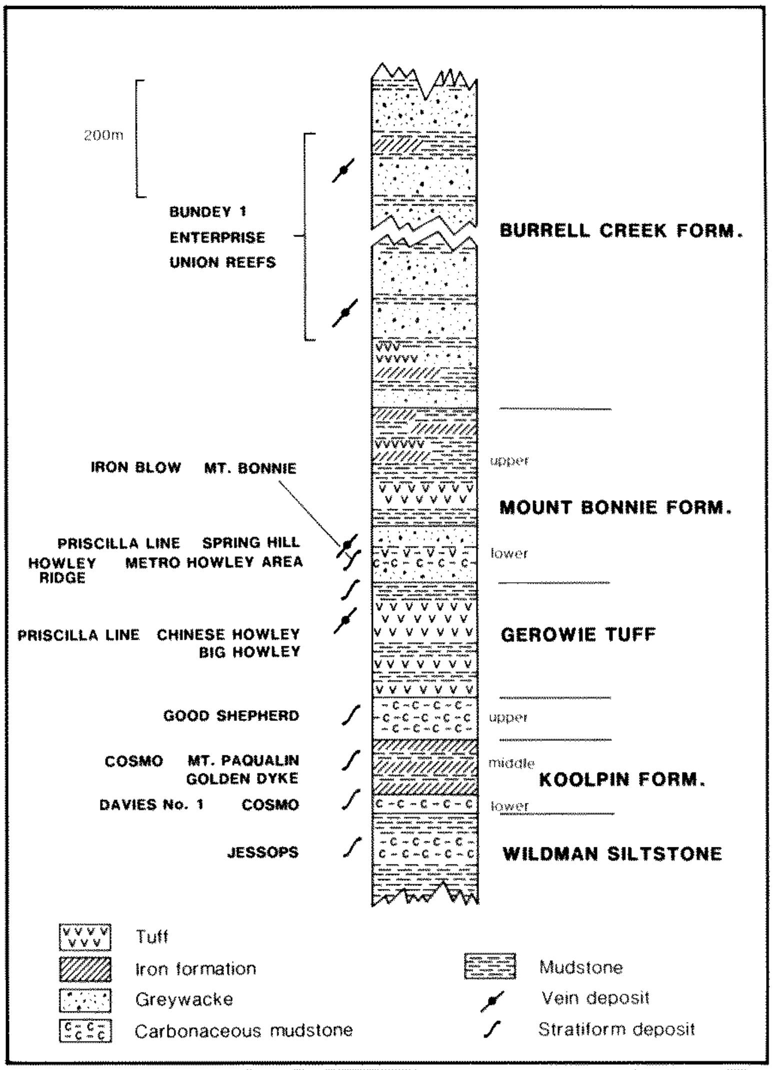


Figure 4 – Stratigraphy and Mineralisation (Nicholson & Eupene, 1984)

5 MINERALISATION POTENTIAL

Gold

Stratiform gold deposits occur throughout the Pine Creek geosyncline in the carbonaceous mudstones of the Wildman siltstone and lower and upper Koolpin formation as well as the interbedded mudstone & banded iron sequences of the middle Koolpin formation (Figure 4). Vein type deposits are known to occur within the Gerowie Tuff and the lower Mt Bonnie Formation. Tightly folded and sometimes overturned anticlinal structures are the key to development of economic gold mineralisation (Nicholson & Eupene, 1984). The Spider and McCarthys anticlines are the main focus areas for gold mineralisation (predominantly quartz-sulphide-vein style but also as part of larger polymetallic systems) in the licence area.

Base Metals (Cu, Pb, Zn)

McCarthys silver-lead mine is the only documented economic mineral occurrence near the licence area. The lode is 0.3m to 1.0m wide and was worked between 1912 and 1927 from several shafts. The mineralisation occupies a shear zone dipping between 70° and 80° west and transgresses carbonaceous siltstone of the Wildman Siltstone. The ore comprises an oxidised zone with pyromorphite, cerussite, anglesite and galena. It is postulated that the mineralisation formed due to metal precipitation by reduction during contact metamorphism within the hornblende-hornfels zone around the McCarthys Granite. Total recorded production is estimated at 580t concentrate of silver and lead (Stuart-Smith et al, 1988). In the areas surrounding McCarthys mine, detailed exploration located discordant lead and zinc mineralisation in northerly and west northwest trending structures. The mineralisation commonly occurs as linear gossanous limonitic outcrops variably silicified with a trace of galena and pyrite. Within Zamu Dolerite the mineralisation occurs more as a stockwork of gossanous veinlets. The widest development occurs where two structures intersect. There is significant potential for other concealed McCarthys style deposits along the contact margin of the metasediments with the McCarthys granite.

Stratabound replacement type polymetalic massive sulphide deposits similar to the Ironblow and Mt Bonnie deposits form the focus of exploration work at the apexes and on the limbs of the Spider and McCarthys anticlines.

Iron Ore

The characteristics of the area are completely analogous to the Frances Creek Iron Field and the opportunity for a crystalline hematite deposit within the Wildman siltstone is being extensively investigated. Previous explorers noted the presence of crystalline hematite (62% Fe) from gossanous outcrops in the laterally equivalent iron ore horizon called the Frances Creek beds.

At the time the Frances Creek mine had only just commenced operation (1966 to 1974) and the Pilbara Iron Ore field had moved into full production. This massive supply of Iron Ore to the market saw prices fall to all-time lows together with exceptionally high product quality specifications that effectively removed any incentive to explore for additional supplies. This situation is reflected in the conclusions reached by previous explorers in relation to the prospectivity of the McCarthy's area for this commodity.

The Frances Creek Iron Ore deposits occur as massive, conformable hematite lodes hosted within tight to open north-northwest-trending syncline-anticline structures that plunge moderately to the north. At the main Helene 6/7 deposit the average thickness of the massive hematite lens is 15.5m grading 64.4% Fe but with significant thickening to 100m+ in an overturned syncline. Minor folds and faults, which are mineralised in places, also influence the distribution of ore. An unmineralised 40-50 m thick dolerite sill (Zamu Dolerite) is present in the footwall sequence. Ore consists of massive, fine, micaceous to bladed hematite containing varying amounts of shale fragments and quartz grains. Hematite is found in a number of forms; this includes veins, fine-medium interlocking anhedral aggregates, fine-medium plates or needles that may show radial growths or an 'ophitic' texture, and fine-coarse tabular crystals. Cavities within the massive ore are common and may form up to 20% of the rock, by volume. They are often lined or partially infilled with coarse, transparent, bipyramidal hydrothermal quartz crystals or by medium-grained hexagonal plates of specularite. Goethite and limonite are commonly associated with weathered ore lenses. Brecciation of the massive ore lens is evident on the eastern side of the open cut where a northwest-trending fault intersects the ore bed near the surface (Ferenczi, P. 2001).

Other Metals

Other potential mineralisation styles being investigated include Tin and Tin-tantalum in Sn quartz or sulphide veins and Sn-Ta pegmatites within the hornfels facies contact metamorphic aureole of the granite.

6 PREVIOUS EXPLORATION

A detailed description of previous explorer's activities in this area is provided in the second annual report for EL 22440 (McCoy, 2006).

7 WORK COMPLETED

7.1 Year 1 - Data Compilation

Summary: Reports from previous mapping and exploration work conducted throughout the area since 1919 were reviewed. Geological, sampling geochemistry and drilling data was assimilated to reconstitute previously identified anomalous zones and identify other lower tenor anomalies. A review of historical NTGS regional airborne magnetic survey data was carried out and highlighted several areas giving rise to intense magnetic anomalies.

Reports from previous mapping and exploration work conducted throughout the area since 1919 were reviewed. The following information was assimilated.

7.1.1 Geology data

Geological maps at scales of 1:250k and 1:100k were acquired from the NTGS however these are based on mapping activities undertaken in 1981. Several company reports also included geological maps based on their own mapping activities and interpretation of aerial photographs. The most detailed of these were by Renison Goldfields Pty Ltd (Vann, 1988) and Aztec Mining Company Ltd (Melville, 1993) over several areas of the two main anticlines at a scale of 1:2500.

7.1.2 Sampling data

A complete review of all previous geochemical sample results was undertaken in which a total of 2100 soils, 830 stream sediment and 1340 rockchip/ironstone from 8 companies in the period 1966 to 1995 were plotted to show zones of anomalous Zn, Pb and Au values.

Five anomalous zones, identified by previous explorers (Aztec, 1992 CR92/168) were re-confirmed but an additional 6, lower tenor anomalous areas were also highlighted.

7.1.3 Drilling Data

Drilling information was reviewed and on the whole found to be ineffectual in terms of thoroughly testing the economic mineralisation potential of the area.

7.1.4 Historic Geophysics

The NTGS Mary River aeromagnetic data was reviewed and his findings were conveyed in a report included as an appendix to the first year report. The magnetic data appear to indicate three main categories of iron bearing South Alligator Group and immediately overlying and interfolded rocks: skarn adjacent to granite, pyrrhotitic carbonaceous shale and/or shale with chert/BIF sequences, and magnetite bearing greywacke and conglomerate.

7.2 Year 2 – Magnetics and Radiometric Surveys

Summary: An ultra-detailed airborne magnetic and radiometric survey was flown over the most prospective portion of the tenement based on previous competitor sampling results and historic aeromagnetic data. The results of the survey show several high amplitude magnetic anomalies occurring within the Koolpin Formation or at the Zamu/Koolpin contact within the fold nose and flanks of the steeply dipping or overturned Spider and McCarthys anticlines. These magnetic features may represent massive sulphide (pyrrhotite) lenses prospective for precious and base metals. Linear north to north west trending magnetically suppressed zones transecting the Wildman Siltstone near the granite contact may be analogues to the shear zone that hosts the McCarthys Pb mineralisation.

7.2.1 Magnetics and Radiometrics

In order to define iron rich horizons and, in particular, isolated pyrrhotite sources, a 526 line kilometre aeromagnetic and radiometric survey over the southern 17 sq km portion of the licence was completed in September 2005. Sensor height was 30 meters and line spacing was 40 meters in an east-west direction.

7.2.2 Processing and Observations

The final magnetic data (total field) was further processed to remove the effects of distortion due to the inclination of the Earths magnetic field and large regional variations. This was achieved by applying a reduction to the pole filter (RTP) and then a first vertical derivative (1VD). The result of this process is to “sharpen up” the appearance of the anomalies, thereby giving a better representation of the near-surface geometry of the source, and to shift the peak of the anomaly so that it is centred directly above the true location of the source rock. Consequently what initially appeared to be one large anomaly on the eastern part of the survey area decomposed into three distinct features.

These three features appear to fall within the Koolpin formation at the apexes (fold nose) and on the flanks of the Spider and McCarthys anticlines (Figure 1). However it may also be the case that the sources are nearer the Koolpin/Zamu contact or indeed entirely within the Zamu dolerite. Modelling is required to fully understand the stratigraphic position of the magnetic bodies.

Numerous northerly to NNW trending linear features with suppressed magnetic character are apparent in the southern half of the Wildman Siltstone bordering the contact with the McCarthys Granite (Figure 5). These features may represent sheared zones since they have an appearance and orientation similar to shear zone that hosts the McCarthys Pb mineralisation.

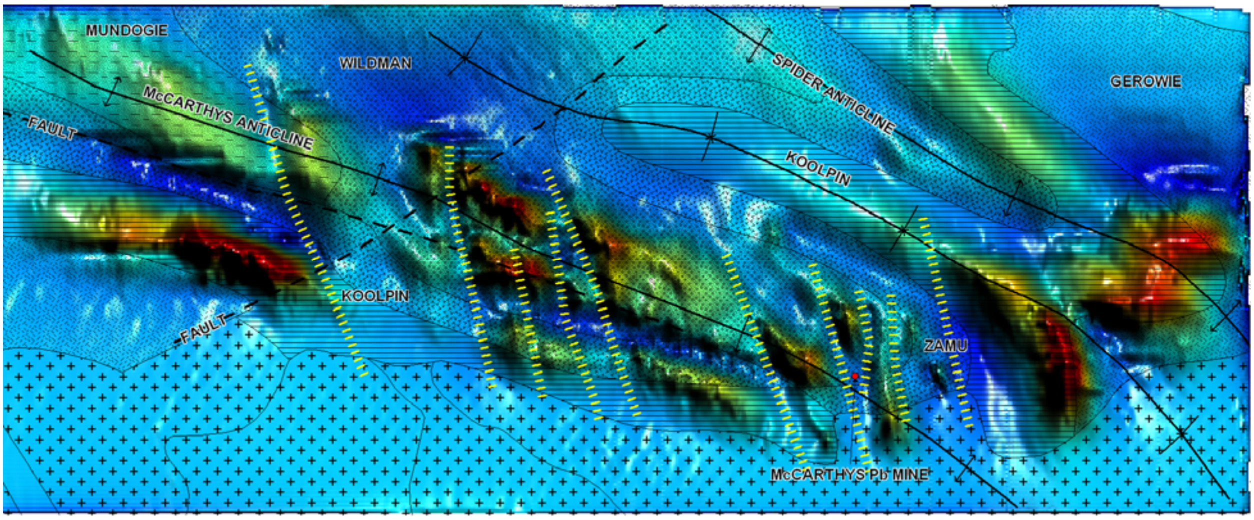


Figure 5 – NTGS 1:100,000 geology showing structural features over 1VD RTP image. Yellow striped lines indicate possible shear zones.

7.3 Year 3 – Geophysical Interpretation and Satellite Imagery

Summary: Data from the historic reports continued to be incorporated into the project GIS to facilitate ready comparison with newly acquired information. Interpretation focussed on the magnetic and radiometric survey data with particular emphasis on the development of geologically realistic models of the source bodies responsible for the intense magnetic features proximal to the Spider Anticline. The results indicated probable pyrrhotite lenses at depth of 80m below the surface that are tightly constrained to the hinge zones of two overturned isoclinal folds making the target analogous to the likes of other gold and polymetallic deposits of the district. Additonal high resolution and spectral satellite imagery were acquired to assist with further mapping and field-work activities. The process of obtaining sacred site clearances for proposed drilling areas commenced.

7.3.1 Database compilation

Work continued on entering all of the historical sampling and mapping data into a GIS database. Enquiries were made with Normandy (who took over Aztec) in an attempt to obtain the digital information compiled by Aztec on this project during the 1980's. Unfortunately the data has since been lost. All data is being transformed to the current MGA coordinate system to facilitate easier comparisons with newly acquired data.

7.3.2 Magnetic & Radiometric Data Processing and Interpretation

The final magnetic data (total field) was processed to remove the effects of distortion due to the inclination of the Earths magnetic field and large regional variations. This was achieved by applying a reduction to the pole filter (RTP) and then a first vertical derivative (1VD). The result of this process is to "sharpen up" the appearance of the anomalies, thereby giving a better representation of the near-surface geometry of the source, and to shift the peak of the anomaly so that it is centred directly above the true location of the source rock. Consequently what initially appeared to be one large anomaly on the eastern part of the survey area decomposed into three distinct features.

Additional filtering techniques were applied to the magnetic data to enhance the interpretability of the data and will assist with the ongoing geological interpretation of the area.

Radiometric data from the 2005 survey was processed and images of the potassium (K), uranium (U), thorium (Th) and total count (TC) channels were produced. A ternary K,Th,U as RGB image was also produced and formed the basis of some preliminary interpretation work to delineate various geological domains based on their radiometric characteristics (Figure 6).

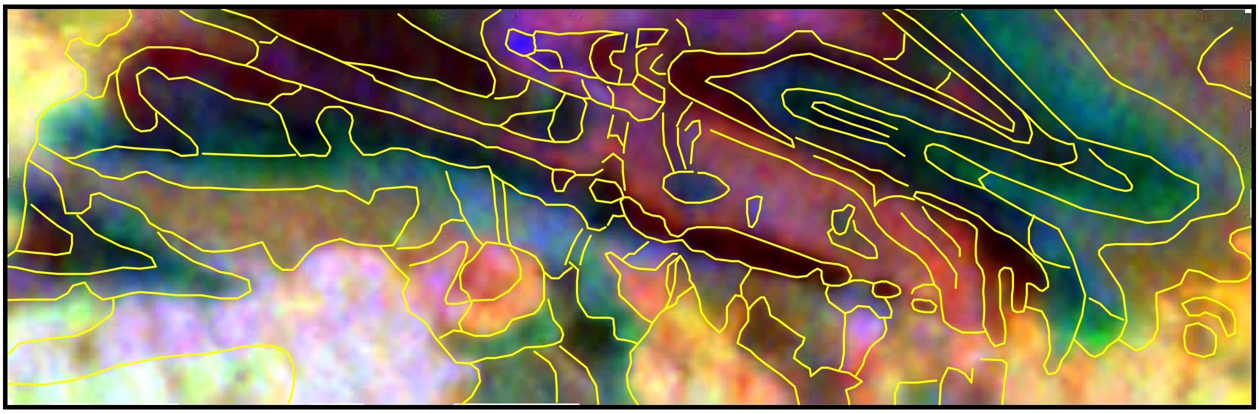


Figure 6 – Ternary radiometric image and preliminary domain interpretation.

7.3.3 <u>Modelling Results</u>

The principle aim of this work was to formulate a geologically realistic model for the source of the intense magnetic anomalies thereby determining if they have the potential to indicate significant systems of mineralisation.

Modelling was carried out on the eastern magnetic anomalies to determine the geometric relationship of their source to the stratigraphy and structure of the area. The results showed that the top of the source (interpreted as the unweathered or primary sulphide zone) occurs at a depth of approximately 80m below the lowest part of the land surface in that area. There is a substantial hill immediately above the features which effectively puts them at a vertical depth of 120 to 130 m. The value of magnetic susceptibilities modelled for the sources suggests that massive pyrrhotite lenses could well account for the observed response provided that the pyrrhotite was coarse grained and accounted for 45% to 55% of the total source volume. Evidence from throughout the region indicates that this would be consistent with the sulphide composition of other economic deposits.

The modelling results have also confirmed that the source of the magnetic anomalies is constrained to the hinge zones of the Spider anticline which appears to be overturned and dipping isoclinally to the SW. Previous detailed geological mapping of the immediate area identifies the Spider anticline as having two distinct parasitic folds, the apexes of which follow very closely the projected surface location of the modelled sources. This suggests that the sources are tightly constrained to the hinge zones of the two overturned isoclinal folds. A result which strengthens the analogous nature of this prospect to the likes of other gold and polymetallic deposits of the area.

7.3.4 IKONOS Imagery

A 49sq.km area of 1m resolution colour IKONOS imagery was purchased covering the majority of the lease area. The data was processed and will be used as the base-map for future on-ground work programs and also to aid with the interpretation of the geology.

7.3.5 ASTER Imagery

Multi-spectral ASTER imagery covering the lease area and beyond was acquired from the USGS satellite archive repository. The 14 band imagery, covering wavelengths from the visible part of the spectrum through to the thermal portion, can be used to provide information about the mineralogy of the surface material by processing the data using a method known as spectral curve matching or deconvolution. Once processed, the resultant map can assist with defining hydrothermal alteration systems and mapping of geological units and mineralised zones.

7.3.6 Geological Reconnaissance & Rock Chip Sampling

Limited amounts of geological reconnaissance style field mapping coupled with opportunistic rock-chip sampling were carried out toward the end of the reporting period.

7.3.7 Clearances

In accordance with the requirements of the NT Aboriginal Sacred Sites Act, notification was sought from the AAPA as to the existence of any Sacred Sites within the EL. The AAPA had a record of one possible site and an application for an Authority Certificate was made toward the end of the year.

7.4 Year 4 – Geophysical Surveys, Access Recon & Clearances

Summary: Notification from the AAPA regarding the possible sacred site redirected efforts back to completing additional non-intrusive work whilst an Authority Certificate was in application. Additional coverage of the EL with airborne magnetics and radiometrics was completed and a heli-borne EM survey flown over the most prospective portion of the lease to highlight conductive features.

7.4.1 Heli EM Survey

A new airborne EM survey using the RepTEM system was carried out during the period by external contractor GPX Geophysics. The helicopter borne survey consisted of 197km of time-domain EM data covering most of the license at 100m line spacing and nominal terrain clearance of 35m. Magnetics and radar data were also collected during the survey.

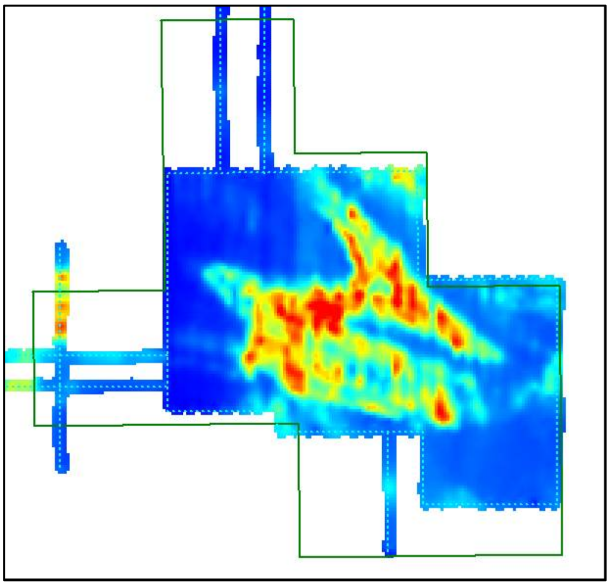


Figure 7 – RepTEM survey raw EM data image.

Preliminary analysis of the data identified the presence of significant conductivity contrasts relating to both the geological formations and also the prospective target areas (Figure 7).

7.4.2 Magnetic and Radiometric Survey

A 138 line km airborne magnetics and radiometrics survey was flown by UTS Geophysics Pty Ltd over northern parts of EL22440. These data (Figure 8), recorded at 50m line spacing and a terrain clearance of 40m, also resulted in digital terrain model data.

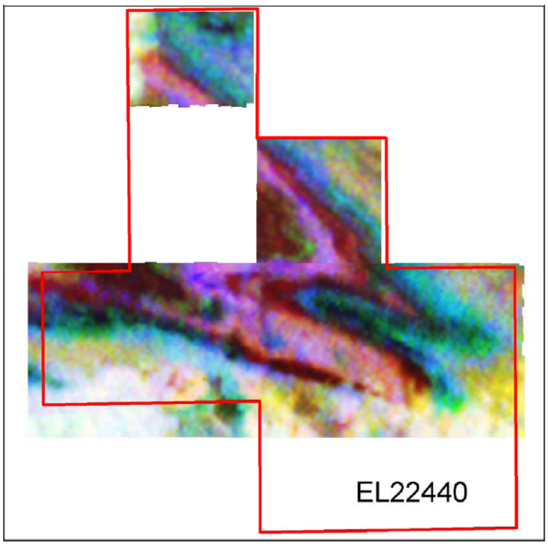


Figure 8 – Combined ternary radiometric image (left) and magnetic RTP image (right) of additional survey coverage areas.

The radiometric data clearly map out the various geological units and will assist with prioritising some of the target areas identified from the EM survey and photo-geological interpretation work.

7.4.3 Access Reconnaissance

A field trip was conducted at the end of September 2007. The purpose of this trip was to locate pre-existing tracks within the license that would be suitable for drill-rig access.

7.4.4 Clearances

An application was made to the AAPA for an Authority Certificate covering the EL to enable rock & soil sampling, ground geophysical testing and sampling, drilling and associated access earthworks.

7.5 Year 5 – Geological Mapping and Sampling

Summary: The AAPA provided an Authority Certificate with a “no significant disturbance” restriction across the entire EL. As a consequence the work program reverted to minimally invasive techniques by focussing on further interpretation of the geophysical datasets, in particular the EM data, and conducting geological mapping and rock sampling of the prospective Iron Ore targets. Results of the work showed that the modelled magnetic features were also conductive and that the sampled section of the Frances Creek beds showed good iron levels of around 60% with low-order gangue mineralogy.

7.5.1 Clearances

An Authority Certificate was received from the AAPA in relation to the application made in Year 4. The entire lease area is designated a Restricted Work Area meaning that no significant disturbance (drilling or heavy machinery earthworks) can take place within the lease at all. Only minimally invasive sampling techniques are permitted.

7.5.2 Geophysical Interpretation

The RepTEM EM survey data flown in Year 4 was reviewed and further processed to refine targets. Results of inversion processing showed zones of higher conductivity occurring at depth possibly indicating the presence of massive sulphides. Shallower zones of conductivity possibly correspond to deeper weathering profiles. Based on geological information the EM data appears to have mapped out black carbonaceous shales of the Wildman formation very clearly.

Figure 9 shows a plot of the maximum conductivity derived from the inversion processing. A target zone is indicated where an elevated conductivity is coincident with a magnetic anomaly.

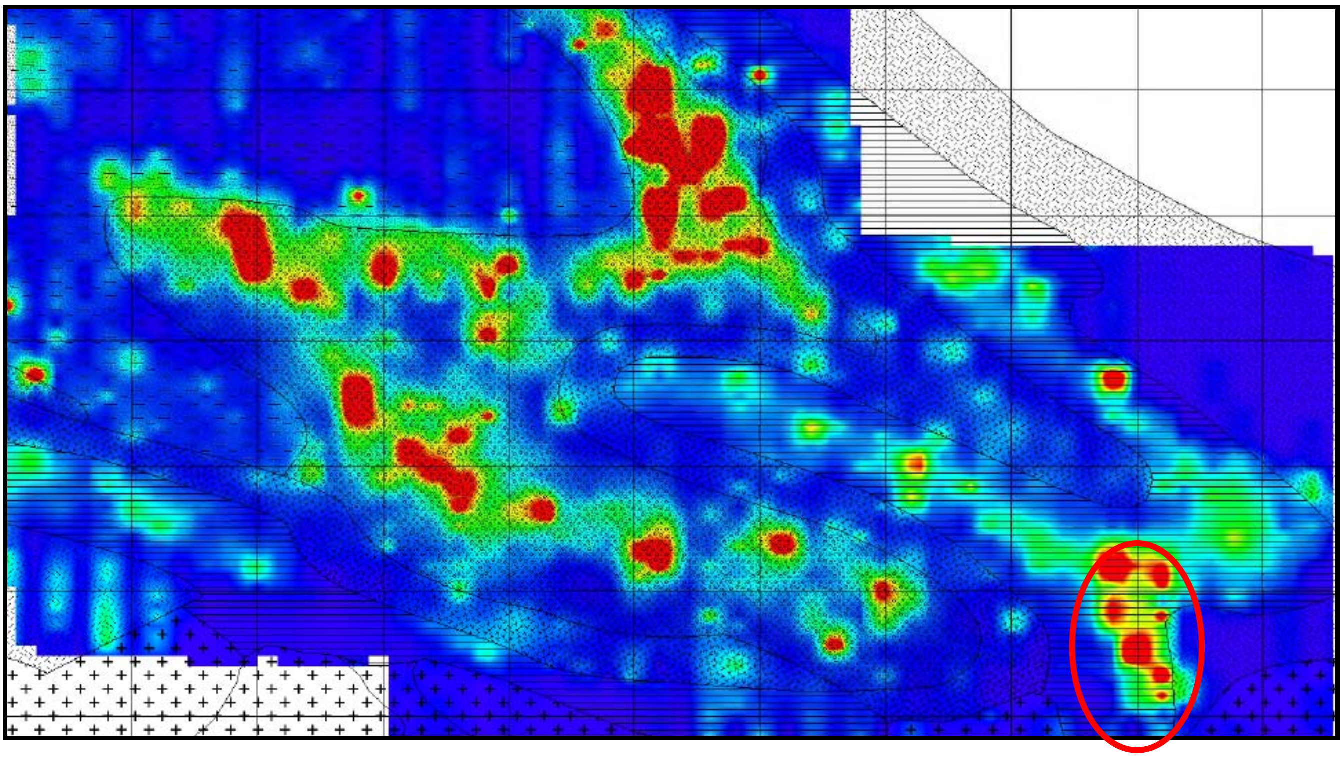


Figure 9 – EM maximum conductivity image with geology overlay.

7.5.3 Geological Mapping

Field work mapping and associated sampling activity focussed on the prospective Iron Ore geology of the Wildman Siltstone. The extent of hematite outcrop along the southern limb of the Spider anticline was mapped using GPS data and samples taken at regular intervals for mineralogical analysis.

Two paralleling hematitic reefs, each between 2 and 10m wide and separated by a distance of up to 20m, occur in this area along a mapped strike length of 920m. The reefs outcrop for approximately 80% of the strike length with the remaining 20% appearing as sub-crop or loose boulder floaters of identical hematite material.

The reef can thus be segmented into 4 main sections with strike lengths, going east to west of 350m , 130m, 100m and 130m.

7.5.4 Rock-chip Sampling

A total of 94 rock-chip samples were collected along the mapped reef system mentioned in section 7.5.3. Sample density was of the order of 1 per 50 sq.m where good outcrop existed and at least 1 per 200 sq.m where sub-crop or float predominated.

Samples were whole-rock analysed by XFR at ALS Laboratory in Brisbane for a typical Iron Ore suite of elements and oxides. The main elements of interest are Iron, Silica and Phosphorus and a summary of the results for the individual sections of the mapped reef are provided in the table below.

Section	Iron (%)	Silica (%)	Phosphorus (%)
1 (easternmost)	57	8.04	0.17
2	59.4	9.8	0.15
3	58.5	13.9	0.07
4 (westernmost)	60	10.9	0.65

Some additional sampling was conducted on spec on a gossanous ironstone outcrop located near McCarthy's pass. Results were generally of a low tenor with the exception of a few samples returning elevated lead values up to 0.5%.

7.6 Current Year – Geological Mapping and Sampling & Interpretation

Summary: Conditions of the Authority Certificate remained in force for the year while an application for variation was being processed by the AAPA. The work program focussed on completing the geological mapping and rock sampling of the prospective Iron Ore targets. Results of the work showed that the main outcropping part of the horizon occupied a complex structural zone near the nose of a syncline. Assays of this zone showed good iron levels of better than 60% with low-order gangue mineralogy. Additional geophysical data processing and interpretation was completed and assisted with target prioritisation. Preliminary commercial discussions were held in respect of the Iron Ore potential of the lease.

7.6.1 Drilling Clearances

An application for a variation to the Authority Certificate was submitted to the AAPA requesting drilling clearances for two smaller target areas within the lease. The AAPA advised that they were unable to complete the necessary field work due to wet-season access issues and that the work would be conducted as soon as practicable in 2010 (Year 7). Notification was provided to the Northern Land Council (NLC) of the terms of the Authority Certificate and to seek assistance with the process of establishing dialogue, in relation to the variation, with the Native Title traditional owner claimants. Similarly the NLC have advised that this process will occur sometime before May 2010.

7.6.2 Geological Mapping

Field work continued with an intensive campaign of mapping and sampling of the remaining prospective Iron Ore geology situated in the syncline between the Spider and McCarthy's anticlines. The extent of hematite outcrop at the apex of the syncline was mapped using GPS and samples taken at regular intervals for mineralogical analysis.

The thickest and longest body of outcropping crystalline hematite occurs near the apex of the syncline and is coincident with a small hill of approximately 30m height. At its widest point the mineralisation measures 130m and dips steeply to the north-east at between 45 and 70 degrees. Its strike length of 720m comprises a few sections of sub-cropping mineralisation but in general the outcrop is reasonably consistent. Two iron reefs (2 & 3) on the northern limb of the syncline were also mapped and sampled.

A clear analogy with the Helene 6/7 orebody at Frances Creek is evident, at least in terms of geometrical similarity, if the axial fold orientation and younging direction are appropriately aligned as shown in Figure 10.

Figure 10 – Geological map (Ferenczi, P.A., 2001) of Helene 6/7 flipped, rotated and equal scaled for comparison (left). Outcropping mapped hematite beds and sample locations (right).

Structural data were also interpreted from a combination of detailed satellite imagery, historical report information (drilling) and the various geophysical data sets. A series of west verging thrust faults and complimentary strike-slip faults have been postulated that largely explain the juxtaposition and off-setting of the mapped iron units.

The results of this mapping and interpretation work are shown on Enclosure 2.

7.6.3 Rock-chip Sampling

A total of 110 rock-chip samples were collected along the mapped reef system mentioned in section 7.6.2. Sample density was of the order of 1 per 50 sq.m where good outcrop existed and at least 1 per 200 sq.m where sub-crop or float predominated.

Samples were whole-rock analysed by XFR at ALS Laboratory in Brisbane for a typical Iron Ore suite of elements and compounds. The main elements of interest are Iron, Silica and Phosphorus and a summary of the results for the individual sections of the mapped reef are provided in the table below.

	Iron (%)	**Silica (%)**	**Phosphorus (%)**
1a (central)	61.9	8.0	0.04
1b (nw end)	62	6.5	0.06
1c (sw end)	47.3	29.4	0.05
2 (nth limb w)	56.1	4.8	0.16
3 (nth limb e)	60.4	4.9	0.11

Sample locations are shown on Enclosure 2 and a complete listing of the relevant iron ore elements for all samples is provided as Appendix III. Full data is provided separately as a text file (see Appendix I)

7.6.4 Geophysical Processing

Various enhancements and statistical analysis of the radiometric data from the 2005 survey were undertaken to highlight new data features particularly in the context of iron reef mapping and sampling results.

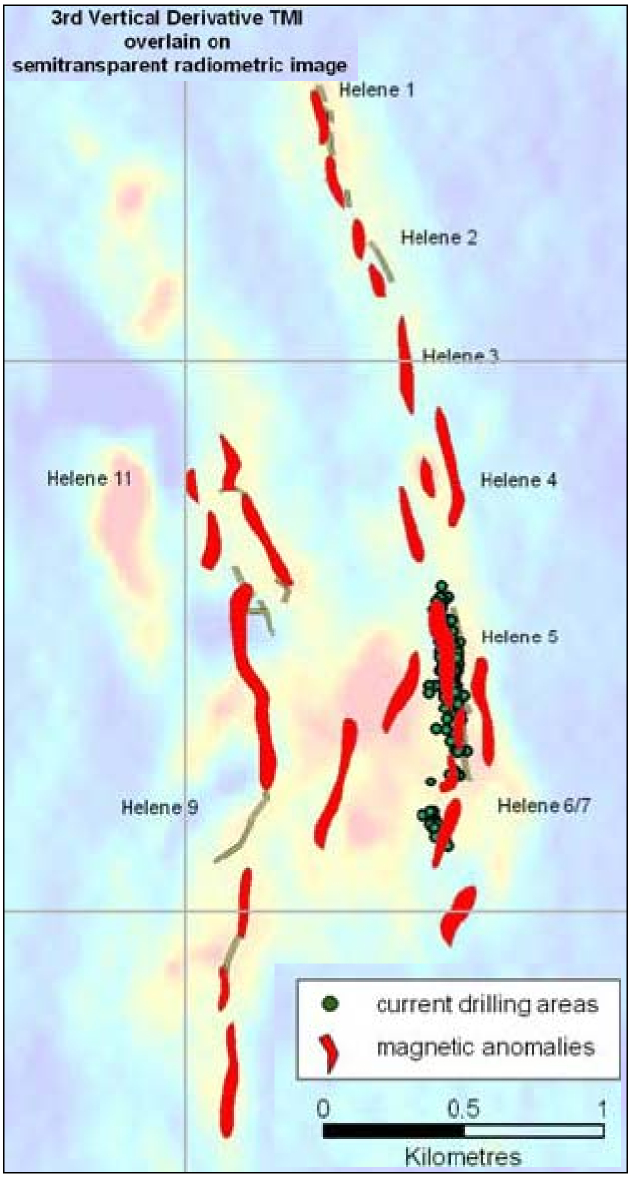
Resultant images are shown in Appendix II including total count, potassium, thorium and uranium pseudocolour images, a K-Th-U composite as a red-green-blue ternary image and statistically enhanced uranium images. The rock-chip sample locations are plotted on the figures as black crosses and contours of uranium values greater than the 80th percentile are also shown.

Images of the radiometric data (as a ternary K-Th-U image) and magnetic data from the 2008 survey are also shown.

The SkyTEM EM data were also reprocessed to resolve a height datum problem and provide addition images of both raw channel data and various depth slices of the inversion results for the purposes of interpretation work.

7.6.5 Interpretation

An empirical correlation was observed between the uranium highs occurring within the Wildman Siltstone unit and the location of the mapped iron-rich reefs. This relationship is consistent with the findings of explorers of the Frances Creek Iron Ore field who rank targets according to a combination of geological and geophysical characteristics as shown by Figure 11.



Using the 3rd vertical derivative of the pole reduced total magnetic intensity data, anomalies detected are ranked as follows:

Rank 1 :
- Correlated either directly with or along strike from Fe-stone
- Hosted by Wildman Siltstone & near Mundogie Sst contact
- Associated with discrete U response; on topo high or ridge

Rank 2:
- Discrete mag response along strike of mapped Fe-stone
- Hosted by Wildman Siltstone
- Close to discrete U response; on topo high or ridge

Rank 3:
- Discrete mag response along known/inferred Fe-stone trend
- Can be outside Wildman Siltstone or below Cretaceous cover
- May have no U response; may be detrital.

From Territory Iron Investors release 23-May-2006

Figure 11 – Territory Iron target prioritisation rationale (Source: Territory Iron September 2005 Quarterly Report)

In relation to this exploration targeting criteria, the "Fe-stone" described in section 7.6.2 possesses all the necessity attributes to make it a Rank 1 target. Figure 12 shows the various geophysical responses and as noted previously the target corresponds with a 30m high hill.

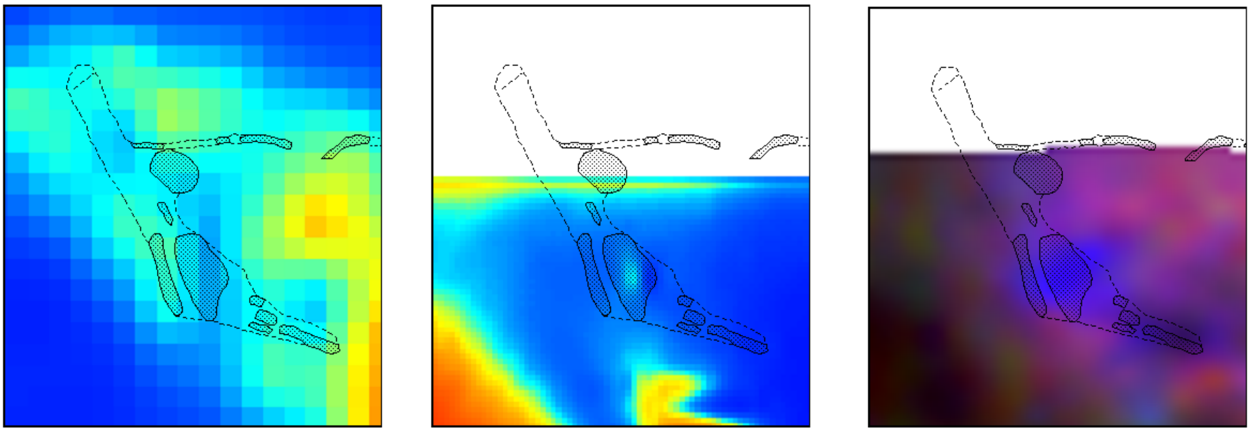


Figure 12 – Early time EM data (left) showing resistive responses coincident with and down-dip from mapped hematite beds. Magnetic RTP 1VD image (middle) showing subtle response coincident with main hematite lode. Radiometric ternary image (right) showing elevated uranium response in blue coincident with main hematite outcrop.

A synthesis of previous magnetic modelling results together with the EM inversion data was used to further evaluate the drill targets in proximity to the Spider & McCarthy's anticlines.

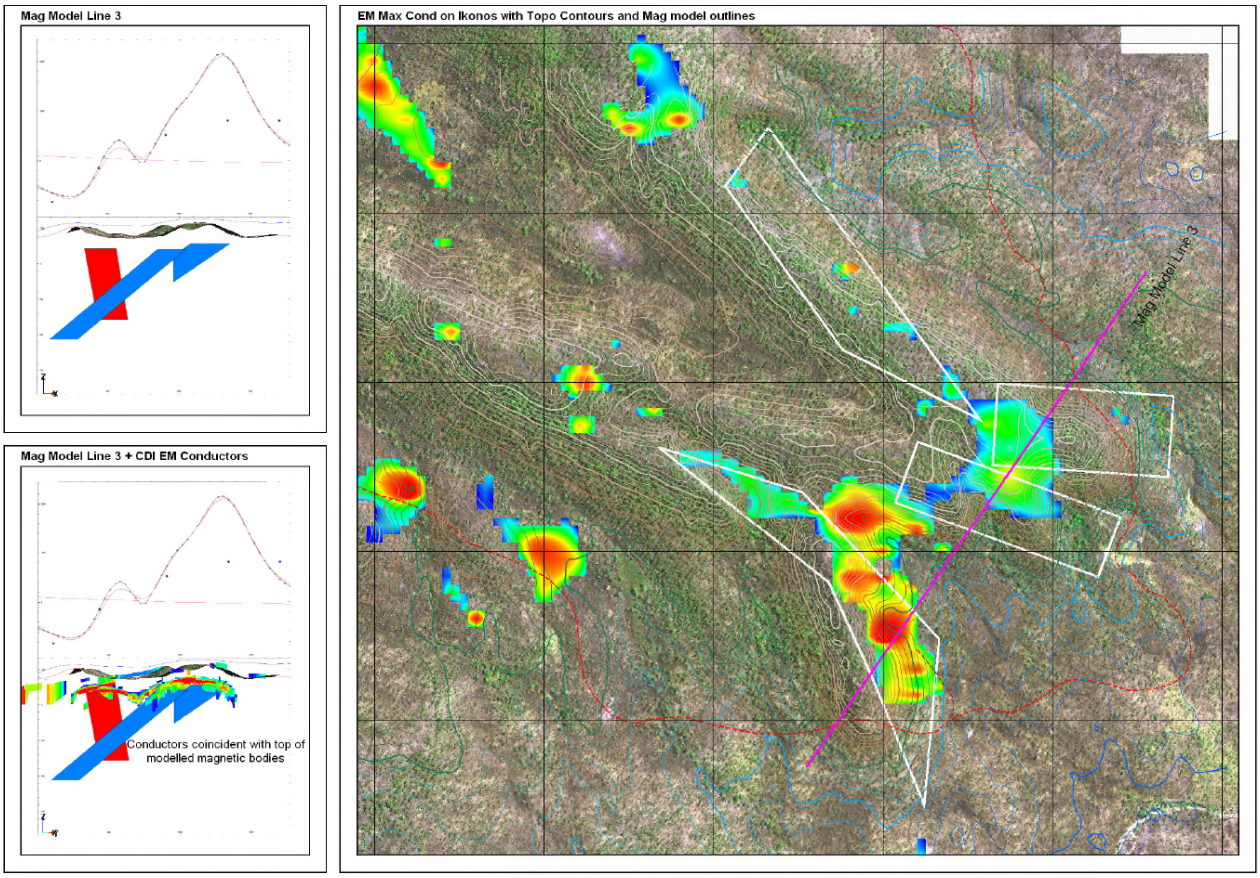


Figure 13 – Combined magnetic modelling and EM inversion data

Figure 13 shows the results of overlaying the EM inversion data onto the magnetic modelling section. There is a clear correspondence between the depth of the top of the modelled magnetic features and the depth of the peak conductive responses as seen on the inversion sections.

Accurate drill targeting for both the iron ore and massive sulphide style mineralisation is readily achievable from the data presented.

8 PROPOSED PROGRAM FOR YEAR 7

8.1.1 Database Compilation

Work will continue on compiling all surface geochemical sample results and geological mapping from previous exploration into a database/GIS system to facilitate more interactive analysis of the data. Once in a database form, various statistical manipulations can be performed to uncover important trends and correlations in the data. This is a significant piece of work that will capture thousands of sample results and other geological data.

8.1.2 Geophysics

To further evaluate the area for additional, potentially deeper, iron ore mineralisation, detailed ground gravity geophysical work will be conducted. This method will have the objective of assisting with defining the volume of any iron ore mineralisation and helping to optimise the location of drilling to test the targets. Together with drilling and assay data this technique will fast-track the process of defining a resource.

Ground IP surveys over selected conductive features are also being considered for further refinement of base/precious metal targets identified from the airborne geophysical surveys.

8.1.3 Computer Modelling

Additional work will be required to model magnetic or gravity anomalies as new information becomes available, particularly following any drilling activities. Resource modelling work may also be necessary.

8.1.4 Geological Mapping

Priority target areas will be subject to detailed mapping work at 1:1000 scale or finer as appropriate to facilitate construction of the geometries, structures and mineralogy of the local geology. This will be particularly important in conjunction with any resource modelling work.

8.1.5 Geochemical Sampling

Additional, carefully collected, stream-sediment, soil and/or rock-chip samples will be obtained from drainage/areas that have been identified as anomalous but remain unexplained and from drainage and areas that stem from or surround the locality of anomalous geophysical features or structurally important areas. Assays will be carried out for precious metals, the base metal suite and iron ore minerals as appropriate.

8.1.6 AAPA Clearances

Meetings with the local traditional owners will be conducted in consultation and with direction from the NLC to assist with achieving a variation to the Authority Certificate

8.1.7 Mine Management Plan

As per the requirements of the Mining Act, a mine management plan will be developed prior-to and commensurate with the types of activities proposed to be carried out on the lease during year 7.

8.1.8 Drilling

A program of percussion and possibly core drilling, with associated geological logging and assay analysis will be completed following the satisfactory completion of items 8.1.6 and 8.1.7.

Drilling will initially focus on testing for and defining an Iron Ore resource. Subsequent to that program and contingent on additional financing, a drill program to test the base & precious metal targets may also be carried out.

Access & drill pad preparation earthworks will be required to support the drill program and rehabilitation work.

8.1.9 Rehabilitation

As required under the Mining Act, the terms of grant of licence and any requirements imposed by a Mining Authorisation, rehabilitation of areas of significant disturbance will be carried out in accordance with the guidelines.

8.1.10 Commercial

Discussions will continue with interested parties in relation to achieving a commercial agreement in the event that potentially significant resources are identified. Particular focus will be on the potential Iron Ore resources of the lease and Territory Resources would likely be a party in the discussions.

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APPENDIX I

File Verification Listing

Exploration Work Type	Filename	Format
Office Studies		
Literature search		
Database compilation		
Computer modelling	EL22440_2009_A_02_ReportBody.pdf	pdf
Reprocessing of data	EL22440_2009_A_02_ReportBody.pdf	pdf
General research	EL22440_2009_A_02_ReportBody.pdf	pdf
Report preparation	EL22440_2009_A_02_ReportBody.pdf	pdf
Other (specify)		
Airborne Exploration Surveys		
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital terrain modelling		
Other (specify)		
Remote Sensing		
Aerial photography		
LANDSAT		
SPOT		
MSS		
Radar		
Other (specify)		
Ground Exploration Surveys		
Geological Mapping		
Regional		
Reconnaissance		
Prospect	EL22440_2009_A_02_ReportBody.pdf	pdf
Underground		
Costean		
Ground geophysics		
Radiometrics		
Magnetics		
Gravity		
Digital terrain modelling		
Electromagnetics		
SP/AP/EP		
IP		
AMT		
Resistivity		
Complex resistivity		
Seismic reflection		
Seismic refraction		
Well logging		
Geophysical interpretation	EL22440_2009_A_02_ReportBody.pdf	pdf
Other (specify)		
Geochemical Surveying		
Drill sampling		
Surface sampling	EL22440_2009_A_03_SurfaceSamples.txt	txt
Other (specify)		
Drilling		
All drilling		
File Verification Listing	EL22440_2009_A_04_FileListing.txt	txt

APPENDIX II

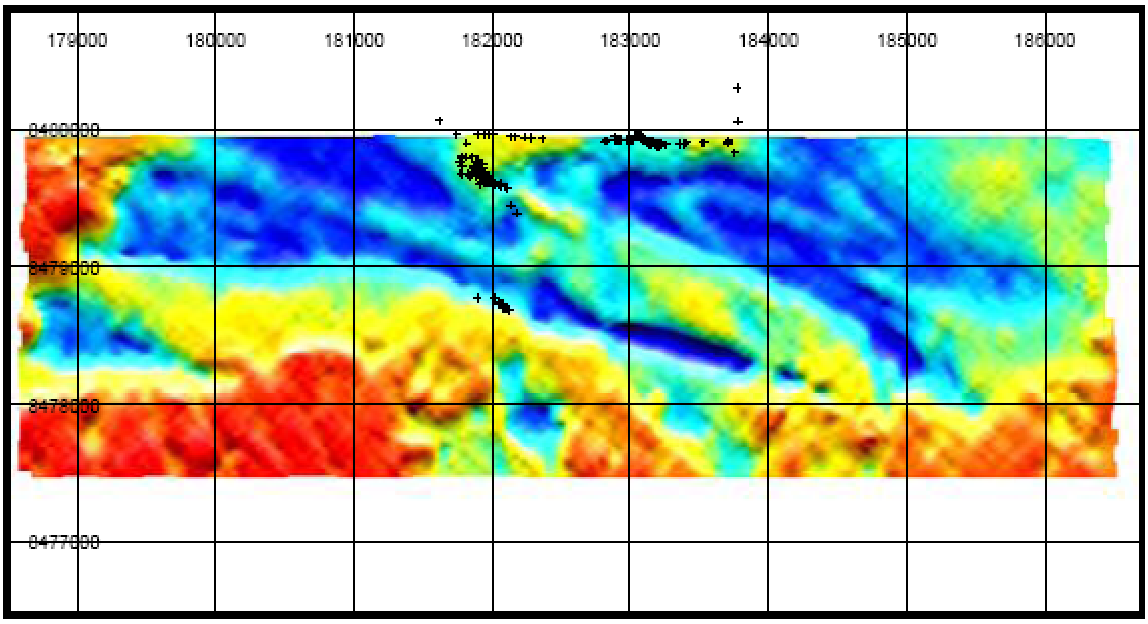
Geophysical Processing Images

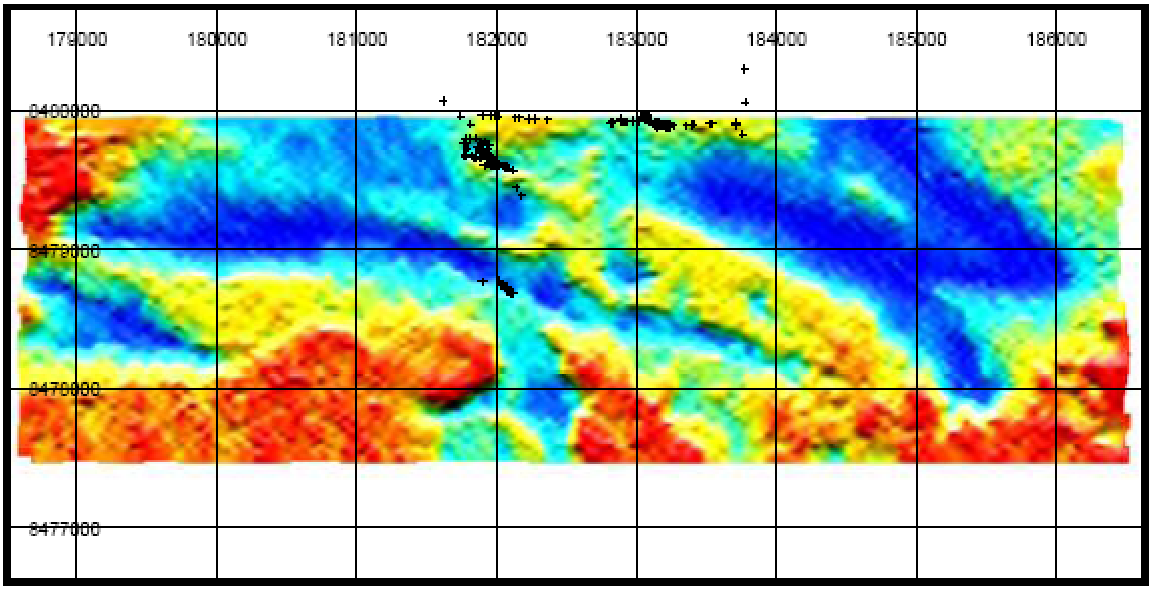
EL22440

2005 Airborne Radiometrics Survey

Ground Geochemistry Locations

Total Count (top) and Potassium Count (bottom)



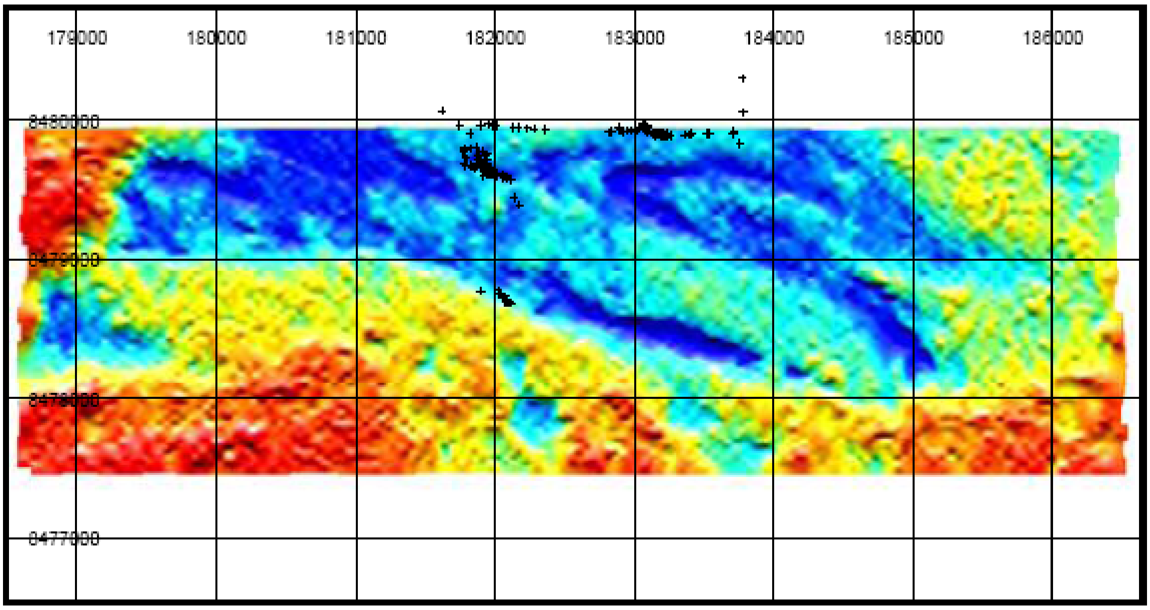


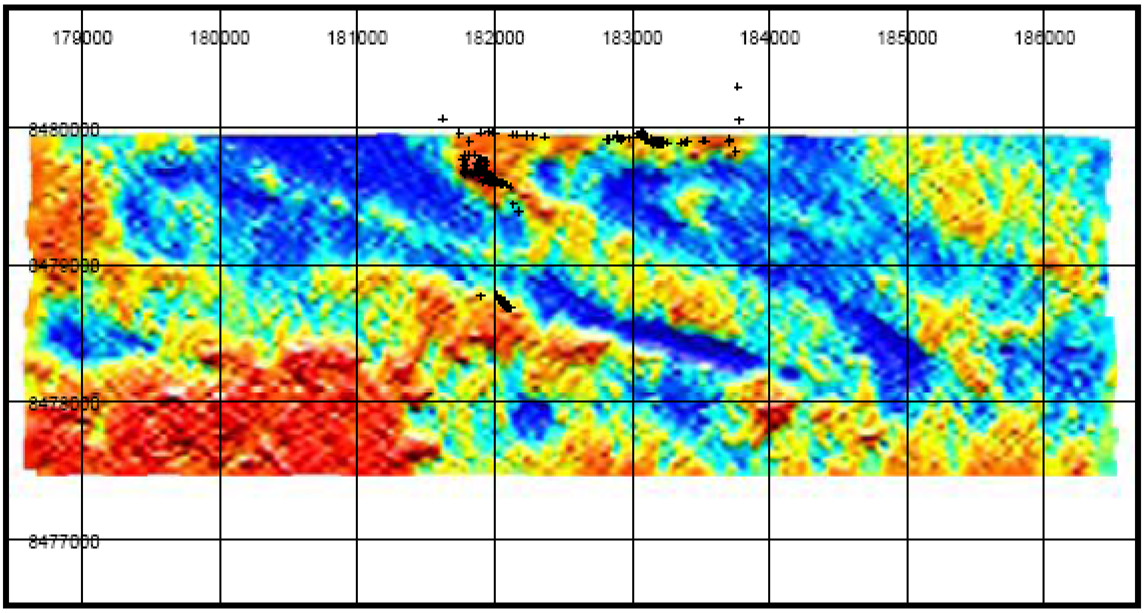
EL22440

2005 Airborne Radiometrics Survey

Ground Geochemistry Locations

Thorium Count (top) and Uranium Count (bottom)



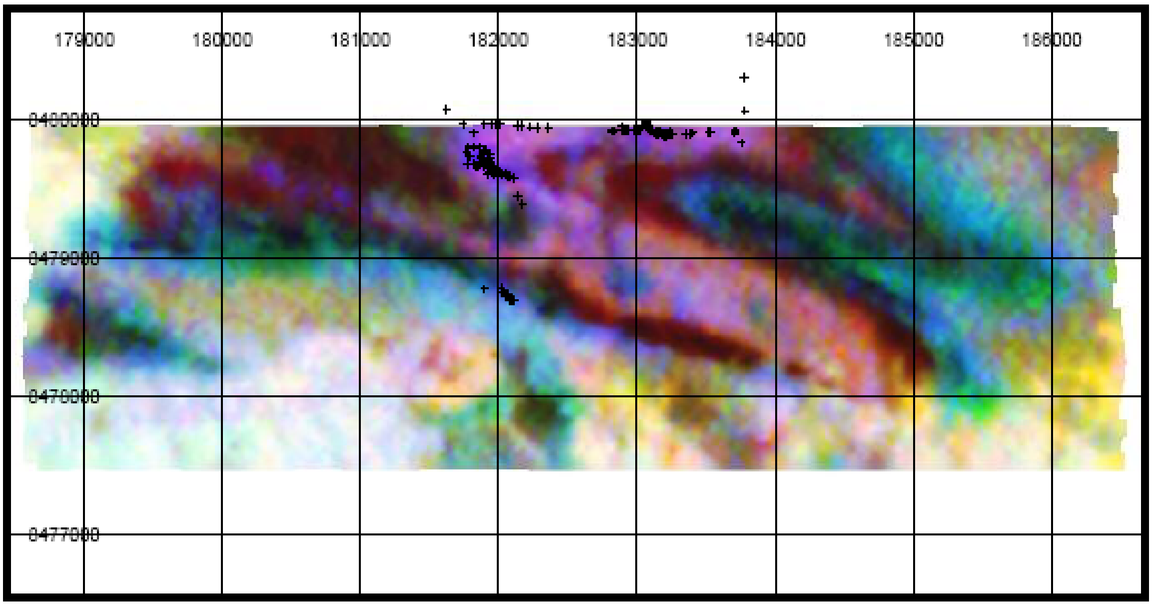


EL22440

2005 Airborne Radiometrics Survey

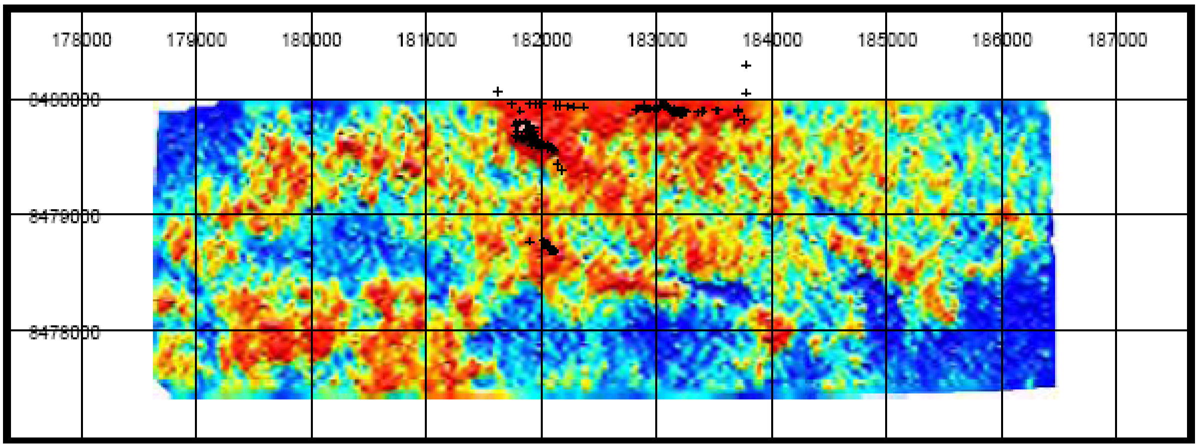
Ground Geochemistry Locations

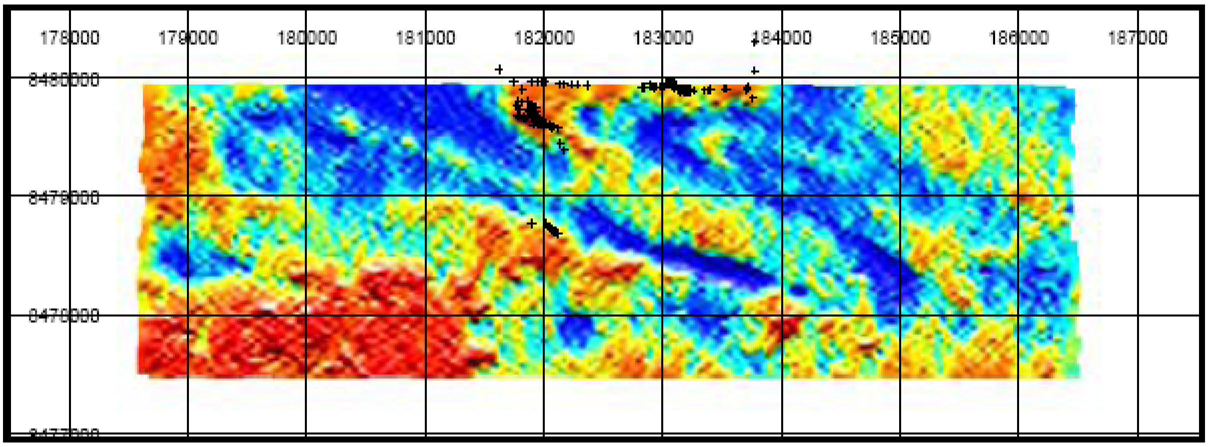
PTU Composite

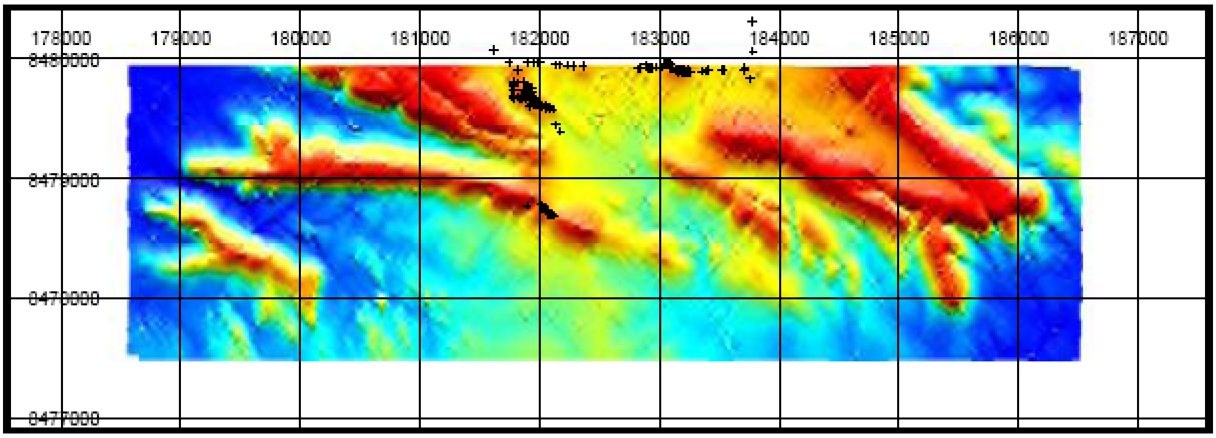


EL22440

2005 Airborne Radiometric Survey
Ground Geochemistry Locations
Satistical derivative (top) Uranium (middle) DTM (bottom)

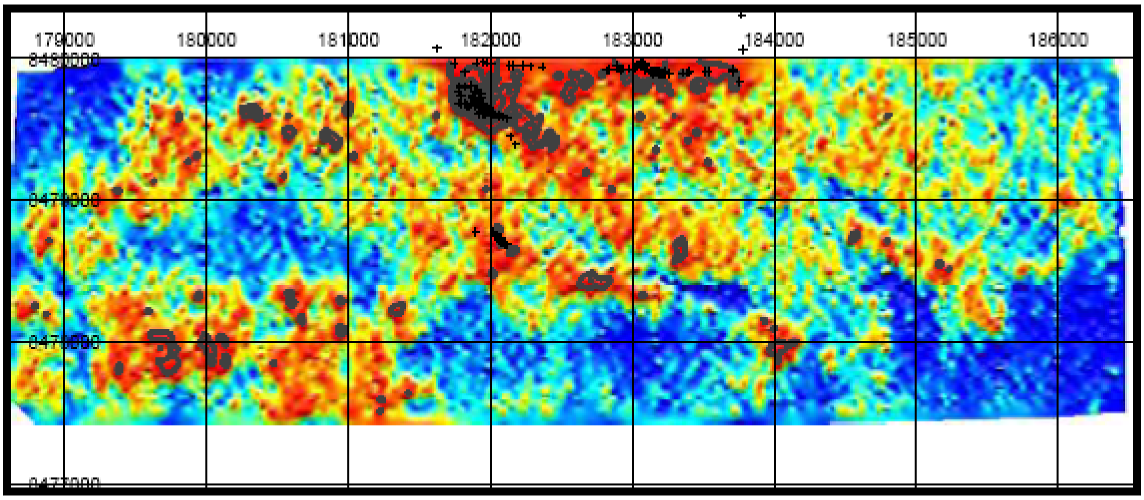


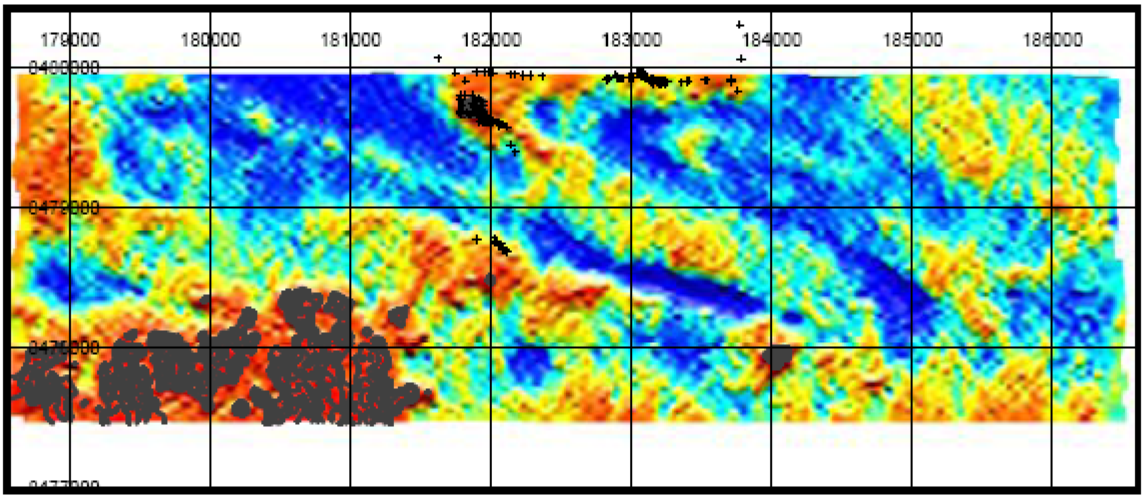




EL22440

2005 Airborne Radiometrics Survey
Most anomalous uranium data shown in contours
Uranium related data (top) and Uranium data (bottom)
(top image statistically derived)





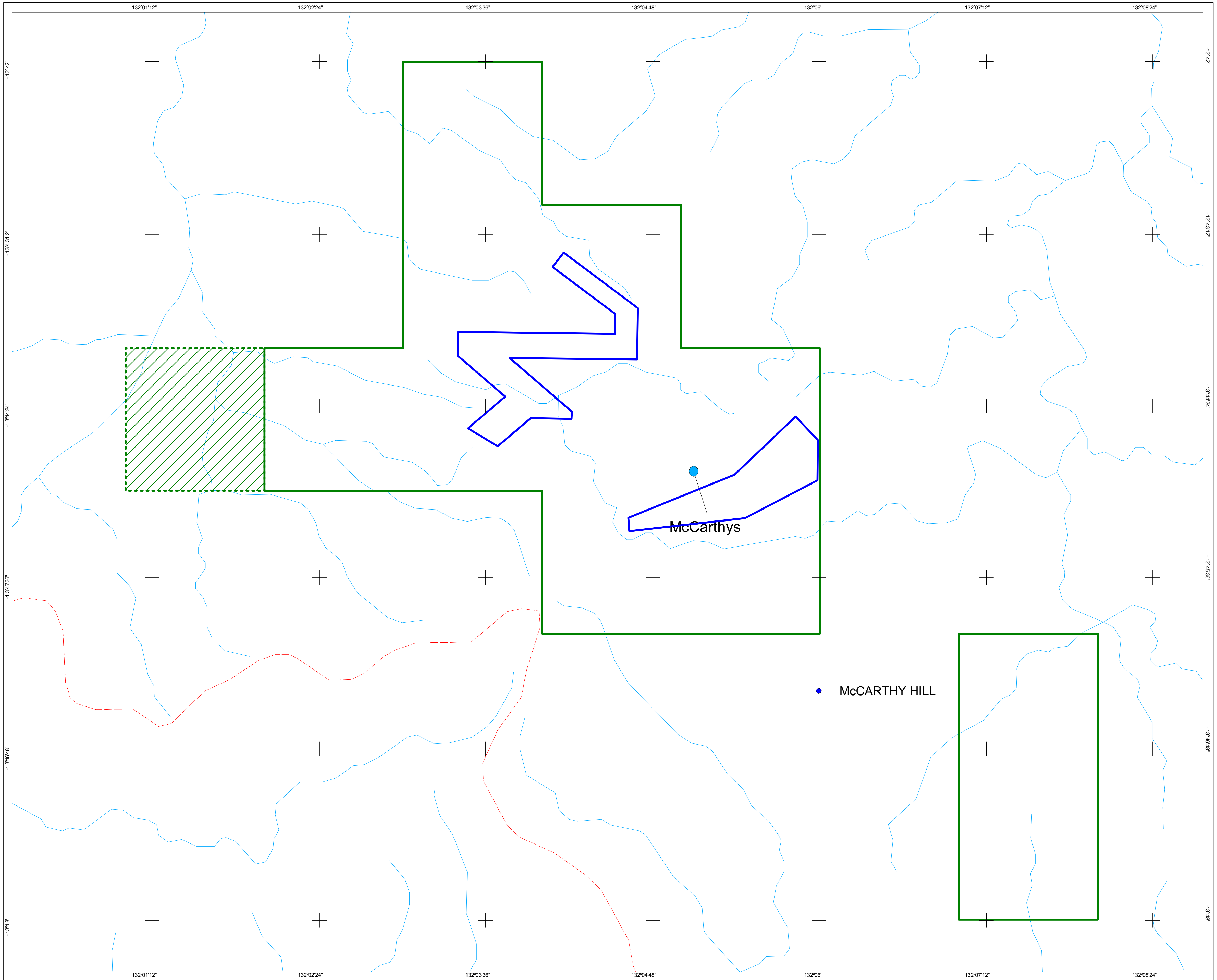
APPENDIX III

Rock Chip Geochemistry Results

Sample	Al2O3_ppm	Au_ppm	Bi_ppm	Cu_ppm	Fe_ppm	Fe2O3_ppm	Ni_ppm	P_ppm	Pb_ppm	S_ppm	SiO2_ppm	Sn_ppm	Ti_ppm	TiO2_ppm	U_ppm	Zn_ppm
1003		-0.005														
1005		-0.005														
1006		0.01														
1010		-0.005														
1011		-0.005														
1024		-0.005														
1025		0.03														
1017	29300			50		901000	50				51100			1000		10
93605J	9100			50		777000	50				204000			300		30
93604	6500			50		834000	50				151500			300		10
93601		0.01		1900					463000							5500
93602		0.01		200					686000							700
93603		-0.005	0.71	431	318000		279	2400	425	200		7	2410		36	3380
93609		-0.005	1.79	516	330000		18	1410	62	500		2	1790		10.85	197
93610		0.02	1.13	915	296000		11	2180	2240	1500		1	1370		26.2	164
1001		0.02	1.85	1630	443000		17	2440	3600	2100		1	1640		30.2	284
1002		0.01	1.66	1680	432000		16	2260	3340	2000		1	1520		30.2	273
1004		0.03	1.6	1640	497000		18	2200	3110	2100		1	1500		27.6	310
1014		-0.005	2.54	1360	440000		21	1300	1130	1300		1	2620		49.7	259
1016		-0.005	1.25	153	153000		127	400	187	200		4	2590		21.4	79
1018		-0.005	3.76	321	140500		30	1780	3000	800		1	3070		11.25	277
1023		0.04	2.25	200	62800		22	660	183	200		2	2840		7.8	60
93607J		0.02	0.55	378	136000		69	8040	45800	1500		15	920		28.1	1870
93608J		0.01	1.22	245	153500		55	6550	44000	1000		13	950		23.3	1300
1	19700			90	565000		130	2470	30	420	123500	-5		400		640
2	26600			200	517000		390	3490	60	340	93500	-5		600		6070
3	33200			190	510000		400	3580	50	280	95500	-5		1100		6420
4	31400			150	538000		240	2320	-5	270	73700	-5		1000		2750
5	21500			480	552000		320	2890	160	160	52000	20		1000		4640
6	16400			160	619000		140	1300	240	430	43000	-5		700		1340
7	5400			20	292000		40	350	-5	80	557000	20		200		400
8	20900			120	604000		50	610	70	340	78000	-5		600		210
9	18600			130	609000		100	1080	140	280	74500	-5		600		440
10	13400			90	619000		140	1700	70	210	50300	-5		400		980
11	13400			60	615000		110	1440	180	100	54000	-5		500		990
12	19000			50	522000		250	2130	30	130	146500	-5		900		1860
13	15800			30	487000		160	4020	30	70	183000	-5		1200		2890
14	20500			20	532000		60	1830	30	140	179500	-5		1000		490
15	5600			20	626000		60	310	-5	20	90700	-5		-50		100
16	13300			-5	331000		20	1200	60	70	486000	-5		200		490
17	16200			-5	288000		10	940	40	60	546000	-5		800		560
18	17400			-5	364000		30	250	20	30	446000	10		500		110
19	13200			20	648000		20	430	230	20	44600	-5		300		220
20	21100			20	632000		20	290	220	20	57300	-5		700		150
21	24100			-5	422000		-5	890	20	150	354000	-5		500		70
22	14600			30	608000		40	890	10	50	90000	-5		500		390
23	10600			40	637000		30	660	100	80	55300	20		200		290
24	10700			20	653000		10	420	50	30	41800	-5		200		90
25	5800			20	675000		30	210	20	30	21000	-5		-50		60
26	8700			10	637000		50	270	180	40	68700	-5		300		150
27	11300			10	623000		40	280	30	50	86300	-5		200		120
28	10800			20	624000		220	1660	-5	30	37300	-5		-50		1280
29	8500			20	652000		30	200	560	40	48100	20		-50		190
30	2900			10	610000		30	290	280	30	119000	-5		-50		100
31	17300			-5	471000		20	360	-5	40	295000	20		700		40
32	13900			-5	299000		630	400	20	30	544000	-5		500		40
33	11400			10	609000		50	250	200	50	105500	-5		200		120
34	16200			-5	650000		50	760	50	80	32700	-5		800		170
35	9900			10	609000		20	810	80	70	97800	-5		200		110
36	7700			-5	505000		40	570	60	70	254000	10		-50		110
37	7700			20	647000		10	290	20	40	58300	-5		-50		60
38	8600			20	655000		40	340	60	140	34100	-5		200		200
39	5800			20	610000		20	230	20	40	114000	-5		-50		40
40	6900			10	574000		-5	200	50	70	162000	-5		200		60
41	8300			10	643000		10	340	30	30	61700	-5		200		40
42	8500			10	566000		110	370	-5	30	172500	30		-50		40
43	11800			20	659000		20	190	430	100	32300	-5		100		150
44	21900			-5	521000		20	290	40	70	215000	-5		900		80
45	12400			20	610000		30	1100	50	130	99800	-5		200		70
46	27100			40	628000		50	850	40	90	46500	-5		1100		120
47	6400			-5	615000		20	270	170	20	105500	-5		-50		110
48	8200			20	663000		40	610	50	80	29500	30		300		100
49	21100			20	565000		20	150	60	20	157000	-5		600		100
50	10600			-5	518000		-5	100	40	20	239000	-5		200		50
51	12200			80	633000		40	850	130	140	56600	-5		-50		620
52	8200			30	652000		20	530	90	60	48000	-5		300		40
53	50100			150	518000		110	7710	150	80	70100	-5		1900		1860
54	3400			20	555000		40	670	50	40	181500	-5		-50		370
55	4200			20	607000		20	130	40	20	120000	20		-50		70
56	3500			10	583000		10	100	-5	30	157000	-5		-50		40

Sample	Al2O3_ppm	Au_ppm	Bi_ppm	Cu_ppm	Fe_ppm	Fe2O3_ppm	Ni_ppm	P_ppm	Pb_ppm	S_ppm	SiO2_ppm	Sn_ppm	Ti_ppm	TiO2_ppm	U_ppm	Zn_ppm
57	35900			270	563000		140	3180	60	90	67400	-5		1300		1140
58	13800			760	615000		150	3050	140	70	42000	-5		300		930
59	6300			30	457000		-5	750	290	20	328000	-5		-50		140
60	6000			40	588000		20	400	270	50	143000	20		200		140
61	4500			60	630000		10	610	310	70	83000	20		-50		220
62	9500			-5	510000		-5	260	-5	50	248000	10		-50		40
63	9800			50	579000		20	620	290	160	144500	-5		200		280
64	4300			50	529000		-5	610	300	50	229000	20		-50		210
65	7000			30	631000		-5	620	320	70	79200	-5		300		220
66	3900			30	516000		10	330	330	50	250000	-5		-50		270
67	6400			30	609000		10	390	190	30	114000	10		-50		140
68	10000			60	595000		10	520	340	50	125500	10		700		220
69	7400			300	563000		50	260	60	60	171500	-5		-50		170
70	6300			120	604000		40	230	70	60	118000	-5		100		90
71	38100			460	545000		210	2680	20	80	76600	-5		1500		2480
72	14300			20	474000		10	250	60	20	296000	-5		500		60
73	12100			530	630000		20	460	60	340	59300	-5		-50		120
74	7500			70	589000		20	320	40	20	141500	-5		100		30
75	10500			50	515000		20	260	-5	20	241000	30		200		30
76	7500			70	623000		30	300	20	60	94200	-5		-50		30
77	9200			100	658000		30	250	10	40	37400	-5		100		70
78	25900			140	611000		50	2440	40	80	56000	20		500		360
79	4400			50	664000		20	100	10	20	38600	-5		-50		60
80	3900			30	648000		20	60	-5	10	66700	-5		-50		50
81			-1	1220	384000		1	1940	5050	2100		-5	1500		20	219
82			-1	1220	286000		14	2780	11150	5100		-5	1800		20	354
83			-1	442	262000		1	1980	2440	1800		-5	1200		30	73
84			-1	717	310000		8	1970	2780	2000		-5	2100		20	91
85			-1	488	248000		5	840	406	900		-5	1800		20	66
86			-1	269	239000		12	1580	744	1100		-5	2600		20	79
87			-1	330	210000		5	1640	1030	1200		-5	1900		20	56
88			-1	575	237000		16	2870	1220	1200		-5	2100		20	153
89			-1	496	237000		9	2820	602	1300		-5	1800		10	120
90			-1	874	261000		18	2660	221	1000		-5	2900		10	189
91			-1	611	343000		4	2930	210	1400		-5	1700		10	94
92			-1	615	251000		6	1730	85	1100		10	1400		10	118
93			-1	129	86200		2	650	96	400		-5	700		-5	34
94			3	936	406000		6	2980	182	1300		10	2000		20	129
95			-1	36	228000		-0.5	610	42	300		-5	700		10	112
96			-1	754	400000		6	1250	225	500		-5	1200		20	86
97	9500			570	594000		150	2750	110	40	75900	-5		100		1000
98	2600			20	628000		20	580	340	30	91200	-5		-50		120
99	9600			-5	601000		-5	260	280	110	118500	-5		200		160
100	8100			80	626000		50	410	30	30	88400	20		100		40
101	12200			120	602000		30	470	40	50	108000	20		300		140
102	8500			40	637000		20	550	310	80	69200	10		300		220
103	8700			100	654000		100	780	580	440	34800	-5		500		420
104	19200			120	640000		30	1200	20	50	43800	10		200		60
105	8100			310	576000		30	250	200	200	150000	-5		-50		110
106	6700			30	603000		30	250	430	40	118500	20		-50		170
107	1600			10	599000		10	300	250	30	135500	-5		-50		80
108	2100			20	638000		40	110	30	70	81300	10		-50		50
109	25600			30	425000		-5	130	70	50	348000	10		800		160
110	6700			40	571000		20	410	170	30	167000	-5		-50		80
111			2	1010	428000		4	1020	163	1200		-5	1800		20	130
001A	6700			-5	434000		-5	210	40	-5	364000	-0.0005		200		40
002A	14200			20	627000		70	570	70	20	74600	0.002		400		200
003A	24000			-5	600000		30	430	-5	40	98300	-0.0005		900		120
004A	12,700			-5	384000		20	590	80	80	414000	0.002		500		200
005A	13,400			10	574000		100	380	50	40	154500	-0.0005		500		100
006A	23,600			-5	548000		30	410	60	20	173500	0.003		800		100
007A	2,000			20	624000		40	70	30	20	100000	-0.0005		-50		20
008A	41,100			20	594000		80	640	40	40	81600	0.002		1300		120
009A	31,000			20	613000		60	270	50	30	65200	0.004		1300		110
010A	35,400			-5	592000		20	350	-5	30	98700	-0.0005		1200		60
011A	12,800			80	657000		120	1540	30	30	24700	0.002		400		260
012A	27,700			20	573000		50	450	40	40	136000	-0.0005		500		60
013A	20,500			30	645000		70	770	40	-5	37300	-0.0005		600		100
014A	23,000			30	626000		20	580	30	-5	63800	-0.0005		700		50
015A	28,500			10	589000		30	510	30	30	109000	-0.0005		1100		50
016A	22,900			40	648000		90	390	60	-5	35700	0.002		800		60
017A	21,000			20	652000		30	320	40	-5	33700	0.002		600		50
018A	24,800			20	583000		70	370	40	-5	125500	-0.0005		900		60
019A	10,800			20	646000		90	810	60	-5	50600	0.002		300		130
020A	17,800			30	628000		50	330	40	-5	70400	-0.0005		500		40
021A	20,100			20	638000		50	440	20	-5	53600	-0.0005		500		70
022A	30,100			20	586000		40	310	40	20	112500	-0.0005		1100		50
023A	10,600			20	604000		60	260	40	30	113000	-0.0005		200		50
024A	34,600			20	601000		50	450	40	70	84800	0.003		1100		50
025A	25,700			50	633000		90	590	60	240	48200	0.001		700		100

Sample	Al2O3_ppm	Au_ppm	Bi_ppm	Cu_ppm	Fe_ppm	Fe2O3_ppm	Ni_ppm	P_ppm	Pb_ppm	S_ppm	SiO2_ppm	Sn_ppm	Ti_ppm	TiO2_ppm	U_ppm	Zn_ppm
026A	16,000			20	652000		30	560	40	120	37100	0.003		400		40
027A	22,100			30	636000		40	980	50	80	46100	0.002		400		100
028A	18,900			40	628000		100	680	50	130	64800	0.002		500		60
029A	20,900			30	594000		90	520	50	30	112000	0.002		500		70
030A	14,600			30	657000		130	480	60	40	33100	-0.0005		400		40
031A	17,200			10	610000		40	350	40	20	96400	0.002		400		40
032A	26,100			120	635000		170	1980	40	20	34900	-0.0005		900		270
033A	16,600			20	638000		20	300	50	-5	56500	0.002		1000		50
034A	5,200			30	667000		70	960	80	30	30100	-0.0005		200		30
035A	6,800			30	666000		50	280	40	20	32700	-0.0005		100		30
037A	4,200			20	661000		80	330	40	50	42600	-0.0005		100		40
038A	2,600			30	683000		70	160	110	90	15600	-0.0005		-50		90
039A	4,800			20	683000		100	210	220	180	9300	-0.0005		200		130
050A	7,000			30	624000		90	620	130	90	87800	-0.0005		100		210
051A	4,500			40	606000		70	140	60	40	123000	0.003		-50		40
052A	16,800			10	569000		120	1150	40	40	141500	0.002		700		250
053A	54,000			30	490000		20	710	60	40	213000	0.003		1700		90
054A	28,600			50	562000		30	550	70	50	145000	-0.0005		3200		100
055A	7,800			10	588000		50	420	40	-5	143000	0.002		400		70
056A	21,200			20	621000		40	380	50	10	76300	0.002		600		50
057A	14,600			30	511000		150	560	50	-5	241000	-0.0005		400		90
058A	14,000			-5	551000		80	940	60	-5	156500	-0.0005		500		770
059A	15,900			20	631000		40	300	60	20	67700	0.001		600		70
060A	7,100			20	581000		40	410	60	20	153000	0.002		100		70
061A	12,200			20	641000		30	450	20	40	57600	-0.0005		500		100
062A	6,700			10	617000		30	300	60	20	102500	0.002		300		70
063A	51,700			10	526000		130	270	20	30	132000	0.002		2600		300
064A	21,200			20	647000		70	410	50	40	38900	-0.0005		800		70
T2-001	11,000			80	567000		50	950	-5	120	157000	0.002		400		220
T2-002	7,100			-5	323000		10	280	-5	60	522000	0.002		300		70
T2-003	2,300			-5	444000		10	230	30	60	356000	0.003		-50		30
T2-004	4,900			-5	427000		40	270	50	50	377000	0.004		100		70
T2-005	3,400			-5	392000		20	160	40	40	430000	0.002		-50		40
T2-006	1,400			10	299000		-5	330	40	160	563000	0.002		-50		50
T2-007	3,000			-5	350000		-5	190	30	30	491000	0.004		-50		30
T2-008	18,800			50	616000		60	570	180	50	84300	0.002		700		120
T2-009	13,800			210	524000		120	1600	20	20	198500	0.002		400		590
T2-010	1,300			20	600000		20	420	70	20	134500	0.002		-50		40
T2-011	2,900			10	516000		20	650	30	60	252000	0.002		100		40
T2-012	8,900			120	623000		210	1440	10	80	31800	-0.0005		300		2400
T2-013	1,000			-5	446000		10	540	30	-5	356000	0.002		-50		40
T2-014	100			-5	395000		-5	380	40	10	433000	0.001		-50		10
T2-015	2,500			-5	519000		-5	400	50	20	247000	-0.0005		-50		110
T2-016	3,200			20	541000		20	560	60	30	214000	0.003		100		100
T2-017	20,400			-5	199500		20	280	30	-5	681000	0.002		500		50
T2-018	45,300			40	542000		450	390	40	20	117500	0.002		1700		460
T2-019	12,300			30	627000		40	640	70	160	57200	-0.0005		500		170
T2-020	27,600			460	555000		440	1870	50	190	43600	-0.0005		400		3040
T2-021	23,900			60	567000		100	1020	-5	70	42700	-0.0005		800		4030
T2-022	22,900			30	545000		110	760	30	110	78100	-0.0005		800		3990
T2-023	19,900			60	614000		100	800	90	220	51200	0.002		900		870
T2-024	17,800			310	573000		350	2550	40	170	37000	-0.0005		600		4370
T2-025	22,000			160	603000		90	1060	100	570	52400	-0.0005		1100		1330
T2-026	13,900			90	625000		120	520	120	350	49200	0.002		500		570
T2-027	21,100			60	607000		130	910	80	470	59800	0.003		900		670
T2-028	20,100			110	577000		340	2910	40	170	28700	-0.0005		600		4690
T2-029	16,100			70	623000		50	510	30	260	62400	0.001		700		150
T2-030	15,500			30	610000		30	840	60	840	76700	-0.0005		1000		120
005B	5,500			20	616000		60	390	40	90	104500	0.001		100		80
013B	9,800			10	654000		80	530	60	60	42800	-0.0005		300		50
030B	14,400			20	658000		80	370	60	40	33900	0.001		400		60
032B	9,000			20	671000		30	210	60	60	21900	0.002		300		30
034B	11,200			20	665000		70	350	70	50	27300	0.002		500		50
037B	11,800			40	645000		40	390	70	140	47700	0.002		600		80
038B	5,600			30	682000		110	370	240	160	11600	-0.0005		200		100
056B	18,500			20	623000		30	330	60	-5	77300	-0.0005		600		60
062B	7,300			20	611000		20	460	90	20	109500	0.002		200		130



Tenement Outline (EL22440)

Relinquished Area Outline

Geological Mapping & Geochemical Sampling

McCarthys Pb Mine

N

0 1,500 3,000

metres

Projection: Geodetic
Datum: GDA94

EL22440 Year 6 Annual Report

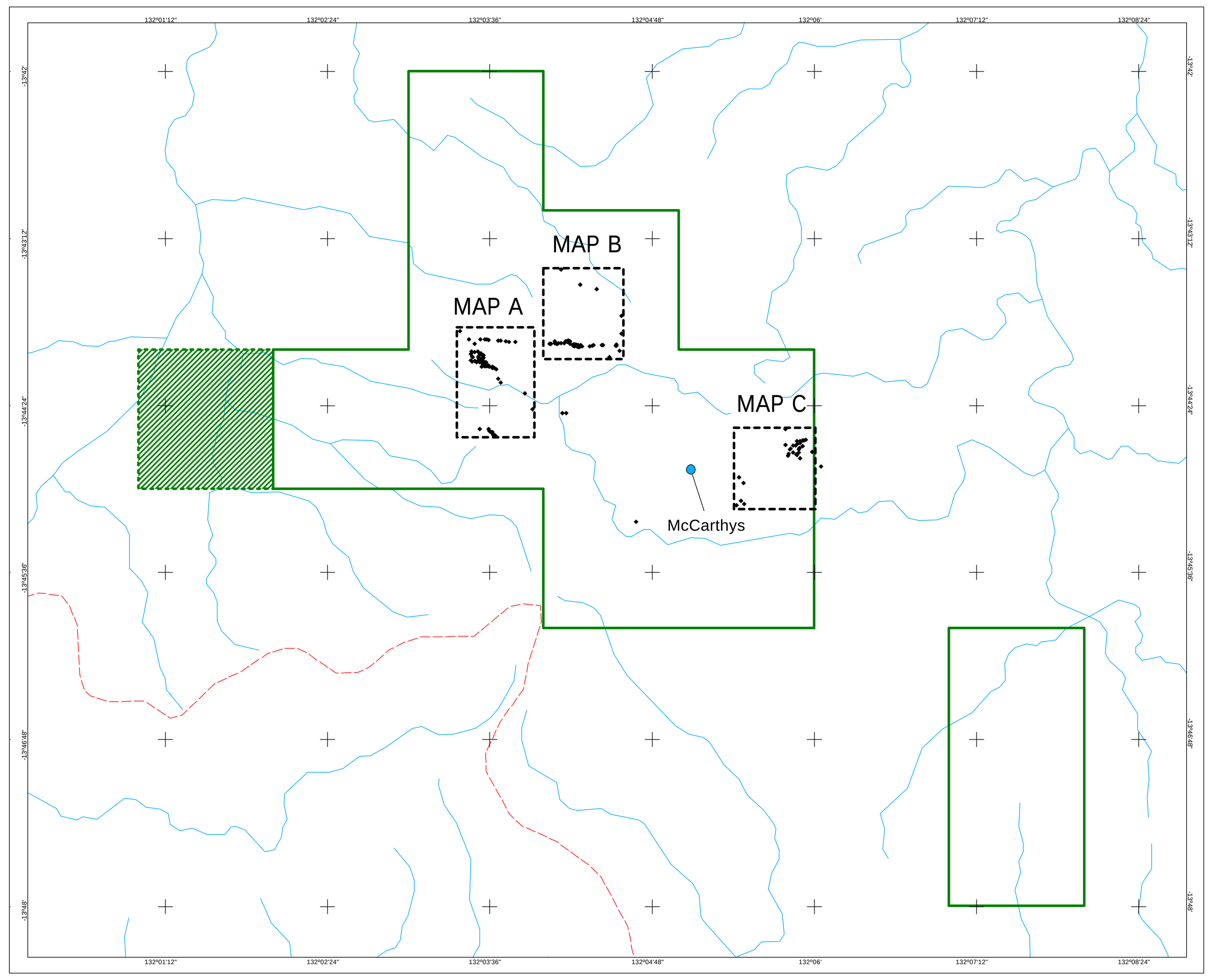
EL22440

Exploration Index

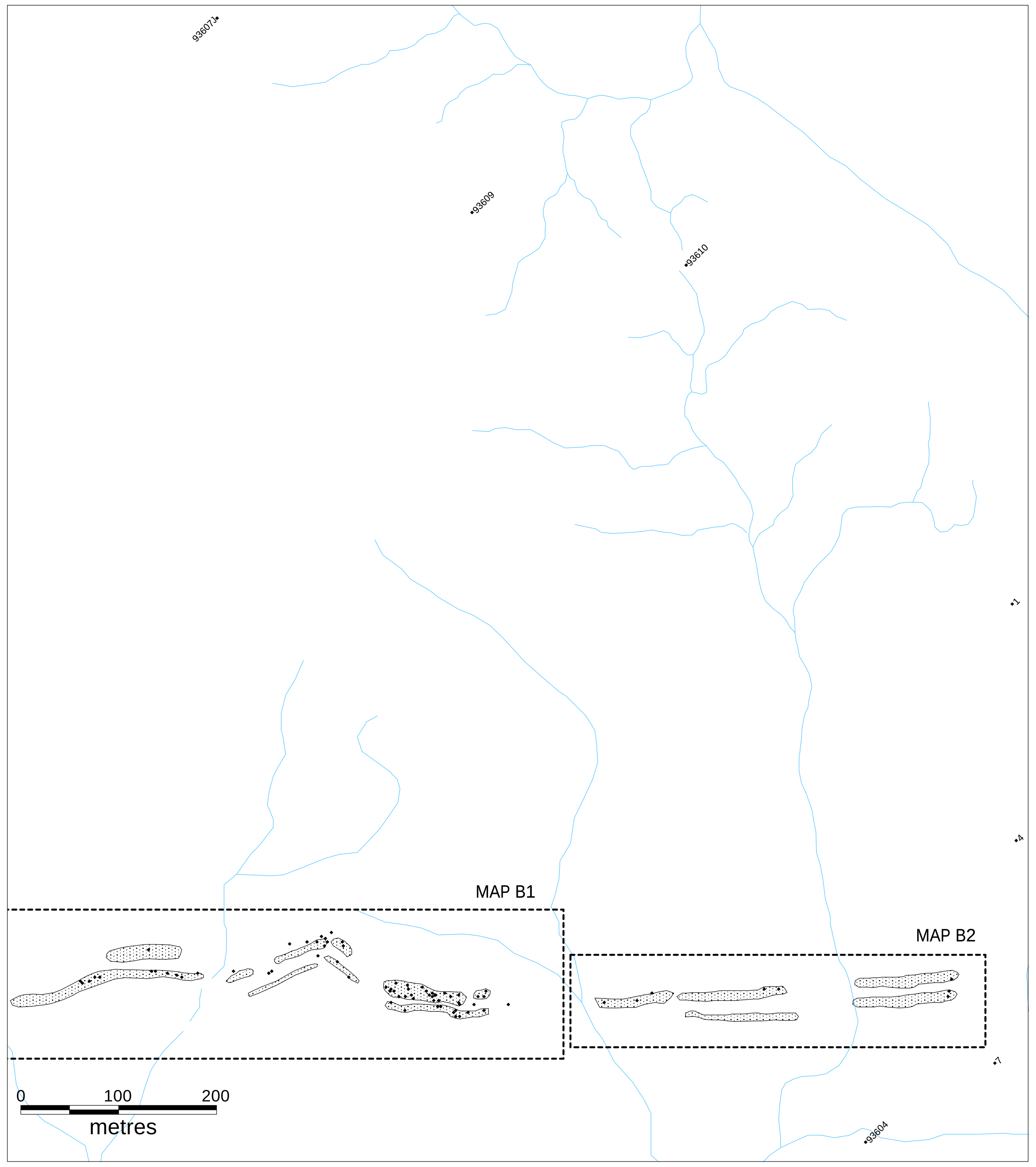
Year 6

Scale	1:50,000	Enclosure 1
Date	24-3-2010	

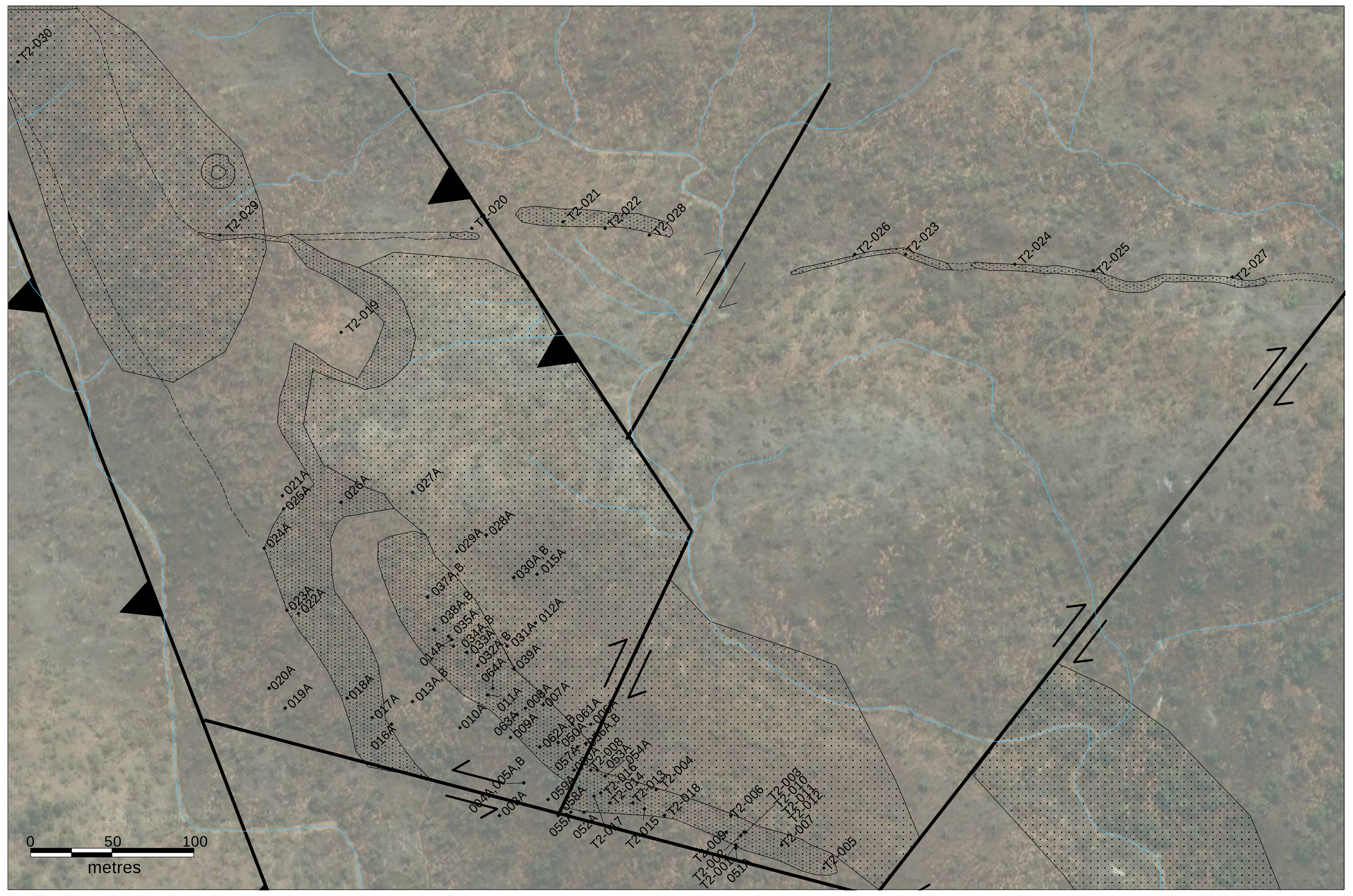
INDEX MAP



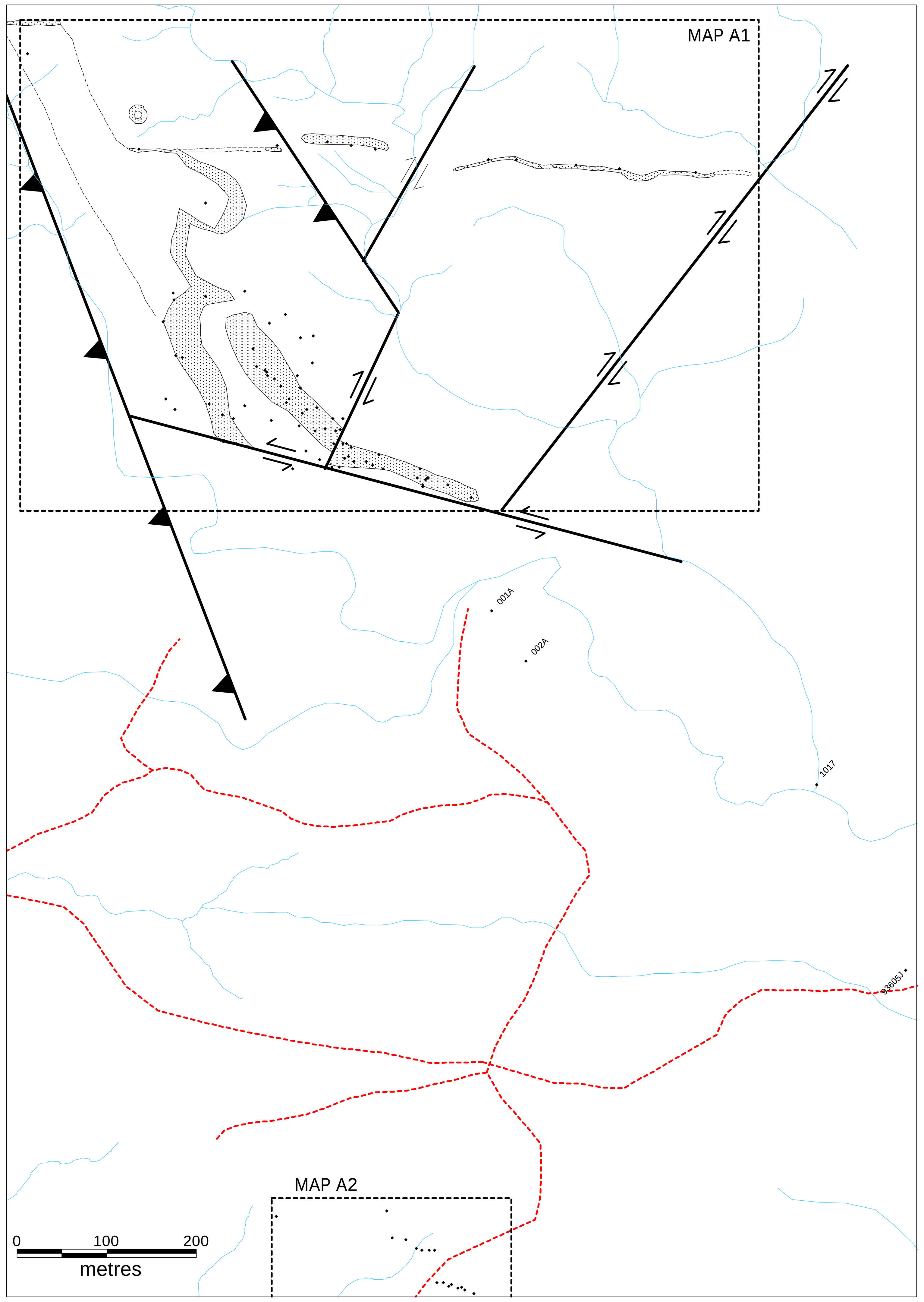
MAP B



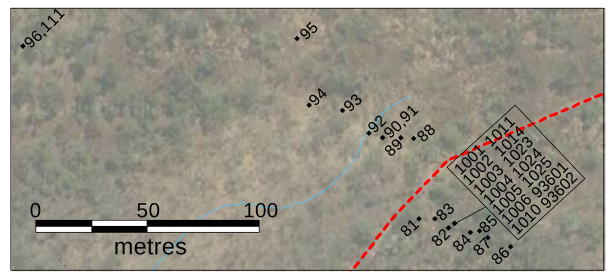
MAP A1



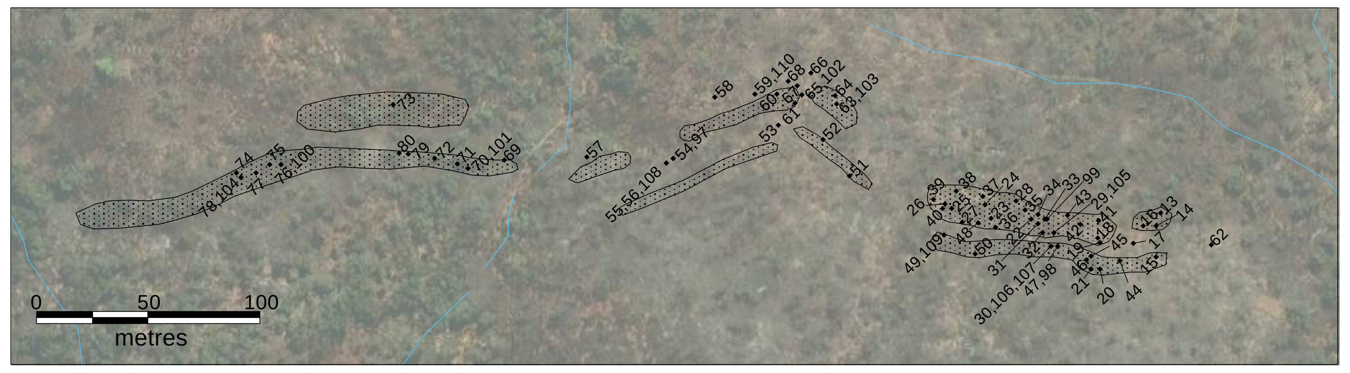
MAP A



MAP A2



MAP B1



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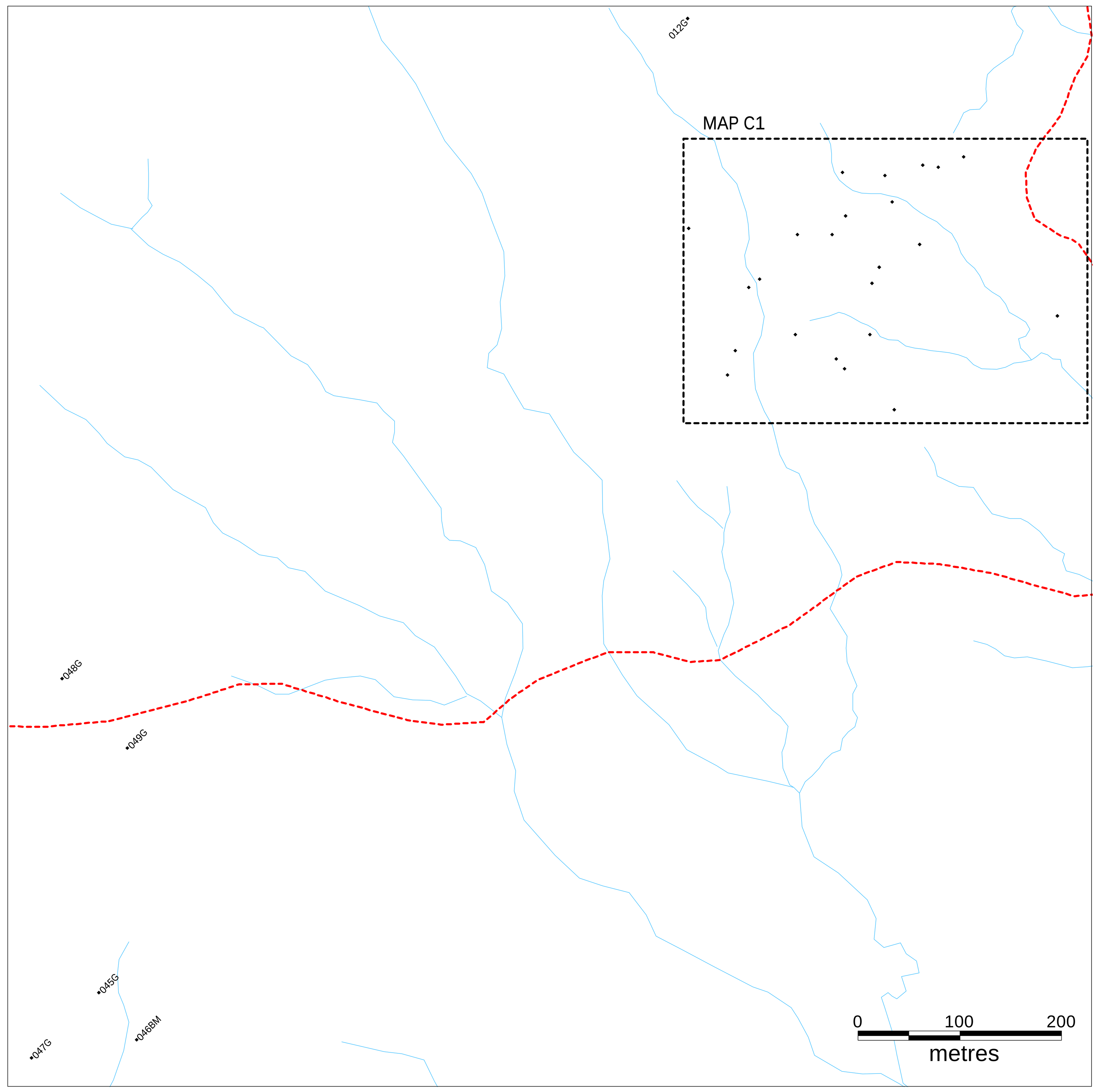

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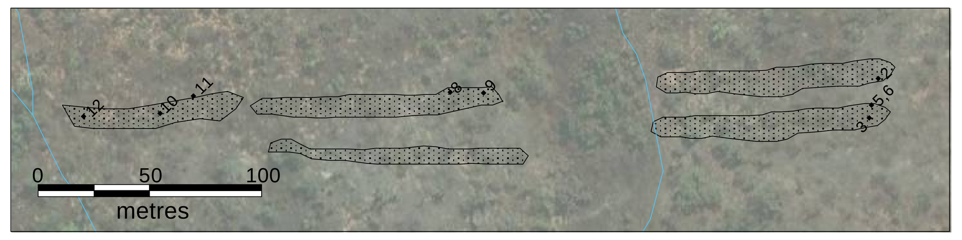

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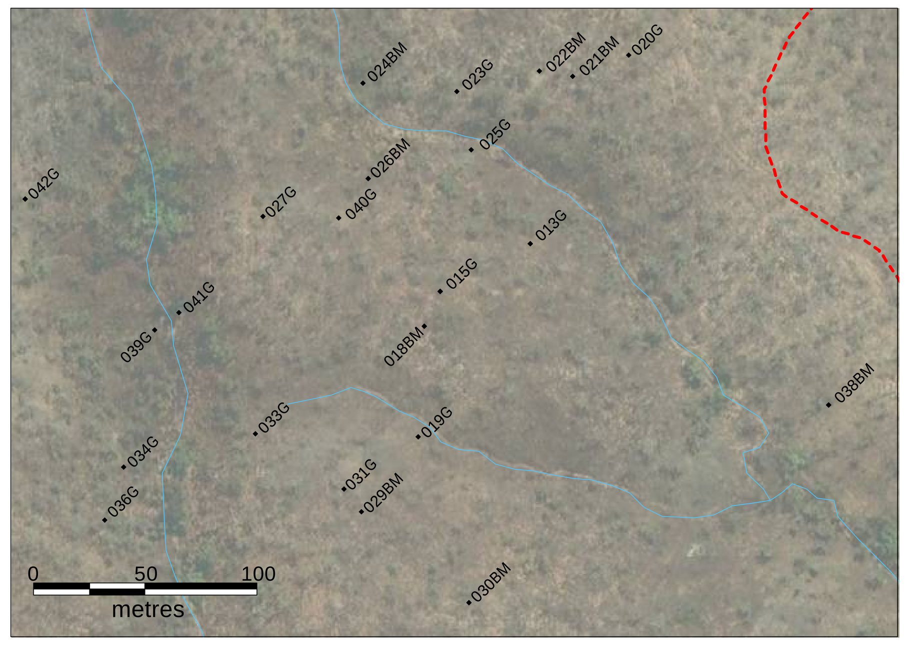

Fault - Thrust

Fault - Strike Slip

Rock Chip Sample Location (& Identifier)

Drainage

Vehicle Track

Tenement Outline (EL22440) / Relinquished

Iron Reef Outcrop (Crystalline Hematite)

Iron Reef Subcrop (Inferred)

Exploration Target Zone at Depth

N

Projection: MGA Zone 53
Datum: GDA94

EL22440 Year 6 Annual Report

Iron Reef Outcrops, Structures, Sample Locations & Target Zones

Scale	1:3,000 & 1:2,000	Enclosure 2
Date	25-3-2010	