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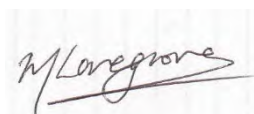


On behalf of

UNIVERSAL SPLENDOUR INVESTMENTS

FINAL ANNUAL GROUP REPORT: GR228

11 December 2012



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EXECUTIVE SUMMARY

Universal Splendour Investments (USI) was granted EL 27425 and EL 27426 in December 2009, and EL 28166 in August 2011. These tenements are collectively referred to as the Dunmarra project area and in December 2011 were approved for group reporting (GR228). The Dunmarra project tenements are located in the eastern region of the Northern Territory, approximately 190km southeast of Borroloola.

Initial work carried out consisted of a background desktop study, completed by Karl Lindsay-Park from CSA Global in March 2010. (Appendix A).

In 2010, International Geoscience completed a full background review for the Dunmarra Project, including an assessment of previous exploration, manganese mineralisation model, data compilation and a preliminary interpretation of the tenements (see Appendix B for summary of this study).

During the 2011 and 2012 field seasons no ground activity was completed on EL 27425 and EL 28166. This was due to USI's commitments to other more prospective tenements in the region.

In 2011 EL 27425 was reduced by 50% based on the NTGS guidelines.

EL 27426 was joint-ventured with Predictive Discovery Limited from February 2011 to January 2012. The activity carried out during this time and the results obtained are detailed in Appendix C.

No further work is recommended with respect to manganese exploration.

Further investigation is required to fully explore the vanadium potential of the Dunmarra region. USI are focusing their 2013 exploration program on other areas of greater interest. Hence the Dunmarra Project was surrendered in October 2012.

This is the Final Annual Group Report for GR228, highlighting all work completed by USI since December 2009.

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1 OVERVIEW

Universal Splendour Investments (USI) was granted EL 27425 and EL 27426 in December 2009, and EL 28166 in August 2011. These tenements are collectively referred to as the Dunmarra project area (Figure 1) and in December 2011 were approved for group reporting (GR 228). The Dunmarra project tenements are located in the eastern region of the Northern Territory, approximately 190km southeast of Borroloola.

EL 27425 consists of a total of 9 blocks (29.4km²), after being reduced by 50% in size in December 2011.

EL 27426 consists of a total of 38 blocks (99.35km²).

EL 28166 consists of a total of 57 blocks (186.75km²).

The main focus for USI was for manganese and to a lesser degree vanadium. Due to the remote nature of the tenements, dense vegetation, and lack of prospective lithologies based on the initial review USI did not undertake any field visits. One of the tenements (EL27426) was in a JV with Predictive Discoveries Limited and undertook a significant amount of work with a focus on uranium.

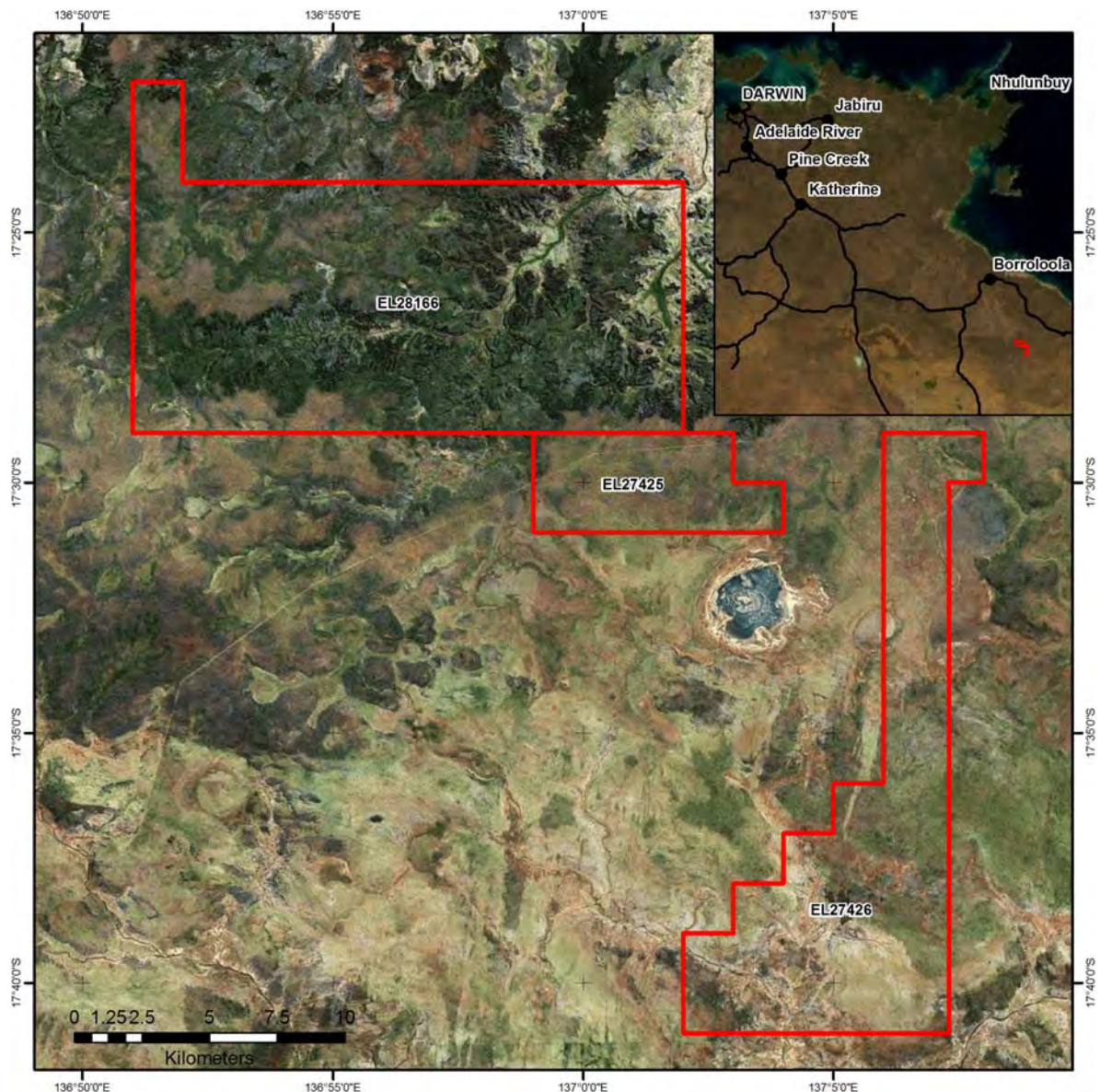


Figure 1: Location Map of GR228 Dunmarra Project ELs. Base image is an Orthorectified image from Bing Maps.

Although the main exploration focus for USI is manganese the Dunmarra project area may prove to be prospective for vanadium. A vanadium occurrence lies approximately 1km from USI's tenement.

1.1 Access

The Dunmarra project area is accessible via the Calvert Hills Station road, which diverges from the main Carpentaria Highway 60km northeast of the tenements. There are also a number of tracks that traverse across the project area accessible to 4WD vehicles. Access to other regions of the project may require helicopter support.

1.2 Geology

The Dunmarra project area is located in the Calvert Hills 1:250 000 map sheet, and Nicholson River, Surprise Creek, Calvert Hills and Coanjula 1:100 000 map sheets.

Figure 2 below shows NTGS 1:250 000 geological mapping of the Dunmarra project area. USI's Dunmarra tenements are outlined in red.

EL 27425 Geology

The surface geology is dominated by Cenozoic Sediments (undifferentiated and laterite) with minor outcropping of underlying Mesozoic rocks, Bukalara Sandstone and Tawallah Group lithologies.

EL 27426 Geology

See Appendix C, report compiled by JV partner Predictive Discovery for details of the geology of EL 27426.

EL 28166 Geology

The eastern region of the tenement is dominated by Cambrian sediments of the Bukalara Sandstone. Mesozoic material covers the central region, including siltstones, sandstones and conglomerates. The northwest corner of the tenement is covered by Cenozoic sediments.

Also within the EL's are lakes which are suspected to contain water on a seasonal basis (identified from remotely sensed data).

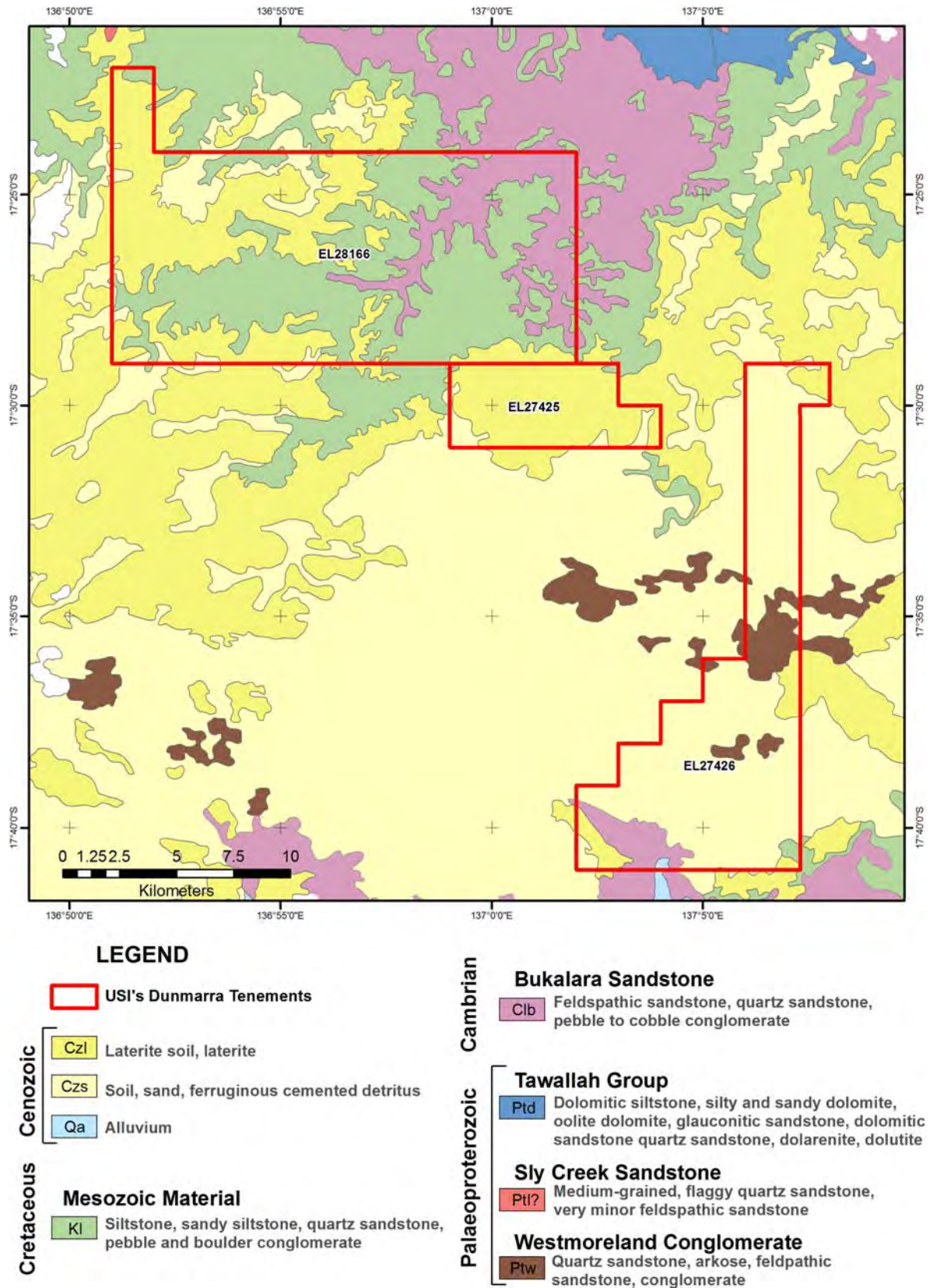


Figure 2: Geology Map of GR288 Dunmarra Project Area (1:250 000 scale)

2 EXPLORATION ACTIVITY

2.1 Activity during 2010

Work undertaken during this reporting period included a detailed desktop study.

2.1.1 Desktop activities

CSA Global provided a background desktop study for the Dunmarra project area in March of 2010 (Lindsay-Park, 2010). The report has been included as Appendix A in this report.

International Geoscience completed a desktop study included regional and local geology and mineralisation models; past exploration activities within the region; data compilation of all freely available geospatial data; landscape and environment study; initial integrated interpretation of surficial geology within the tenement. A summary of this study can be found in Appendix B.

2.2 Activity during 2011 & 2012

2.2.1 Geophysics and Drilling

Predictive Discoveries Limited completed several small ground gravity surveys, interpretation and modelling of the results. Follow-up drilling was undertaken and the results were disappointing. A complete account of the results has been included in Appendix C.

3 CONCLUSIONS AND RECOMMENDATIONS

Manganese was the main focus for exploration in the Dunmarra project area.

Initial work carried out consisted of a background desktop study, completed by Karl Lindsay-Park from CSA Global in March 2010. In 2010, International Geoscience completed a full background review for the Dunmarra project and surrounding tenements held by USI, including an assessment of previous exploration, manganese mineralisation models, data compilation and a preliminary interpretation of the tenements.

EL 27426 was joint-ventured with Predictive Discovery Limited from February 2011 to January 2012. The activity carried out during this time and the results obtained are detailed in Appendix C.

No further work is recommended with respect to manganese exploration.

Further investigation is required to fully explore the vanadium potential of the Dunmarra region. USI are focusing their 2013 exploration program on other areas of greater interest. Hence the Dunmarra Project was surrendered in October 2012.

APPENDIX A: CSA GLOBAL DUNMARRA PROJECT SUMMARY REPORT (MARCH 2010)

Review of Previous Exploration and Work Proposal

Universal Splendour Investments

Dunmarra Group Project

Northern Territory, Australia

By

Karl Lindsay-Park

1/3/10

Introduction

Universal Splendour Investments (USI) Dunmarra Group project lies in the central eastern part of the Northern Territory. The licences were applied for by USI on the 29th June 2009 and granted on the 23rd December 2009. Figure 1, shows the location of the licences and their identity number.

Licence Number	Application Date	Grant Date	Size blocks/sqkm	Land Status PPL / NT Por	Owner	Covenant
27425	29/6/09	23/12/09	19 / 62	NTP 0668 PPL 2269 NTP 0963 PPL 963	USI	\$7,850
27426	29/6/09	23/12/09	38 / 99	NTP 0668 PPL 2269 NTP 0963 PPL 963	USI	\$10,700

An Aboriginal Areas Protection Authority clearance has been undertaken for the licence area. No sites have been registered with the Authority.

Location, Landform and Climate

Exploration Licences 27425 and 27426 are located on the northern edge of the Barkly Tableland and approximately 160km, in a straight line southwest of the Gulf of Carpentaria. The nearest towns of any consequence would be Camooweal on the Northern Territory, Queensland border some 650km by road to the South-southeast and Tennant Creek approximately 600km to the southwest. Calvert Hills Station and Benmarra are the only two homesteads that appear to be less than 100km from the licences.

Access to the licences is not difficult but will be very time consuming. From Darwin access is via the Stuart highway (600km) to the Carpentaria Highway intersection, then along that road to the east for 270km. The Tableland Highway (unsealed) runs further to the south for a further 150km. The Calvert Hills road leads to the northeast for 170km to reach the tenement area. The Calvert Hills station is another 70km along the road. It will take at least 2 days to reach the licence area by road.

Examination of the Google image, figure 2, shows the area is mostly flat with only some minor hills in the central part of EL 27426. Three salt lakes are clearly defined and the drainage appears to be broad flood zones rather than discrete creeks with defined banks. Vegetation appears to be sparse with Spinifex grass wide spread.

The licence area, located approximately 150km from the Gulf coast is subject to heavy seasonal rain. During the monsoon months between October and April vehicle access in the area is extremely limited. During the dry period the ground dries out completely and large desiccation cracks develop in the black soil areas. Cross country travel at this time is easy but very rough.

Figure 2 shows a few tracks and fence lines in the area but it appears they have not been used regularly nor well maintained. Travel within the licence area maybe problematic.

Accommodation

At this stage it is uncertain what the accommodation options are. Hopefully one of the two stations mentioned above will be able to provide accommodation or a shed supplied with power. Access to fuel and communications will also be an issue.

Geology

There is very limited outcrop in the area of interest; however the oldest exposures belong to the Mesoproterozoic Westmoreland Conglomerate. Exposed in the middle part of EL27426, Figure 3, the Westmoreland Conglomerate is described by the NTGS as matrix and clast supported boulder conglomerate with interbeds of feldspathic and lithic sandstone.

Exposed in the southwest corner of EL 27426 is the Early Cambrian (Figure 2, Pink Colour) Bukalara Sandstone. The unit is described as feldspathic sandstone, quartz sandstone with lenses of pebble to cobble conglomerate. The Bukalara Sandstone is also exposed in the drainages immediately north of EL 27425.

Unconformably overlying the Early Cambrian Bukalara Sandstone is the Cretaceous Mullaman Beds. The Mullaman Beds are comprised of siltstone, sandstone, pebble and boulder conglomerate.

Covering almost all of the area of EL 27425 and most of EL27426 are black soils, sand and laterite of Cainozoic age.

Both licences lie within the Cretaceous shoreline and as such have the potential to host manganese mineralisation. Located approximately 50km to the northeast of the licence area is the Calvert Hills manganese field. The manganese is hosted in the Karns Dolomite which is described as a Mesoproterozoic algal dolomite, sandy dolomite, oolitic chert, siltstone and sandstone. The largest occurrence has been estimated at 200,000 tonnes. It is unlikely there is any Karns Dolomite located in the area of interest and the manganese occurrences area of academic interest only.

The Groote Eylandt-style of manganese mineralisation has the ore lying directly on the Palaeoproterozoic sandstone unit of the Alyangula Sub-group. The mineralisation is considered to be Cretaceous in age and covered by Cainozoic sediments. A similar situation occurs within the licence area where the Mesoproterozoic Westmoreland Conglomerate is covered by Cainozoic sediments. Detailed study of the manganese deposits in the Gulf region has shown that the underlying rocks have no influence on the formation of mineralisation. It is the topographic and marine situation that plays a role in ore formation.

Whilst manganese is the primary commodity sought and is the reason the licences were applied for there is the potential to locate uranium and potassium mineralisation. The uranium potential is linked to redox-style deposits hosted by the Westmoreland Conglomerate and palaeochannel deposits located under the Cainozoic cover. There is no calcrete mapped in the licence area but uranium deposits of this style should also be considered.

The presence of two large salt pans or lakes suggests there may be palaeo-lakes buried under the Cainozoic cover. There is the chance that the buried lakes may contain potassium-rich salt layers. If any drilling is undertaken in the area some samples should be assayed for potassium.

Geophysics

Most of the NTGS geophysical data available for the area of the exploration licences has been collected on wide line spacing and its use is limited to regional scale applications. The U²/Th image shows a weak stippled pattern near the salt lake in the north of EL27426. The raw uranium data depicts the distribution of the various rock units. The Westmoreland Conglomerate, as expected, generates a uranium anomaly however, the lack of a response in the U²/Th image suggests the response is due to the lithology and outcrop rather than mineralisation. It should be noted that the broad areas of sand and soil cover effectively negates the use of airborne radiometrics as an exploration tool.

The regional magnetic data, figure 4, shows responses due to structures and differing lithologies. Several faults are evident but at this stage the exploration potential or significance of these is not understood. The character of the magnetic response in the north of EL 27425 suggests that the Sly Creek Sandstone mapped to the east of the area continues under cover. Stratigraphically, above the Sly Creek Sandstone are several units including the Karns Dolomite but it is not certain that unit occurs in the licence area. In EL 27426 the distribution of the Westmoreland Conglomerate is defined.

There are no records of any airborne electrical surveys being flown in the area.

Previous Exploration

A detailed examination of the reports describing the previous exploration in the licences has been completed. The only exploration effort recorded was an airborne radiometric survey over the Westmoreland Conglomerate. There is no record of any field work being done based on the survey results.

Several companies have held the ground and explored for diamonds. Several indicator minerals and micro-diamonds have been recovered. Despite several phase of exploration no diamondiferous intrusions were located.

Conclusions

The compilation of the existing geophysical, geological and previous exploration data has demonstrated there is little, other than exploration concepts to go on in the licence areas. Examination of the Google satellite imagery failed to identify any areas suspected of being manganiferous outcrop. The geophysical data available is suitable only for regional scale interpretation. There has not been any previous exploration for manganese, base metals or potassium. The only exploration for uranium was an airborne radiometric survey over the Westmoreland Conglomerate.

The license areas were selected due to their availability, their location within the Cretaceous shoreline and the presence of manganese mineralisation approximately 50km to the northeast. The local geological setting in the licence area is very similar to that at Groote Eylandt and there is no information available to suggest there is or is not buried mineralisation present.

Proposed Exploration

There are two distinctly different paths by which USI's exploration in the Dunmarra Project area can advance. Importantly, the expenditure requirement in the area is relatively modest, less than \$19,000 for both licenses. Exploration in the area as a standalone target at this stage is unlikely; rather the exploration will be guided by what is required in the Gulf Group licences to the north.

Should it be determined that drilling is the appropriate way forward on the Gulf group of licences it would be expedient to mobilise the rig to or from the job via the Dunmarra licence area. Areas for drilling can be defined by the various magnetic terrains and widely spaced drilling used to test them.

In a similar way, if it is elected to fly an EM survey in the Gulf Group licences then a few lines of EM can be added to covert the Dunmarra Group licences.

The initial exploration should be a field visit of one to two days made while travelling to the Gulf Group of licenses. On the trip the manganese deposits north of the licence area should

be visited and sampled. The station owners can be asked if they are aware of any interesting outcrops that are too small to see on the Google satellite imagery or the regional scale geological maps. An assessment of the state of the roads, the ease of off-road travel and the accommodation options must be made. It is unlikely that this work alone will meet the expenditure requirement but should be sufficient to see the licences preserved into the second year of tenure.

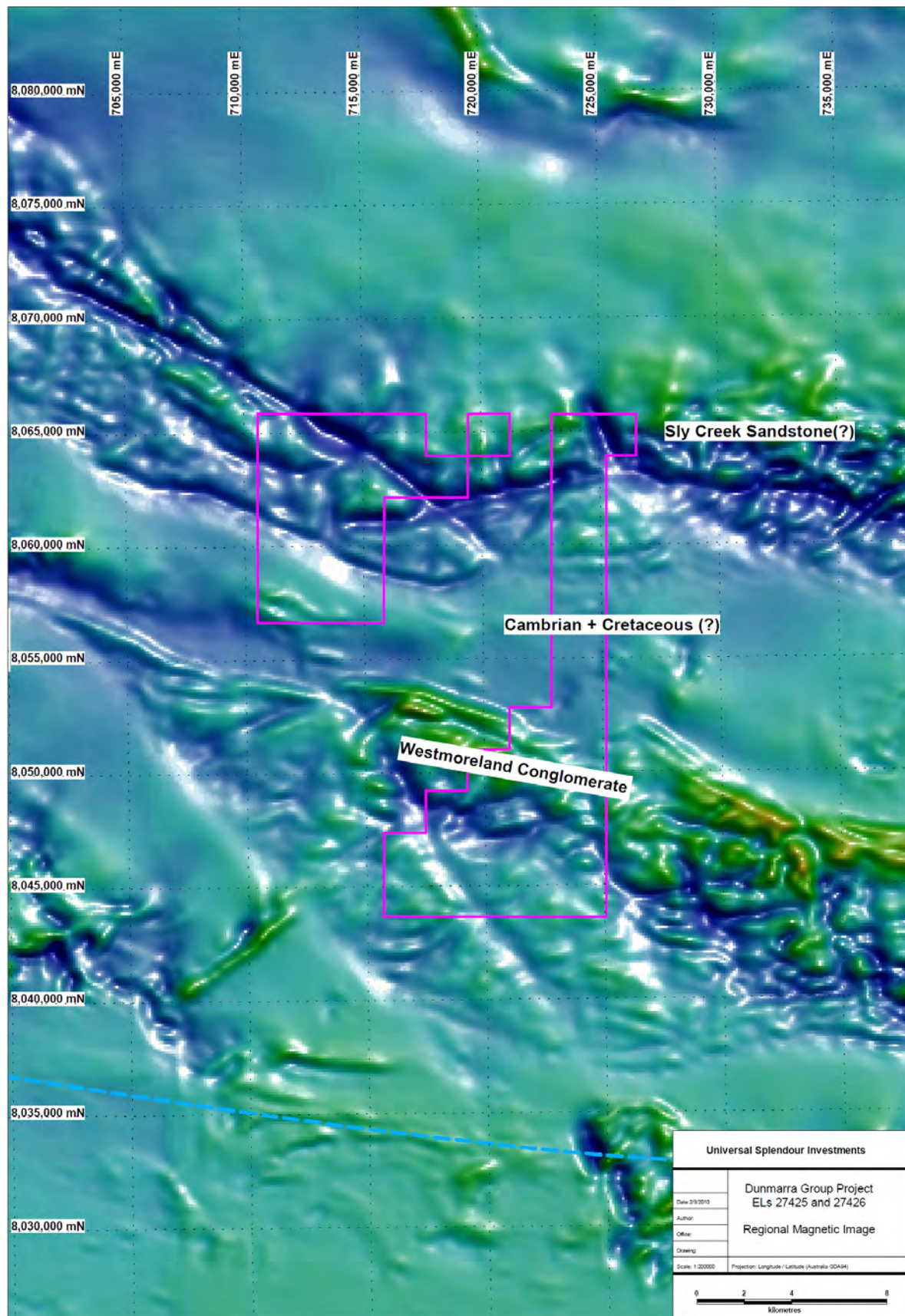
Timing and Budget

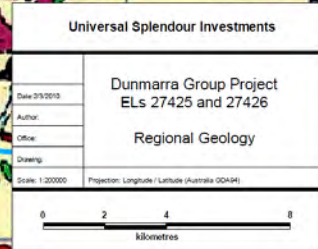
Field work in the Northern Territory is always heavily dependent on the weather. Currently the monsoon is in full swing and significant rainfall is being recorded over most of the Northern Territory. Given the licences position near the Gulf, the flat ground and the presence of Black soil it is unlikely the area will be visited before May or June.

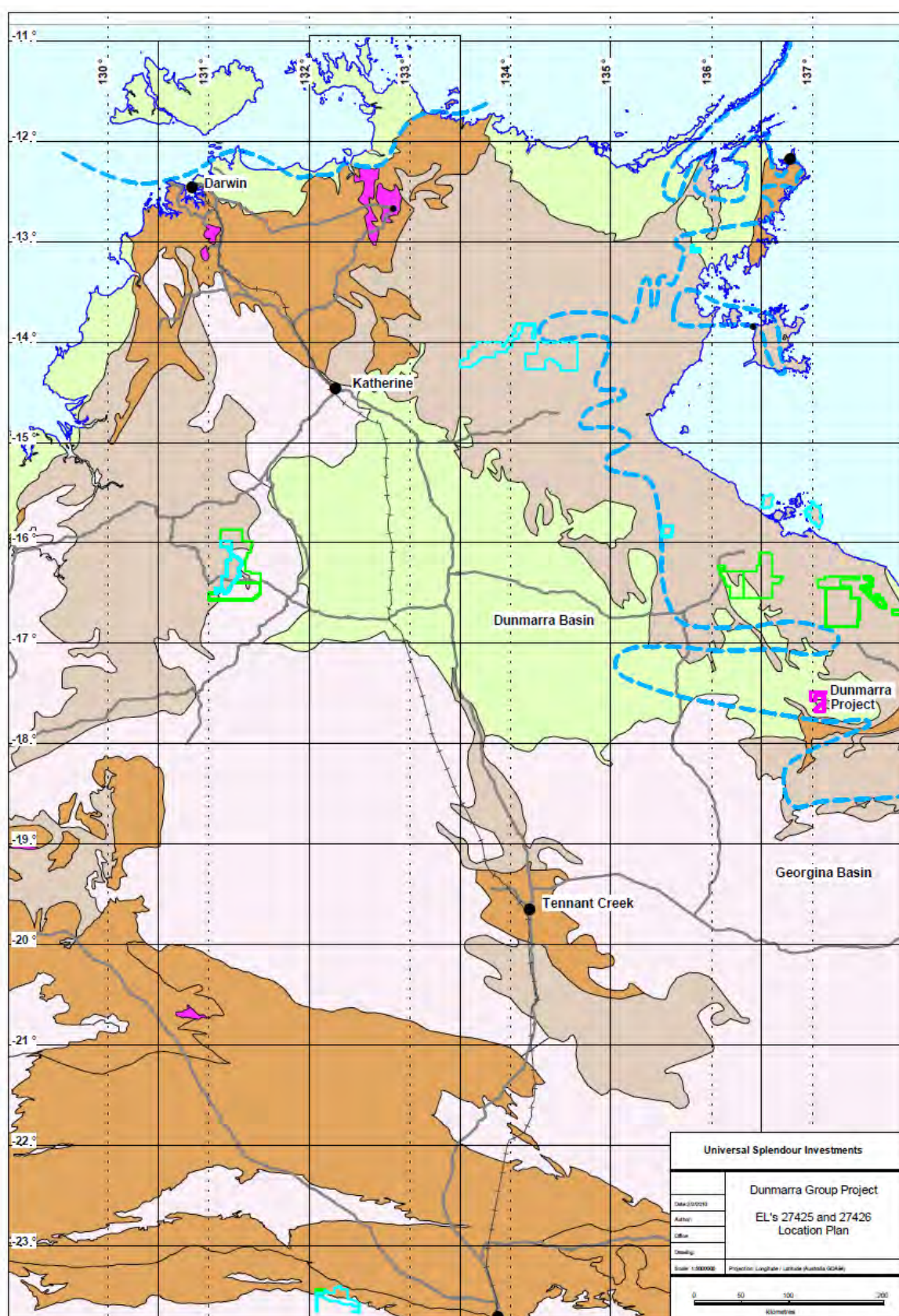
A tentative budget has been prepared to cover the cost of the first visit.

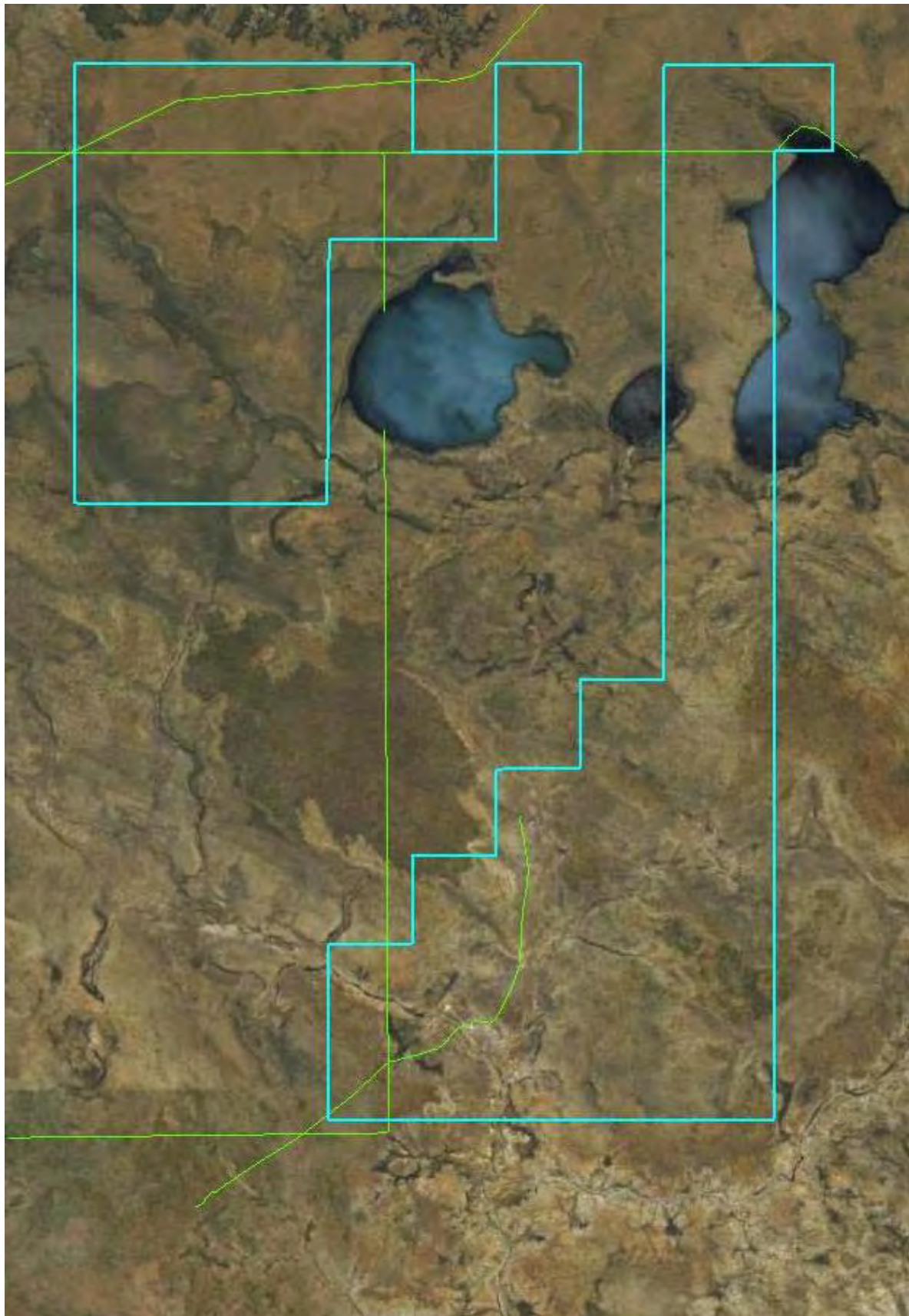
Activity	Unit	Unit cost \$	Description	Total \$
Laboratory Services				
• Preparation	Sample	5	Dry and pulverise samples (10)	50
• Assay	Sample	25	Assay samples for element concentrations	250
• Freight	Sample	5	Move heavy samples from the field to the lab	50
Technical Services				
• Geologist	Day	1500	Regional prospecting and sampling (2 days)	3000
• Fieldie	Day	450	Regional prospecting and sampling (2 days)	900
Field Costs				
• Accommodation	Night	120	Geo + fieldie, 2 nights each (4 nights)	480
• Meals	Day	60	Geo + fieldie, 2 nights each (4 nights)	240
• Expenses	Day	10	Geo + fieldie, 2 nights each (4 nights)	40
Motor Vehicles				
• Vehicle Hire	Day	160	Travel and on-site (4 Days)	640
• Fuel	Litre	1.80	Estimate 500 litres	900
Travel				
• Geologist	Day	1500	Drive to site (2 days)	3000
• Fieldie	Day	450	Drive to site (2 days)	900
• Accommodation	Night	120	Geo and Fieldie, one night each way (4 nights)	480
• Meals	Man day	60	Geo and Fieldie travelling (2 days)	240
• Airfares	Trip	400		
Equipment				
• Purchase	Unit			
• Repairs	Unit			
• Equipment Hire	Unit	100	Spectrometer (4 days)	400
• Safety Equipment	Unit	100	Sun Screen / Safety Glasses	100
Consumables				
• Bags	Each	1	Hold and protect samples (10)	10
• Flagging	Roll	7	Indicate sample sites (1)	7
• Pegs				
• Marker Pens	Box	30	Mark sample site pegs, number sample bags(1)	30
• Other				

Overheads <ul style="list-style-type: none"> • Reporting • Plan Printing • Office Consumables 		1500		
	Days	25	Geologist to compile data, report and planning(1)	1500
	Each	50	Pre and Post field trip Large format A1(8)	200
			Typing and formatting (3)	150
			Total	\$13,567
			Contingency 5%	\$678
			Rounded Total	\$14,200









APPENDIX B: INTERNATIONAL GEOSCIENCE SUMMARY OF 2010 ACTIVITIES

MANGANESE MINERALISATION MODELS

One of the world's largest deposits of manganese oxides is located on Groote Eylandt off the coast of Australia, approximately 200km north of Borroloola. Groote Eylandt lies to the north and northwest of the Gulf project area owned by Universal Splendor (Figure B1).



Figure B1: Location of manganese mineralisation on Groote Eylandt.

Several other smaller manganese deposits to the northwest of the Gulf project area have been identified by Brumby Resources, BHP and Mineral Resources Limited/Sandfire Resources. The deposit styles at these locations are similar to that at the Groote Eylandt deposit and can be expected to be the similar for any deposit located within the Gulf project area, but further investigation into the local geology needs to be undertaken in order to confirm this relationship.

The manganese ore deposit style is sedimentary in origin and consist of pisolites and oolites rich in Mn minerals such as pyrolusite, cryptomelane, romanechite, todorokite and vernadite. Figure B2 is a representative cross-section displaying the Mn mineralization with respect to the lower Cretaceous and basement Proterozoic quartzite for the Groote Eylandt deposit.

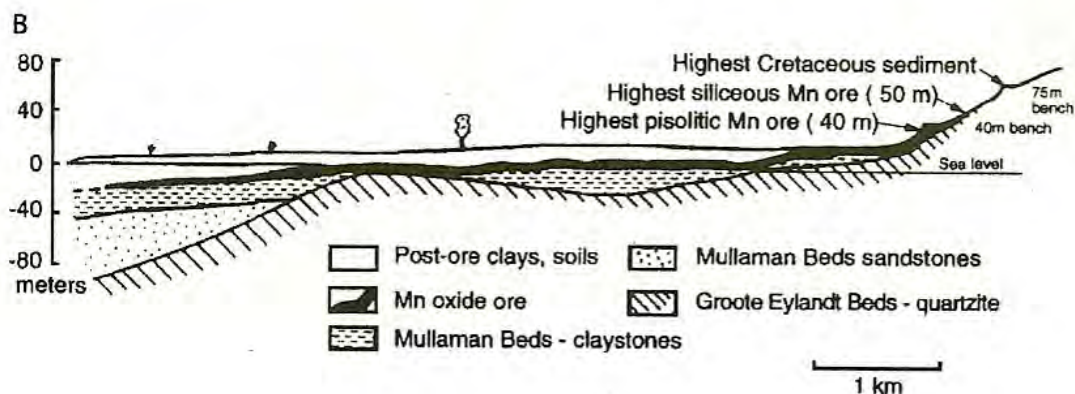


Figure B2: Cross-section at the Groote Eylandt deposit.

The genesis of the Groote Eylandt deposit is considered to have taken place in three major stages. The first stage involved the deposition of primary Mn minerals in sediments in a shallow-marine near-shore environment, producing thick layers of Mn-bearing pisolites and oolites. The second stage, diagenesis, produced pyrolusite that cemented the pisolites and oolites. The third stage was a supergene and pedogenic process that modified the deposit in a terrestrial environment due to intense chemical weathering (Figure B3). The manganese mineral cryptomelane is thought to have formed during this third stage as a result of a large potassium influx into the ores from ground waters during the Tertiary.

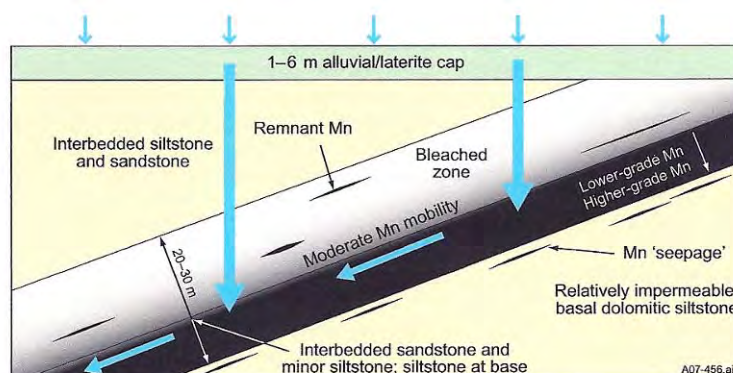


Figure B3: Model for supergene enrichment of manganese orebodies under warm, relatively wet acidic conditions.

DEPOSITIONAL ENVIRONMENT

The concentration of manganese in the region may have resulted from anoxic conditions in shallow seas surrounding the island during the Cretaceous Period (Frakes and Bolton, 1984). The oxide orebody consists essentially of flat-lying strata of primary sedimentary manganese oxide pisolites and oolites, up to 9m thick, in claystones and sandstones. A number of textural types exist including uncemented pisolites and oolites, (the primary sediment), cemented pisolites and oolites (resulting from diagenesis) and textureless/concretionary ores (dominated by cryptomelane and essentially the results of secondary supergene processes).

Anoxic conditions in a shallow intra-cratonic basin, which is possibly closed to the main ocean, leads to concentration of Mn and Fe in saline water. Towards the deeper parts of the basin Fe is precipitated as pyrite in carbonaceous mud. Opening of the basin to the sea results in

increased oxidation particularly in more turbid conditions close to shorelines and development of manganese rich nodules.

At Groote Eylandt the manganese mineralisation is on the western and southwestern shore line. An embayment of the Carpentaria Basin is envisaged which at times may have been cut off from the ocean (Figure B4). The ore lies within the youngest strata of the Carpentaria Basin. The ore-zone sits at the top of a shallow-marine, glauconitic clay succession of Albian age. The primary ore is pisolitic and oolitic but secondary enrichment and weathering has occurred in later phases.

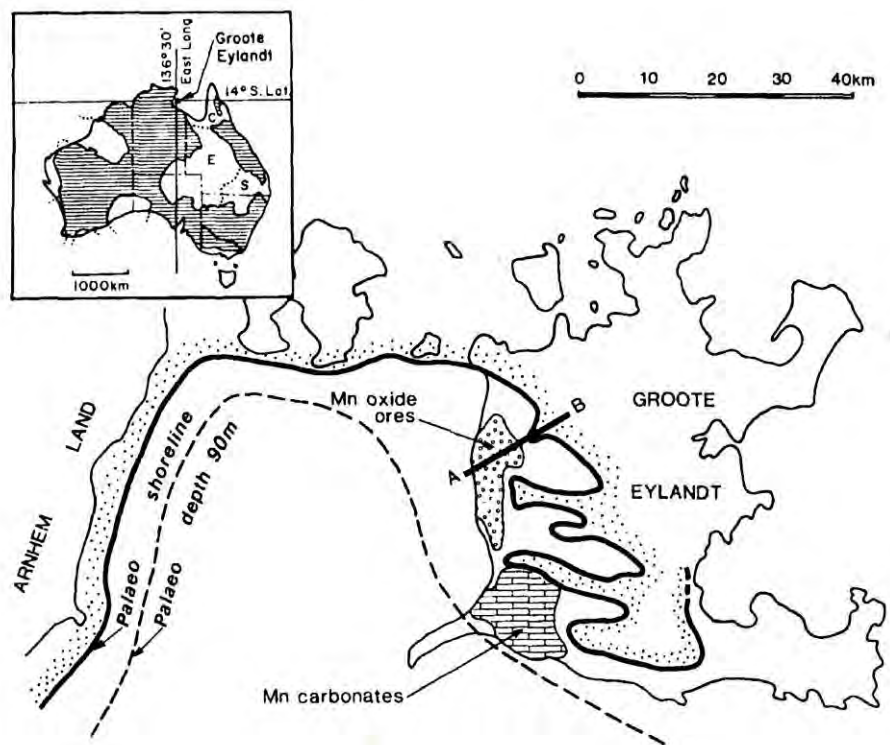


Figure B4: Groote Eylandt and related intracratonic basins. Palaeogeographic map shows location of oxide and carbonate ores, palaeoshoreline at time of manganese accumulation (heavy line) and approximate location of 90m palaeoisobath (dashed line) (Frakes and Bolton, 1984).

The time of formation of the Groote Eylandt manganese orebody was probably late Albian to early Cenomanian or around the boundary between Lower and Upper Cretaceous. The NTGS consider Groote Eylandt and Rosie Creek mineralisation to be contemporaneous.

Cenomanian	99.6 to 93.6 Ma
Albian	112 to 99.6 Ma

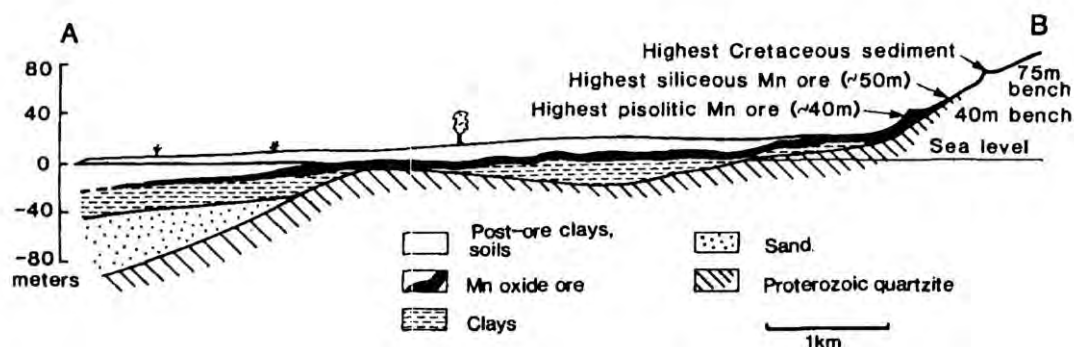


Figure B5: Cross section through ore deposit at Groote Eylandt showing gentle dip of sequence and location of elevation of benches interpreted as wave cut (From Frakes and Bolton, 1984).

BIOLOGICAL ACTIVITY

There is some speculation that these nodules were formed by biological activity as reported by Ostwald (1990):

“The sedimentary manganese ore deposit of Groote Eylandt, Australia, is an orthoquartzite-glaucanite-clay association, and was formed during a short Cenomanian Age transgression and regression across the Middle Proterozoic sandstone basement of the island. The primary sediment consisted of pisoliths and oolites of manganese oxide in sandy clay. Petrological studies have shown that these structures are accretions, not concretions. Microscopic studies indicate that these pisoliths and oolites satisfy specific criteria for biogenic origin and thus they appear to be manganese oxide oncolites. This deduction is consistent with the presence of a variety of manganese-oxide biogenic structures (stromatolites) in the orebody.”

Marine origin of the Groote Eylandt manganese deposits is confirmed by the presence of marine foraminifera in sediments beneath, within and above the ore (Smith and Gebert, 1969).

GEOCHEMISTRY

At Groote the ore is primarily oxides (pyrolusite and cryptomelane) and minor carbonate (manganocalcite). Maximum thickness is around 9m and it occurs as a stratiform body thinning to westward (or away from palaeoshore) with slight regional dip.

Ostwald (1975) described the mineralogy of the manganese oxides at Groote Eylandt.

“The manganese ores on Groote Eylandt occur in a flat-lying horizon in a series of Lower Cretaceous sands and clays which overly unconformably the Middle Proterozoic sandstone basement. The ore horizon exhibits a variety of textural and compositional ore types. Textural types include pisolites and concretions, either free or cemented into massive, bouldery or pebbly horizons. Compositional variations result from varying degrees of admixture of the manganese materials with the sands and clays of the formation. Six manganese minerals have been identified from Groote Eylandt, pyxolusite, cryptomelane, lithiophorite, psilomelane, nsutit and todorokite. The ore minerals are pyrolusite and cryptomelane, and other minerals in minor amounts. Gangue minerals include kaolinite, quartz and goethite. Mineralogical studies indicate that three microtypes of cryptomelane occur. Low levels of cobalt, nickel and zinc in certain of the ore types are associated with the mineral lithiophorite.”

Pyrolusite is a common manganese mineral on Groote Eylandt, where it occurs as:

- Zones in the finely layered pyrolusite and cryptomelane pisolites;
- Zones in the cemented pisolites of the pebbly and bouldery facies;
- Zone replacements of the pisolites, at the expense of the cryptomelane;
- A cementing medium for pisolites. Under these conditions the prisms may attain a size of some millimetres;
- Surface crusts on pisolites and to a lesser degree as surface crusts on pisolitic pebbles; or
- Soft wad - finely divided crystals of pyrolusite mixed with fractured shells of pyrolusite - replaced pisolites.

The pyrolusite at Groote is essentially MnO_2 with minor amounts of Fe, K, Ba, Ni Co and P as oxides (Ostwald, 1975).

Cryptomelane at Groote Eylandt is a manganese oxide with partial replacement of Mn^{2+} by K^+ and minor substitution by Ba^{2+} and Na^+ .

Cryptomelane occurs as;

- layers in the pyrolusite;
- zones and layers in the cemented pisolitic pebbles and cobbles;
- the primary colloidal precipitate of the concretionary ore type. In this form it is often full of ore impurities, as well as quartz grains and clay.
- reticulate veins filling syneresis cracks in the concretions. These veins are purer than host with higher Mn

Lithiophorite is also reported from Groote with Lithium content up to 0.2%

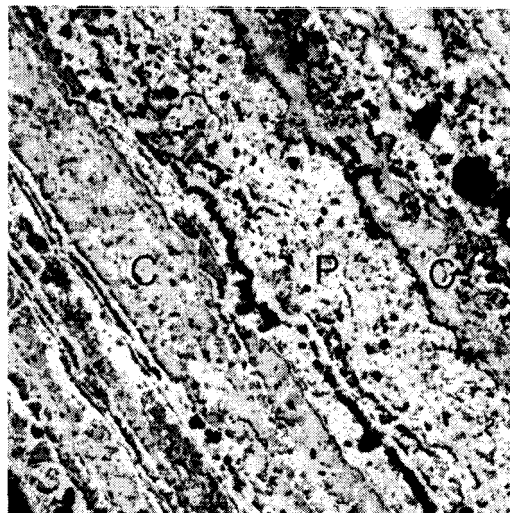


Figure B6: Alternating zones of granular pyrolusite (P) and cryptomelane (C) in Groote Eylandt pisolites. Reflected light 89x (Ostwald, 1975).

PREVIOUS MN EXPLORATION IN THE REGION

GROOTE EYLANDT

Groote Eylandt lies on the eastern margin of the Proterozoic Gulf Basin and contains several Mn occurrences and operating mines (Figure B1).

Groote Eylandt, the site of the Broken Hill Proprietary Company Limited manganese ore quarries, is in the Gulf of Carpentaria, off the eastern coast of Arnhem Land. Brown (1908) first reported the presence of manganese mineralization. Investigation by Dunn (1962) indicated areas of high grade manganese ore near the Angurugu Mission in the central west of the island. The BHP Co. Ltd. began investigating the area in 1962, and in May 1963 a programme of pitting and drilling was commenced to test the nature and extend of the manganese formation. In 1964 the Groote Eylandt Mining Company was incorporated as a wholly owned subsidiary of the BHP and production of manganese ore commenced in 1965 (Ostwald, 1975). The manganese mineralisation extends over an area of 150 square kilometres on the western side of Groote Eylandt. The deposit occur as a single relatively flat bed of cryptomelane and pyrolusite in a sandy clay matrix deposited during a Cretaceous epeirogenic marine transgression (McIntosh *et al.*, 1975), and is the largest known manganese ore body in Australia. Stanton (1972) describes Groote Eylandt is a sedimentary manganese deposit formed by precipitation on manganese oxide and carbonates from seawater.

The manganese sediments occur in a series of basins in the west and southwest of the Proterozoic quartzite island, which, during the Cretaceous period, were occupied by an epicontinental sea depositing sandy claystones and manganese carbonates (in a deeper water environment to the south termed the Southern Basin) and pisolitic manganese oxides (in a shallow water Northern Basin). The manganese sedimentation was restricted in time, and associated with a short, Cenomanian age (95my) marine transgression and regression.

The northern basin contains un-fossiliferous quartz sandstones derived from the basement quartzites, overlain by a shallow marine glauconitic claystone, the top of which bears the primary pisolitic and oolitic manganese ores, and which are followed by the secondary ores, concretionary manganese and weathering products of variable age. The oxides of the North Basin are either exposed or at shallow depths and are extensively mined.

The southern basin sequence is dominated by sandy siltstone which is calcareous in part and contains manganese carbonate oolites at a deeper stratigraphic level and minor manganese oxide cemented sandstones near surface.

Geologically the uncemented pisoliths and ooliths form the bulk of the deposit. Manganese ores belong chiefly to the cemented and secondary types. Grades are high, with typical analyses being

- Premium lump ore - 50.7% Mn total, 3.1% Fe total, 3.9% SiO₂, 4% Al₂O₃, 0.2% MgO, 0.2% CaO, 1.9% BaO, 1.5% K₂O, 0.16% P₂O₅ and 3.3% H₂O + and
- Premium fines - 51.5% Mn total, 2.8% Fe total, 3.3% SiO₂, 31.4% Al₂O₃, 0.2% MgO, 0.1% CaO, 2.2% BaO, 1.0% K₂O, 0.2% P₂O₅, and 3.2% H₂O +.

The Groote orebody occurs as an almost continuous layer some 22 km long, 6 km wide and up to 9 m, but averaging 3 m thick within the sandy layers of the Mullaman Formation. The manganese varies from massive oxides, through a mixture of oxides and kaolinitic clays and quartz sands to disseminated oxides in a sandy clay matrix. The major ores are found either at a shallow depth or exposed in a series of WNW trending, joint controlled, partly infilled depressions between elongate inliers of basement quartzite, or they lie directly on broad terraces cut into the basement quartzite, or to the west as an almost continuous sheet that dips gently at 3° W

Irvine and Barents (2000) studied the geophysical characteristics of the manganese ore at Groote to determine whether it would respond to AEM surveys.

Table BB1 lists the drill hole conductivities for the two main ore minerals of pyrolusite and cryptomelane. No consistent differences in conductivity between the two minerals are apparent, suggesting that the degree and/or style of supergene alteration are more important than mineralogy in determining the level of EM response.

Location	Pyrolusite	Cryptomelane
F3 Quarry	860-1990	1000-2470
F4 Quarry	370-1980	960
C Quarry	500-5050	690-6830
D Quarry	860-3100	12-3060
B Deposit	530-9010	70-5550

Table B1: Conductivity (mS/m) for dominant minerals at Groote Eylandt.

Irvine and Brents (2000) concluded that;

The airborne and drillhole EM surveys demonstrated that the manganese ores at Groote Eylandt are significantly conductive and all the known mineralised areas produced significant responses. These responses were clearly defined because of the resistive nature of the host rocks and the sandstone basement, except where sea water incursions are present.

ROSIE CREEK AND TAWALLAH DEPOSITS (SANDFIRE RESOURCES)

The Rosie Creek deposit sits on the western side of a ridge of outcropping McArthur Basin quartzite (Figure B7). BHP explored along the west side of basement outcrops possibly seeking a replica of Groote Eylandt geological setting with mineralisation located in a basin west of an island. Reanalysis of the data from Rosie Creek suggests the mineralisation dips toward the east from a subsurface basement ridge detected by airborne EM surveys. A small basin lies between the subsurface rides and the present day outcropping basement ridge.



Figure B7: Sandfire Resources licences in the Gulf Region.

Sandfire drilled 435 RAB holes at five prospects west of Borrooloola in the 2008 field season (Rosie Creek, Rosie SW Reconnaissance Area, Tawallah 1 and 2, Yiyintyi Range and Eastern Creek).

The selection of these targets was based on:

- Testing previous work by BHP at Rosie Creek
- Testing previous work at Rosie Creek South with new interpretation of palaeogeography based on airborne electromagnetic surveys.
- Tawallah 1 and 2 were conductive bodies towards the centre of an interpreted palaeobasin
- Yiyintyi was a conductor along the edge of the Yiyintyi Range and considered analogous to Grote Eylandt.
- Eastern Creek was a test of another interpreted palaeobasin.

Nodular manganese mineralisation, interpreted to be at the base of the Cretaceous, was intersected at the Rosie Creek and Rosie SW Reconnaissance prospects where previous drilling by BHP had intersected manganese layers. In total 163 holes intersected Mn mineralisation at the base of the Cretaceous sedimentary sequence. The manganese intervals varied from 1 to 4 metres thick in loose manganiferous sandy and clayey sediments typically at shallow depths. The manganese rich horizon was intersected around 35m below surface.

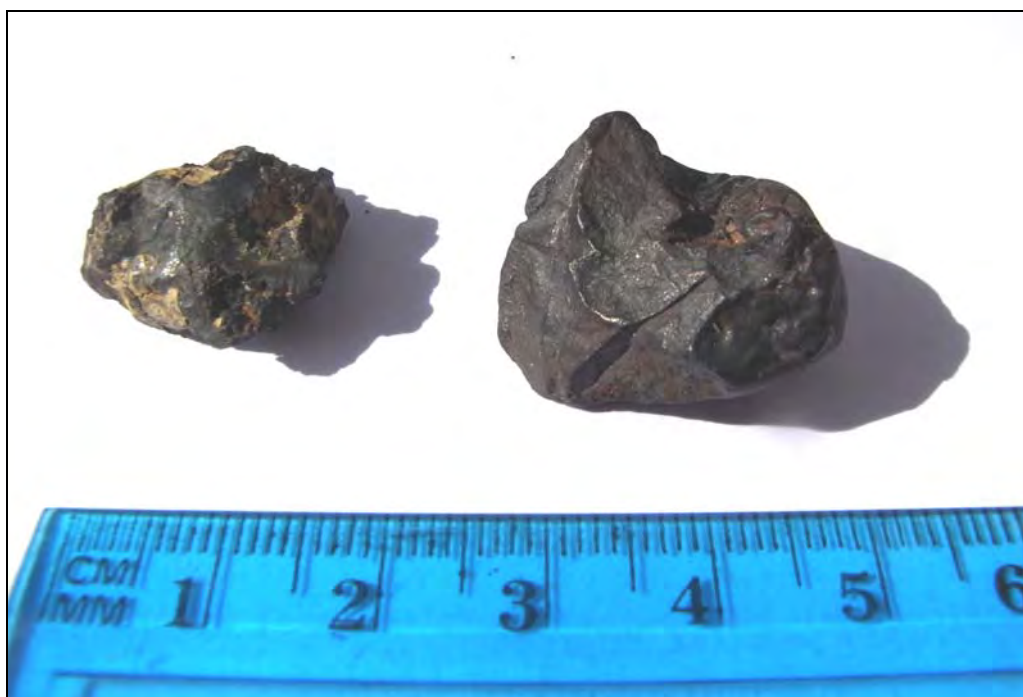


Figure B8: Nodules of Manganese oxides from Rosie Creek

West of Rosie Creek on the Tawallah prospects Sandfire drilled flat lying conductors detected by airborne electromagnetic surveys. Coarse pyritic horizons in clay were intersected and were considered to be the cause of the conductivity anomaly. The pyrite in clay possibly represents deposition from more anoxic conditions towards the centre of the basin. No manganese was indicated at Tawallah and no analysis of samples was carried out.

The AEM surveys did not directly detect manganese mineralisation but could be used to recreate the depositional environment by detecting the anoxic basin and concealed basement ridges.

Sandfire estimated volumes of manganese mineralization of;

*Rosie Creek: **2.1 million cubic metres***

*Rosie Creek SW Reconnaissance: **1.1 million cubic metres***

Assays ranged from **37.7% to 45.6% Mn** (average **40.6% Mn**) from hand-picked nodules.

No description of minerals were provided but in hand-specimen appeared to be oxides and mostly likely pyrolusite and/or cryptomelane.

Sandfire ceased exploration and laid off staff after the Global Financial Crisis and did no more work for manganese. In September 2009 Sandfire entered into an agreement with Mineral Resources Limited (MIN) where MIN would sole fund all exploration and feasibility costs prior to a decision to mine. In returning for funding all exploration, MIN will effectively secure a 70% interest in the manganese rights at Borroloola. SFR will retain a 30% interest in the manganese rights and 100% interest in all other metals. MIN has indicated it plans to undertake further drilling to target the Rosie Creek, Brumby, L4 and Yiyintyi deposits with a view to commencing a 500ktpa mining operation within 12-18 months. MIN has not reported any activity at Borroloola Prospects and there is no mention of any activity in Annual Report.

The deposits around Rosie Creek appear to be similar geological setting to Groote Eylandt. A shallow basin probably cut off from the sea with anoxic conditions (west at Tawallah). Epeirogenic subsidence resulted in marine transgression, increasing oxygen particularly along

the palaeoshoreline where oxygenated, turbid conditions result in deposition of manganese oxides and carbonates.

BATTEN CREEK DEPOSIT (BRUMBY RESOURCES)

The Batten Creek Manganese Project is located approximately 40km north of EL 27308 (Figure B9). Historical drilling by BHP during 1995 returned a best intersection of 6 metres at 15 per cent manganese from between 30 and 36 metres. The manganese mineralisation is hosted within the younger Cretaceous sedimentary rocks overlying the older Proterozoic rocks, which host the McArthur River Pb-Zn-Ag deposits.

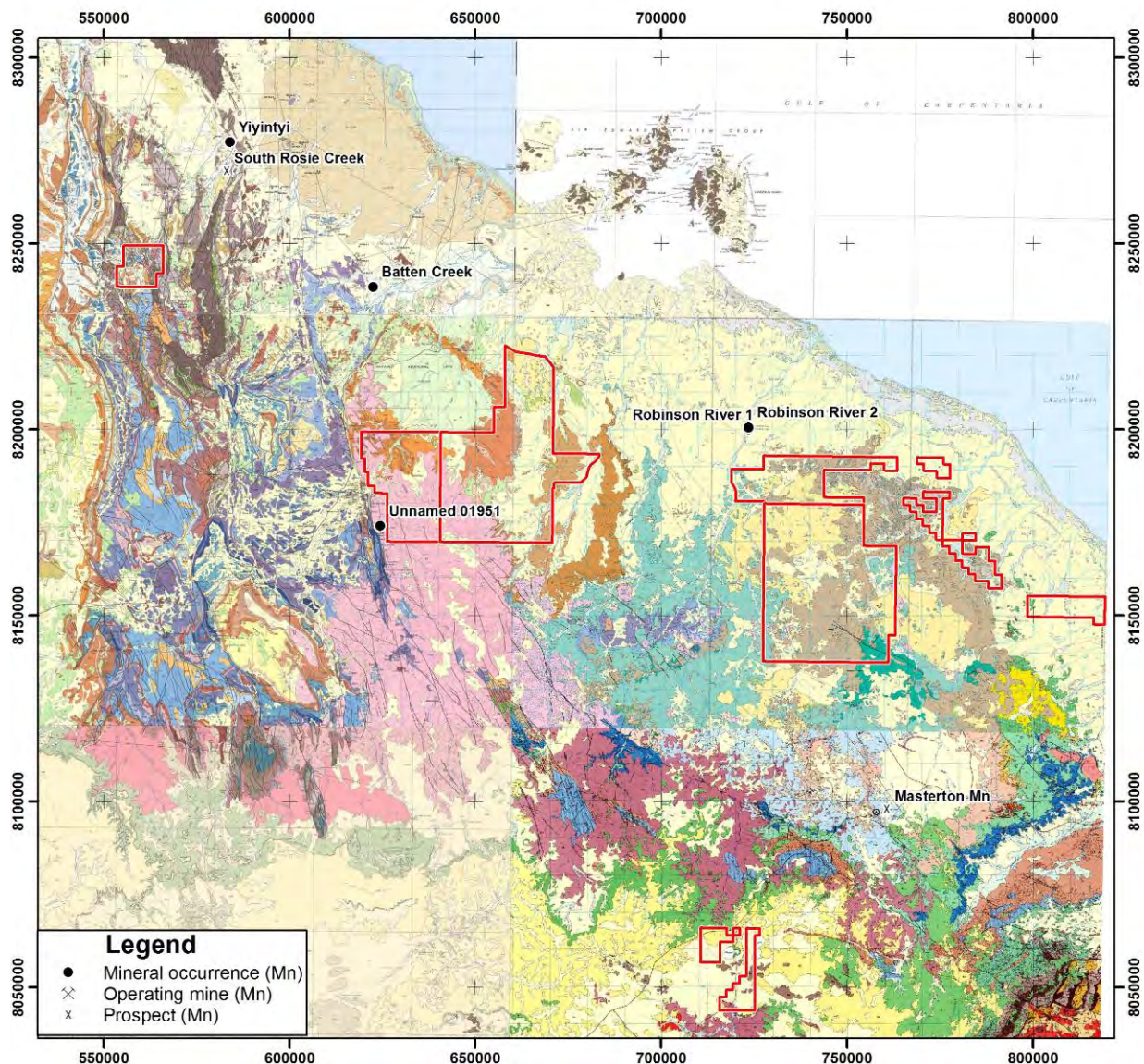


Figure B9: Location of manganese mineralisation surrounding Universal Splendour's EL's.

<http://www.brumbyresources.com.au/userfiles/image/mcarthur2.jpg> Brumby Resources completed a VTEM survey over the Batten Creek Manganese Project in July 2008 to better delineate the extent of the manganese mineralisation. The survey detected 11 near surface sub-horizontal target zones between surface and 80 metres depth which are targets for manganese mineralisation. The historical BHP intersection from drillhole BCP010 was located

in one of the VTEM conductors. Two other BHP holes, BCP009 and BCP011 did not intersect the currently defined VTEM anomaly and did not return any manganese intersections. The controls on the mineralisation at Batten are unclear.

The VTEM survey was undertaken to better define the extent of the known manganese mineralisation and also to identify any basement conductors that may be associated with base metal mineralisation. A total of eleven near surface sub-horizontal manganese-clay target zones (BCM-N-01 to BCM-N-11) between surface and 80 metres depth were delineated by the VTEM survey.

First pass Reverse Circulation (RC) drilling was undertaken in August 2009 on two of the eleven VTEM conductors. Fourteen vertical RC holes for 898 metres were drilled into the 'Batten Creek' prospect conductor and three vertical holes for 369 metres were drilled in to the 'Three Brumbies' prospect conductor.

A total of 12 drill holes out of 14 returned anomalous manganese intersections at the Batten Creek prospect. Drilling intersected multiple stacked sub-horizontal manganese lenses varying in thickness from 1 to 6 metres above 50 metres depth. The manganese lenses are hosted within Cretaceous manganiferous shales, siltstones and associated clays.

The anomalous manganese intersections were wet and associated with clay and are open in all directions, with only 1050 metres of the entire 4000 metre strike length of the conductor being drill tested to date.

Figure B10 shows the location of all the Batten Creek prospect drill holes and selected manganese intersections in relationship to the outline of the Batten Creek prospect VTEM conductor boundaries.

The best intercepts are tabulated below.

Hole	East	North	From	To	Interval	Mn %	SiO ₂ %	P ₂ O ₅ %	Fe ₂ O ₃ %	Al ₂ O ₃ %	LOI %	Comment
RC01	622595	8238358	29	34	5	4.7	67.1	0.2	9.3	8.8	4.8	Incl. 1m @ 8.4 % Mn
RC02	622531	8238326	30	35	5	4.6	70.4	0.15	6.8	8.1	4.3	
RC02	622531	8238326	41	42	1	10.9	75.4	0.15	2.8	1.7	3.3	
RC03	622400	8238350	40	42	2	3.8	69.9	0.25	9.2	7.7	3.9	
RC03	622400	8238350	46	48	2	3.3	79.8	0.1	6.4	4.7	2.71	
RC06	622500	8238850	34	37	3	3.8	69.5	0.15	7.9	8.6	3.8	
RC11	622750	8237900	48	42	4	4.5	71.7	0.14	6.9	6.8	3.4	
RC12	623500	8237450	45	46	1	5.9	70.7	0.15	9.8	4.5	3.9	
RC14	622549	8238600	31	33	2	3.5	76.2	0.1	7.6	5.6	3.8	
RC14	622549	8238600	35	39	4	4.7	70.1	0.2	6.7	8.9	4.7	Incl. 2m @ 6.7 % Mn
RC14	622549	8238600	44	46	2	4	74.9	0.1	5.1	7.3	3.7	

Table B2: Results from Brumby resources drilling at Batten prospect in 2009.

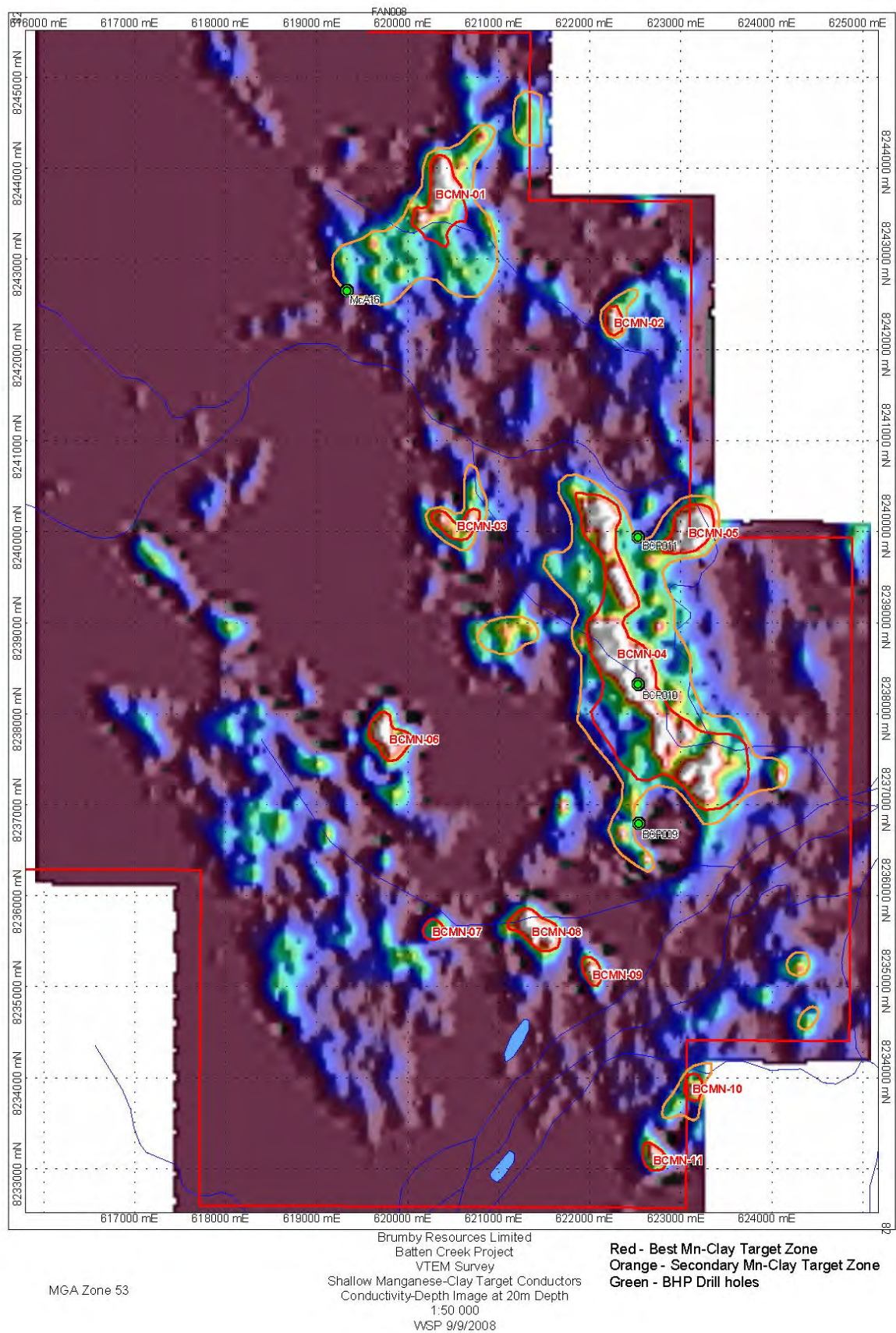


Figure B10: VTEM survey over Brumby manganese prospect.

OTHER DEPOSITS

Surficial manganese deposits are present in the eastern McArthur (eg Masterton No2) and northern Dunmarra (eg McLeans). These deposits are small in tonnage, but may contain patchy high-grade ore material.

Genesis Resources in ASX announcements reported

- *At MastertonNo.2, manganiferous lenses up to 1,320 metres in length and averaging 10 metres in width have assayed up to 53% manganese and averaged approximately 50% manganese with outcrops assaying up to 63.32% Mn, 7.37% SiO₂, 1.53% Fe, 0.43% P and 0.51% Al₂O₃.*
- *Between 40,000 and 50,000t of high grade Mn (50%) material present over the Masterton No.2 prospect*
- *Recent reconnaissance in the central portion has delineate rock chip assay up to 41% Mn within moderate EM anomalies.*
- *Over approx 7,990m strike length by averaging 600 m width over strong EM anomalies remain untested and are of high priority. All elements required for the formation of dolomite hosted, high grade manganese deposits are present in the area*
- *Follow-up drilling of high priority zones around the high grade manganese outcrops-potential not fully explored*



Figure B11: Massive dolomite hosted Mn from Masterton No2 deposit (Genesis Resources website www.genesisresources.com.au)



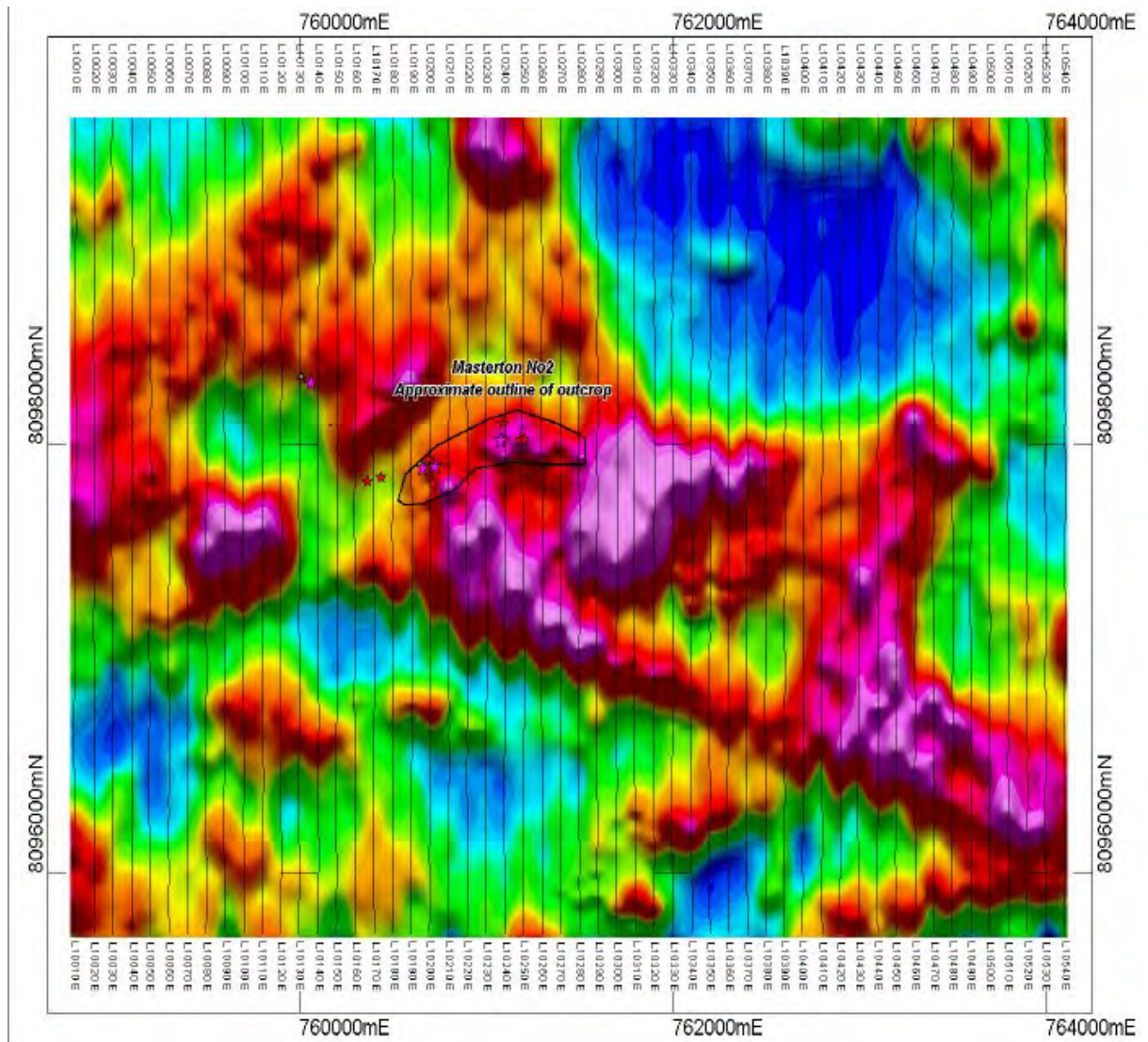


Figure B13: VTEM survey over Masterton 2 prospect. Genesis has interpreted conductors as possible Mn targets but they are more likely to be conductive clay areas.

APPENDIX C: PREDICTIVE DISCOVERY ANNUAL REPORT EL 27426 DECEMBER 2011

Including Greenfields Geophysics Report and all associated data files.



Titleholder: Universal Splendour Investment

Operator: Predictive Discovery Limited

Titles/Tenements: EL 27426

Annual Report

Tenement Manager/Agent: AMETS

Corporate author: Predictive Discovery Limited

Target Commodities: uranium and gold

Date of report: 23rd December 2011

Datum/Zone: GDA94/MGA53

250 000 Map sheet: Calvert Hills

100 000 Map sheets: Coanjula, Nicholson River

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Appendices

1	Greenfields Geophysics – Geophysical Processing Report
2	Previous Exploration Company Reports List

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SYNOPSIS

Predictive Discovery Limited (**PD**) has explored EL 27426 for uranium and gold mineralisation based on strong similarities in the geological setting there with that of the large Westmorland uranium field in North West Queensland.

PD signed a farm-in agreement with Universal Splendour Investments Pty Ltd on 4th February 2011 under which it is entitled to the right to earn a 75% interest in the EL by expenditure of \$400,000. PD can earn up to 75% in a discovery of U, Cu, Au or rare earths.

Exploration until November 2011 has consisted of geophysical data analysis, gravity survey and interpretation, numerical modelling with PredictoreTM, target selection and reverse circulation drilling and assay.

A total of 5 holes were drilled and 10 samples consisting of 5 metre composite RC chips were assayed. All drilled samples were measured for radioactivity. No anomalous mineralisation was detected in any of the drilling.

TENURE

EL27426 consists of 38 sub blocks and was granted to Universal Splendour Investments Pty Ltd on the 23/12/2009 for a period of 6 years. EL27426 covers 99.35 sq. km. Tenement location is shown in Figure 1 below.

INTRODUCTION

The area of interest is situated in a remote outback location with difficult, seasonal, vehicular access and large distances from service centres.

Location and Access

The tenement is situated in the Northern Territory on Benmara Station, a 400+ km² pastoral property at the north eastern end of the Barkly Plateau. Access to the homestead is provided from Calvert Road via formed gravel road. The closest fuel and food supplies are over 300km from Benmara. Access within the EL is afforded by station tracks and cleared fence lines.

Physiography Climate and Vegetation

The tenement is part of the Gulf falls and uplands bioregion comprising undulating terrain with scattered low, steep hills of Proterozoic rocks. The soils are mainly skeletal and shallow sands. Generally the area comprises open flat plain, laterite upland plains with isolated low-moderate relief hilly areas dominated by open woodland. Grevillea and Acacia scrub with Spinifex predominate on sandy uplands. Ephemeral gullies drain the prospect areas and flow into Dinner Creek and Snake Creek. The licence area is dominated by open woodland on Tenosols.

The climate is sub tropical, with wet summers and warm dry winters. Heavy rainfall during the summer months can cause substantial access problems, with vehicular access into the principal areas of interest impossible between December and March and sometimes for several months before, and or after that period.

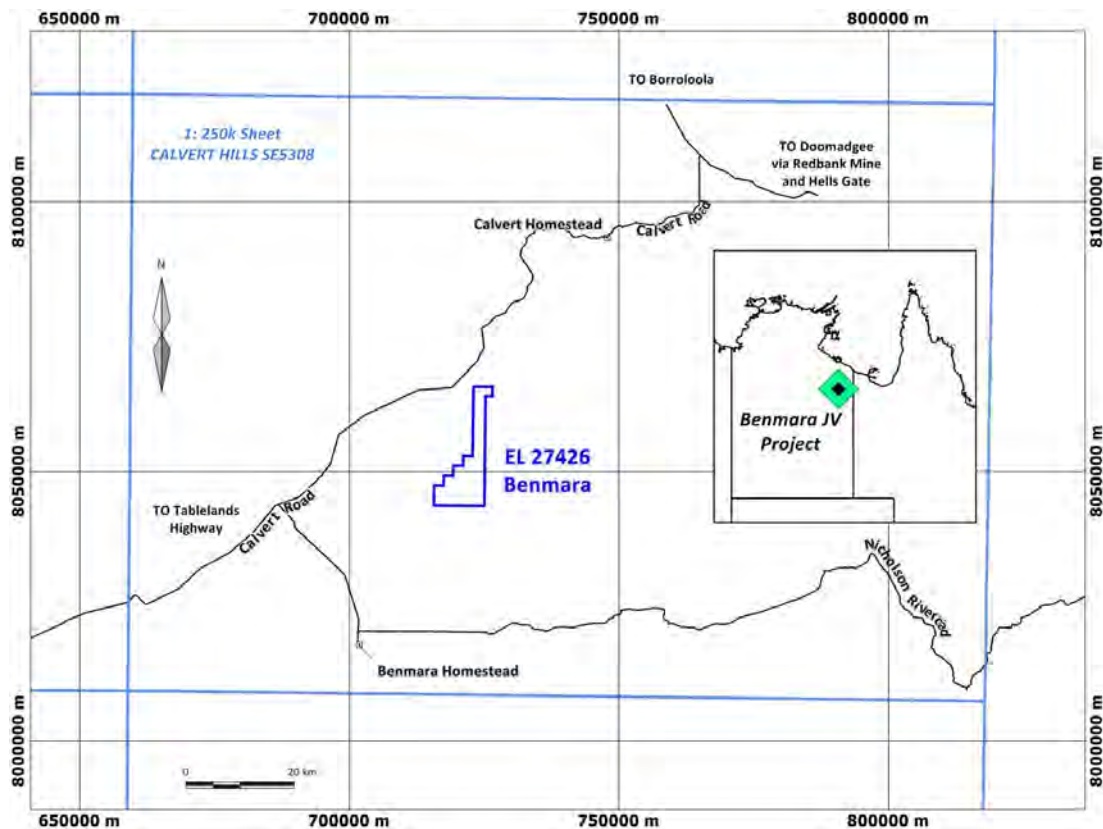


Figure 1 EL27426 - Locality Plan. GDA94 – MGA53

GEOLOGICAL SETTING

The Benmara area is underlain by rocks of the McArthur Basin resting unconformably on granites and metamorphic rocks of the Murphy Inlier. Within EL27426, much of the Proterozoic stratigraphy is overlain by Cretaceous and Cambrian fluvial sediments, respectively the Bukalara Sandstone and Mullaman Beds.

Mapped faults in the Murphy Inlier generally strike west to north-west (Figure 2), however the majority of the McArthur Basin sediments are concealed under cover and therefore structure in those rocks can only be inferred from regional geophysical data.

The Seigal Volcanics do not outcrop in the immediate area, however are inferred underneath Cambrian and Recent cover on the basis of a characteristically rugged character in first vertical derivative magnetics which can be observed in areas where they do outcrop and their stratigraphic relationship with the Westmoreland Conglomerate, which does outcrop in the area.

Faults generally exhibit WNW and NW strikes with the latter offsetting the former.

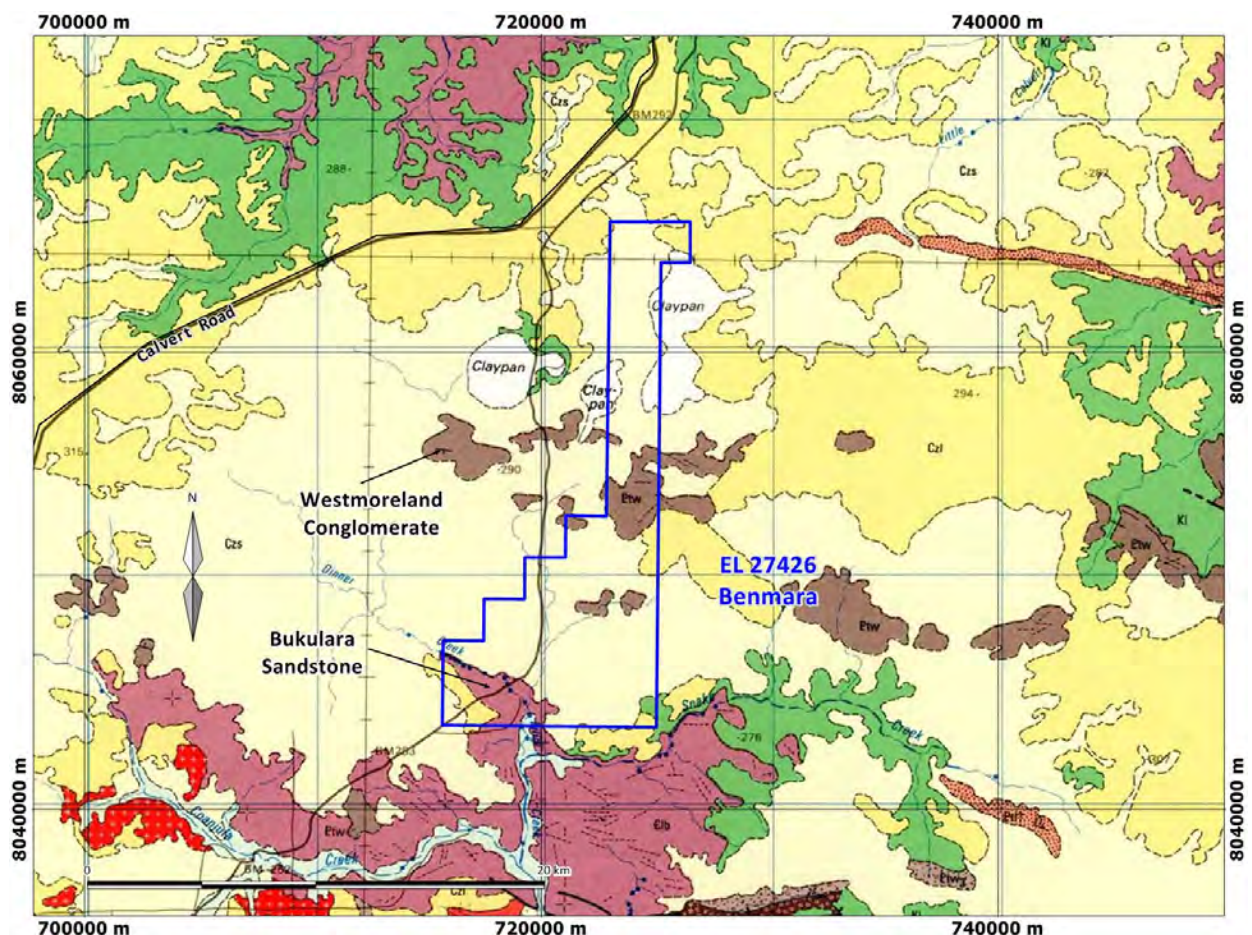


Figure 2 *Geology of EL27426 from Calvert Hills 1:250,000 Geology Map*

PREVIOUS EXPLORATION

Historic Exploration

Past exploration has been firmly focused on diamond and base metal work despite its proximity and geological similarity to good uranium deposits. Initial uranium exploration was documented in 1953, however little work has been undertaken since the late 50's, early 60's. Stockdale, Normandy, Rio and Ashton carried out the majority of exploration within the area post 1980. A list of previous exploration Company Reports has been provided as Appendix 2.

Uranium exploration over the Project area has been minimal. Major exploration or mining company work activity during the early to mid 1970s included airborne and ground magnetic/radiometric surveys, water bore and rock sampling.

NEW EXPLORATION – 2011 Predictive Discovery Ltd

Predictive Discovery Ltd - 2011

Work completed in 2011 was focused on obtaining the required information in order to plan drilling for concealed Westmoreland-style targets beneath Cambrian and Recent cover in the northern half of the EL. The work consisted of the following:

- Target identification based on processed aeromagnetics of adjoining tenement EL24645 comprising the remainder of the Benmara Project.
- Ground gravity survey on one selected target area. It was designed to provide a data set to enable construction of representative 3D models of the geology in the target area. The ground gravity survey was conducted by Haines Surveys Pty Ltd, based in South Australia.
- Reverse circulation drilling of 323 metres in 5 vertical holes and assay of 10 x 5 metre composite samples.

Target Identification

According to the ore formation model which PD is following in its exploration at Benmara (e.g. Wall, 2006), the best targets are those in which reduced iron-bearing lithologies (i.e. those containing Fe²⁺ minerals) are likely to have been in contact with uranium-bearing oxidized fluids which circulated either through the Westmoreland Conglomerate or along permeable structures.

The primary target is Westmoreland-style (that is mineralisation formed in the Westmoreland Conglomerate in close proximity to contacts with either the Seigal Volcanics or dolerite dykes). Potential also exists for "classic" unconformity-style uranium mineralisation along the Westmoreland Conglomerate-Murphy Inlier contact.

Analysis of the aeromagnetic data including interpretation of the likely subsurface geology has highlighted one important target area. A number of linear features, interpreted as structural dislocations, are apparent in the magnetic images and these were used to determine areas of interest for more detailed evaluation

Ground Gravity Survey

A total of 169 stations were collected during October 2011 in an area designated Block 9. The gravity survey produced results that were broadly similar with the magnetics, suggesting that a large dense mass of oxidised dolerite or mafic volcanics is not likely to be present - contrary to the earlier expectations.

The gravity stations displayed on Figure 4, were on several lines, widely separated and the data was not considered adequate for gridding, however some profiles were generated and are included here as Appendix A in the Greenfield Geophysics report describing the results, submitted with this report as Appendix 1.

The located gravity survey data in ASEG GDF2 format is included with this report.

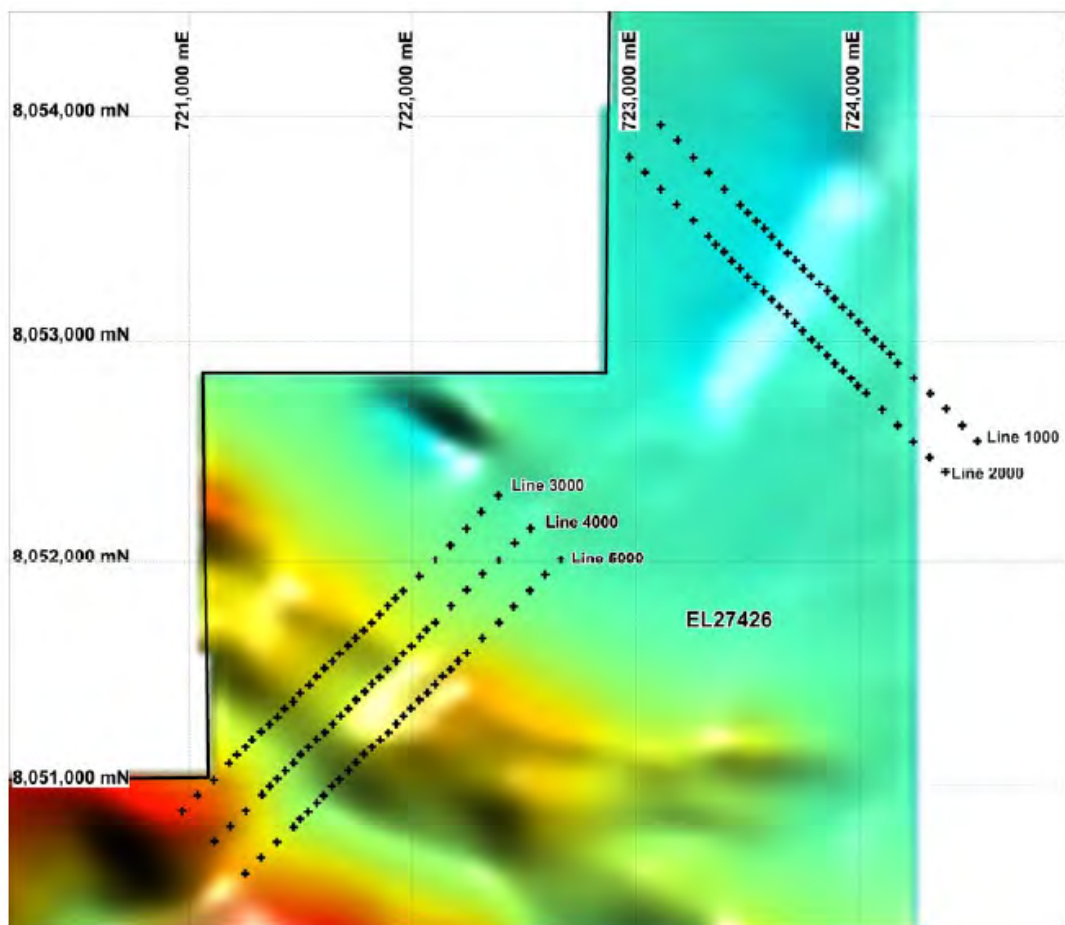


Figure 3 Block 9, Gravity Station locations

Geophysical Inversion Modeling

An extensive modelling exercise was undertaken by Antoinette Stryk and Peter Betts of PGN Geoscience. In addition to the modelling undertaken by PGM, Greenfields Geophysics also attempted to generate 2D models on specific flight lines to estimate depth to magnetic basement as a guide for drilling. Since modelling was only attempting to estimate depth to basement, the models used measured TMI profiles (and the first vertical derivative of TMI) only, while recognising that remanence would probably distort the apparent dip and susceptibility.

The TMI image surrounding Block 9 shows two sub parallel bands of magnetic highs trending WNW – ESE and dislocated by apparent faulting and possible demagnetising alteration in the immediate area of interest. These dislocations make magnetic modelling difficult and prone to errors, particularly since the most useful models are 2D. Consequently it was decided to try to develop 2D models for these same features further west, away from these dislocations, where the 2D approximation seems more reasonable.

The flight line chosen for modelling (Line 301061) extends beyond the boundary of EL27426, into the adjacent EL24645, and data from both tenements was used to develop 2D models. Although the models are centred a significant distance west of the main area of interest as shown in Figure 5, it was considered that the depth to magnetic source could be extrapolated to guide drilling in Block 9.

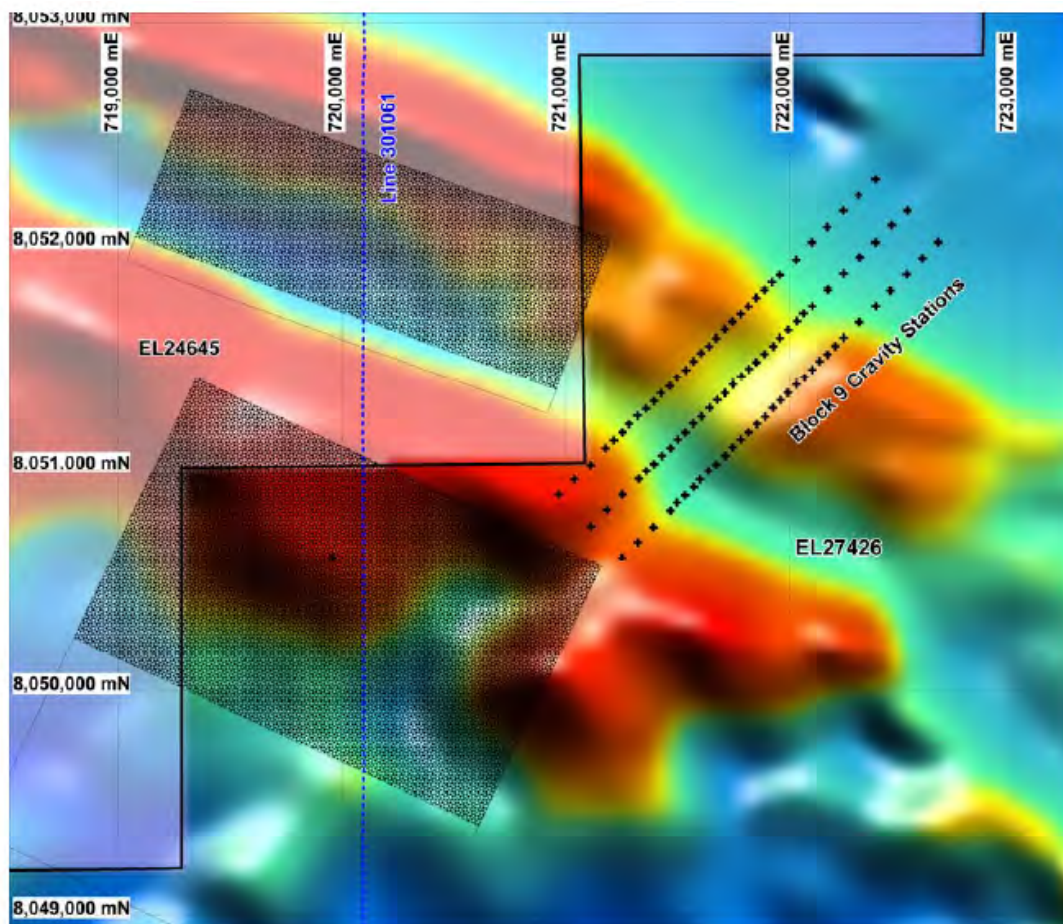


Figure 4 Block 9 Gravity Station locations

AAPA Survey

An AAPA survey was conducted in June 2011 to identify any sacred sites in the areas where drilling was planned. No additional sites were recognised and clearance was reached.

Drilling

Drilling was contracted to Mount Isa based Tom Browne Drilling Services that provided a track mounted multi-purpose rig with 6 metre RC rods, 140 mm (5 1/2 inch) hammer bit and RC depth capability of approximately 150m. Drilling took place in October 2011. There were 323 RC percussion metres drilled in 5 holes.

The 5 RC holes were drilled to test the depth of the Bukalara Formation, and identify the position of an interpreted Westmoreland / Seigel Volcanics faulted contact. All the holes terminated in Seigel Volcanics. The planned deeper RC/diamond hole to test the Westmoreland near the possible fault was not considered justified.

The late start in the year meant that the traditional “build up” weather had begun. Very hot days with rising humidity building to afternoon thunder storms. The effects of the storms ranged from rain and wind affected camp and boggy tracks to downtime waiting for storms to pass and finally bogged equipment during demobilisation.

Site Preparation

Access tracks were improved and extended and drilling pads were cleared with sumps excavated at two of the collar locations. This work was carried out by a Katherine based grading contractor, John Mora using his grader in combination with a D4 dozer on hire from Benmara Station. Sudden adjustments to the anticipated collar positions based on shallower target depths ensuing from the results of the pilot holes necessitated rapid installation of extra pads. Collar locations were installed and measured using a hand held GPS.

Reverse Circulation Percussion

Details of the RC drillholes are listed in Table 1 below. Good sample recovery and size was delivered for the majority of drilling with only a few samples lost due to excessive water. Collar locations are shown in the following Figure 5. No sections were produced for this drilling as the disappointing assay results provide no basis for continuing work. Drillhole logs are included with this report in GGIC tab delimited ASCII format.

HOLE	EAST_GDA94	NORTH_GDA94	DEPTH	AZIMUTH (mag)	Dip
B4RC1	722050	8051360	77	Vertical	90
B4RC2	722050	8051435	66	Vertical	90
B4RC3	722050	8051510	60	Vertical	90
B4RC4	722050	8051600	54	Vertical	90
B4RC5	722050	8051700	66	Vertical	90

Table 1 Benmara Percussion RC drillhole locations.

Site Rehabilitation

Drillhole site rehabilitation consisted of cutting PVC collars below ground level and insertion of an oversize tapered concrete plug which was then covered with mounded earth. Drilled samples are dozed into the dried out sumps and then covered over with the preserved material excavated from the sump during preparation. Finally the area is returned to natural surface contour and compacted areas ripped by dozer.

Sampling

Due to the expectation that a large amount of the drilling would be through potentially barren rocks in order to reach target zones, RC samples were collected in buckets and laid out in rows of piles. A supply of large plastic bags was provided in the event that any of the percussion samples warranted collection for future use. Additionally, approximately 300 grams was collected from each RC metre in zip-lock plastic bags as a reference sample stored at site and each metre was sieved and collected into plastic chip trays. Each sample was examined using the Exploranium GR-135G gamma spectrometer in survey mode and later in assay mode with results recorded and included with drillhole data files.

As an added precaution against inaccuracy in the radiometric scanning and to provide analyses for gold and a larger suite of elements, samples were collected from RC metre piles by spear into 5 metre composites. Sampling was carried out across sediment mafic contacts.

Assay

A total of 10 Samples were delivered to ALS Laboratories in Mount Isa for preparation (crushing and pulverising to 75 micron) and analysis. Multi-element method ME-MS41 by aqua regia digest and ICP-MS and ICP-AES analysis for 51 elements was used. A full list of elements and units is shown below. Assay results are included in GGIC tab delimited ASCII format with this report.

Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce
ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K
ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb
ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Tl	U	V	W	Y	Zn	Zr				
ppm	ppm	ppm	ppm	ppm	ppm	ppm				

Table 2 Analytical Method – ALS Labs (ME-MS41) – List of elements

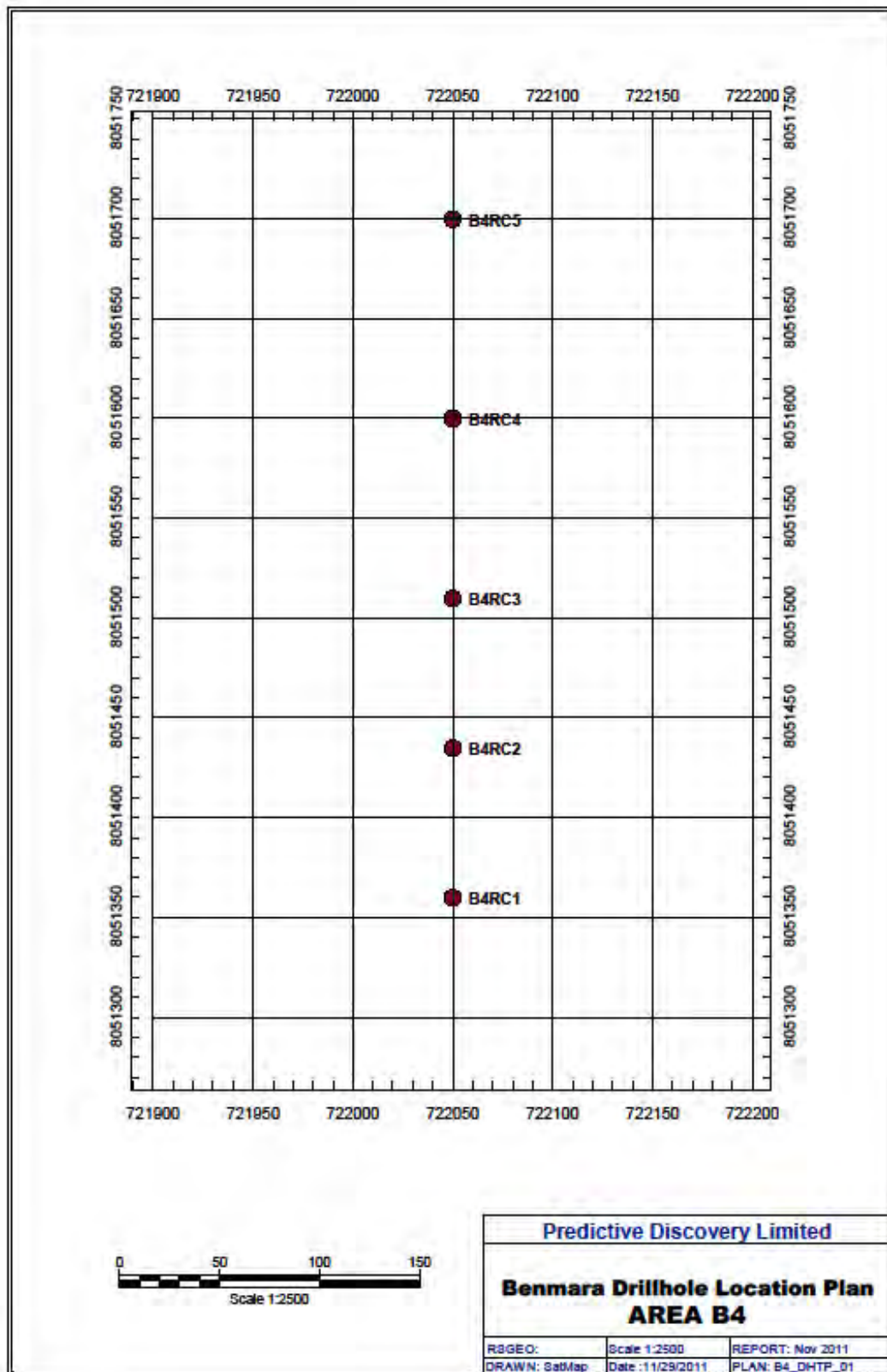


Figure 5 Benmara EL27426 Drillhole Collar Locations

CONCLUSION

No anomalous uranium or gold was detected. No anomalous radioactivity was detected during the campaign. Further study of the airborne radiometric and aeromagnetic data is required to establish drilling targets.

REFERENCES

- Ahmad, M and Wygralak, A S, 1989: Geological map: 1: 250,000 Sheet (SE53-08 Calvert Hills)
- Lally, J H and Bajwah, Z U, 2006: Uranium Deposits of the Northern Territory. *Northern Territory Geological Survey, Report 20, 87p.*
- Wall V J, 2006: Unconformity-related uranium systems: Downunder and over the top. *ASEG Extended Abstracts 2006, 1–12.*

Exploration Expenditure

Exclusive of tenement rentals and tenement management fees, expenditure on the EL during the year has been \$107,032, broken up as follows:

Cost category	\$
Geophysics, geophysical processing and interpretation	17,684
RC Drilling, site preparation, geochemical analysis	84,794
Community relations/AAPA survey	4554
TOTAL:	\$107,032

Greenfields Geophysics

Memorandum

To: Paul Roberts

Copy:

From: Bob Smith

Date: November 18, 2011

File:

Re: Benmara EL27426, Geophysical Program 2011

1 Introduction

Adjoining ELs 24645 and 27426, located in the Northern Territory of Australia, have been the subject of geological and geophysical investigations by Predictive Discovery Pty Ltd during 2010 and 2011. This memorandum summarises these activities in EL27426 only since April 2011, although the geophysical programs were often carried out together.

EL27426 is located on the Calvert Hills 250K map sheet in Northern Territory but close to the NT/Qld border, as shown in Figure 1. Map coordinates in Figure 1 are latitude and longitude (GDA 94) but all other coordinates used in this memorandum are MGA (GDA94) Zone 53.

Most of the EL had been covered by an airborne magnetic and radiometric survey which has been described previously. Coverage was on north south lines spaced 200 metres apart and a grid image of TMI is included in Figure 2. A number of linear features, interpreted as structural dislocations, are apparent in the magnetic images and these were used to determine areas of interest for more detailed evaluation.

One area of interest within EL27426, designated Block 9, was selected and several detailed gravity lines were surveyed to assist in interpreting the structures and possible targets for drilling. The gravity data acquisition was reported previously. The location of the gravity stations is shown in Figure 3, superimposed on the TMI RTP magnetic image.

The gravity stations were on several lines, widely separated and the data was not considered adequate for gridding, however some profiles were generated and are included here as Appendix A.

Some efforts were made to model the gravity and magnetic data to try to determine depth to (magnetic) basement and perhaps generate a rudimentary interpretation model of the subsurface geology. This modelling will be discussed further in the following notes.

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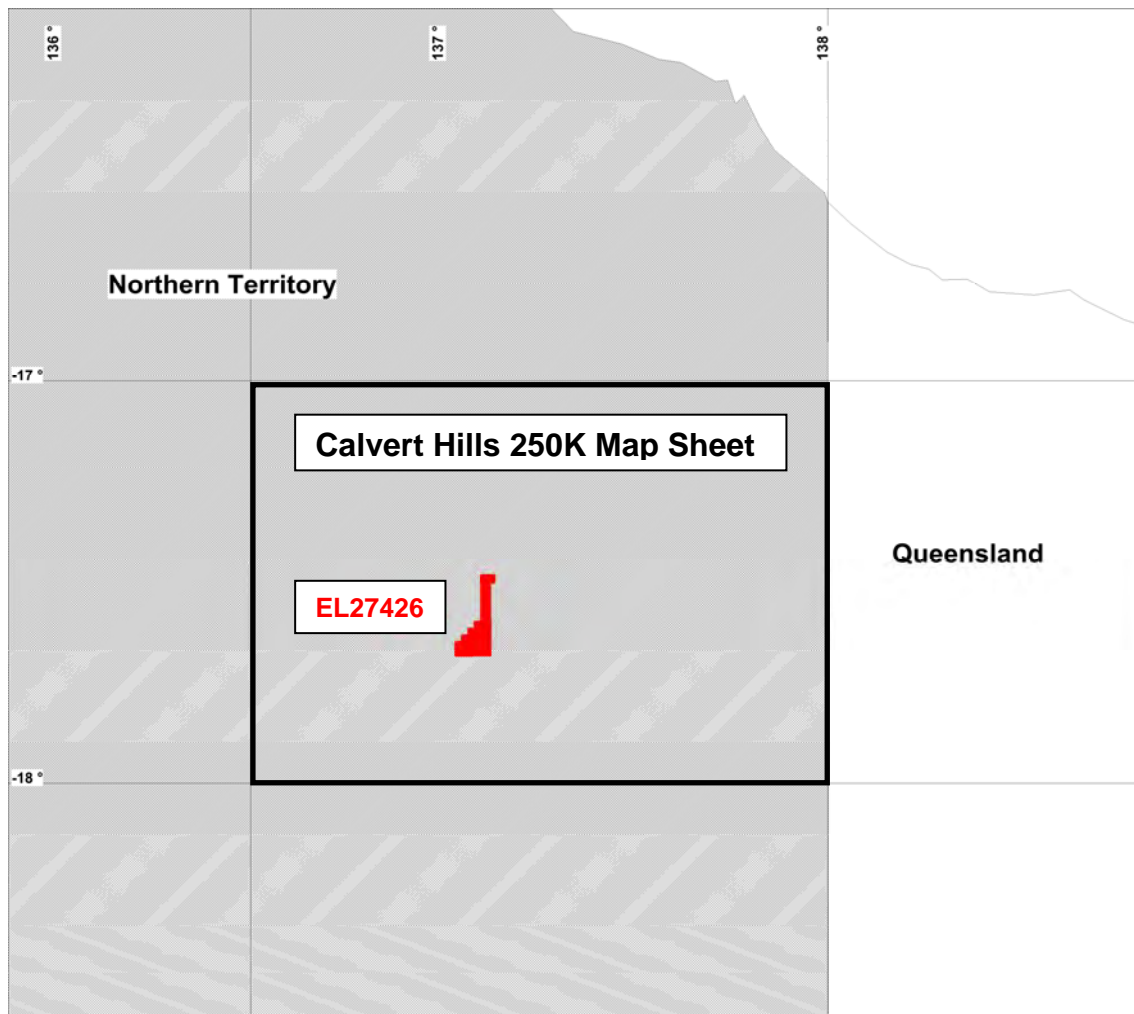


Figure 1 – Regional Locality of EL27426

Although the general stratigraphy of the area is known from regional mapping, no petrophysical measurements on samples were available to assist in constraining the modelling. Reasonable estimates could be made but the lack of hard data limits the accuracy of any models developed. This is particularly the case for magnetic properties which are complicated by the presence of obvious remanent magnetisation.

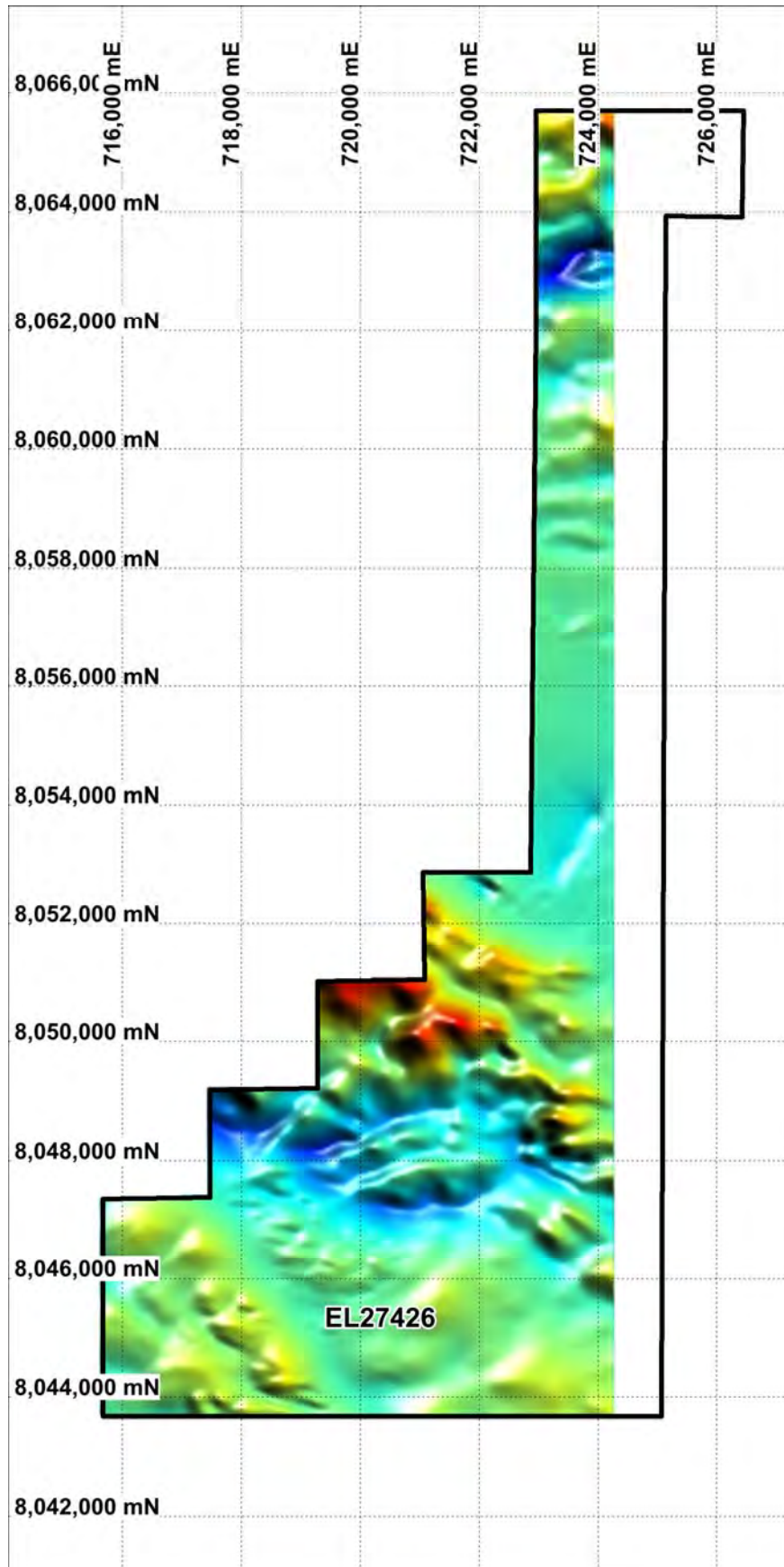


Figure 2 – TMI Image, EL27426

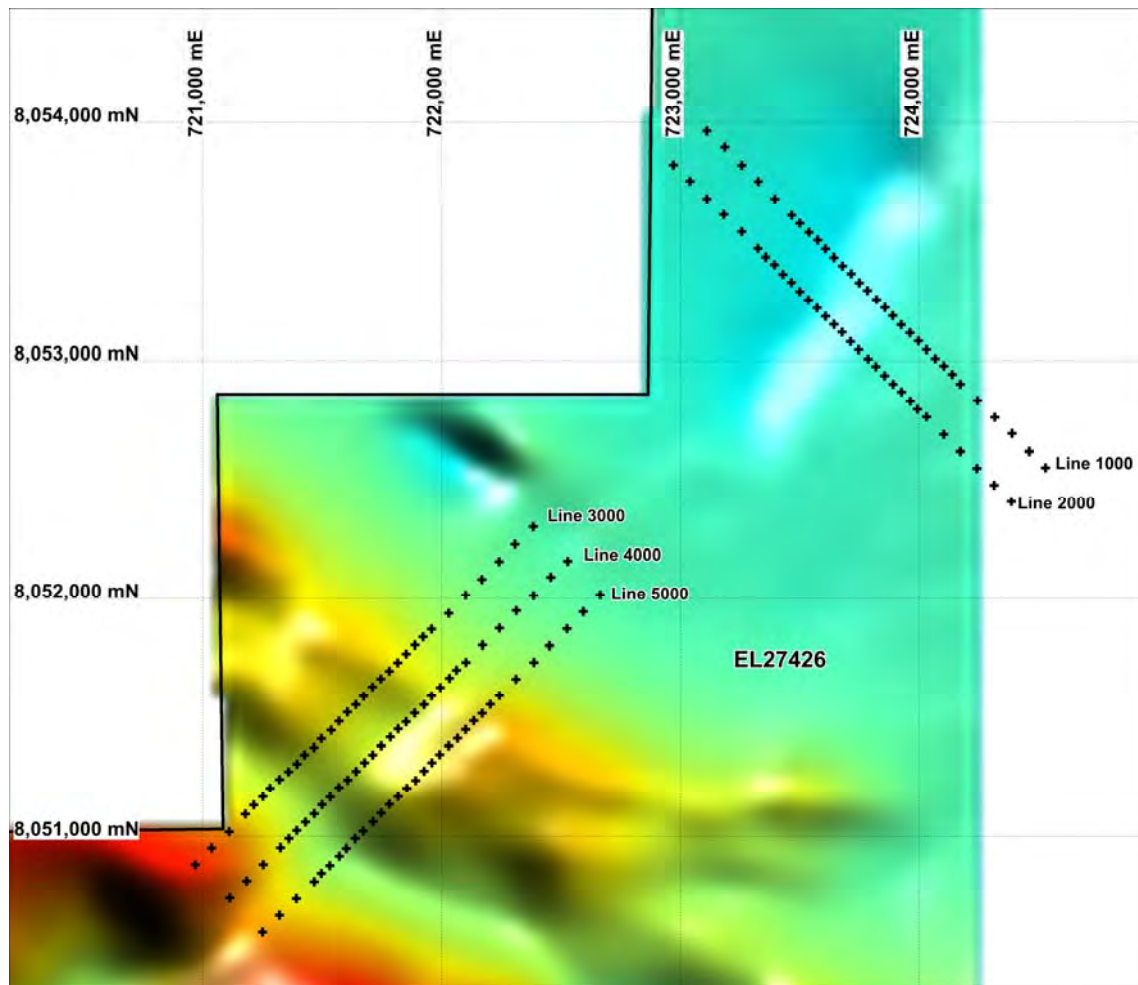


Figure 3 – Block 9, Gravity Stations on TMI Image

2. Gravity and Magnetic Modelling

2.1 PGN Geoscience

An extensive modelling exercise was undertaken by Antoinette Stryk and Peter Betts of PGN Geoscience involving several areas. In particular some modelling was undertaken at Block 9 using both gravity data along Line 3000 (designated Line 303 in their report) and a coincident magnetic profile extracted from the gridded airborne data.

The objective stated was “to forward model one x 2.5D magnetic and gravity constrained cross section through area 9” and this was attempted although few constraints were possible. Extracts from their report (Geophysical Modelling: Benmara Project by Antoinette Stryk and Peter Betts; PGN Report 27/2011 for Predictive Discovery) relevant to Block 9 are included below showing the results obtained. These extracts should be self-explanatory and the figure numbers shown are those used in the original report. Some additional comments by this author are provided within the report and at the end.

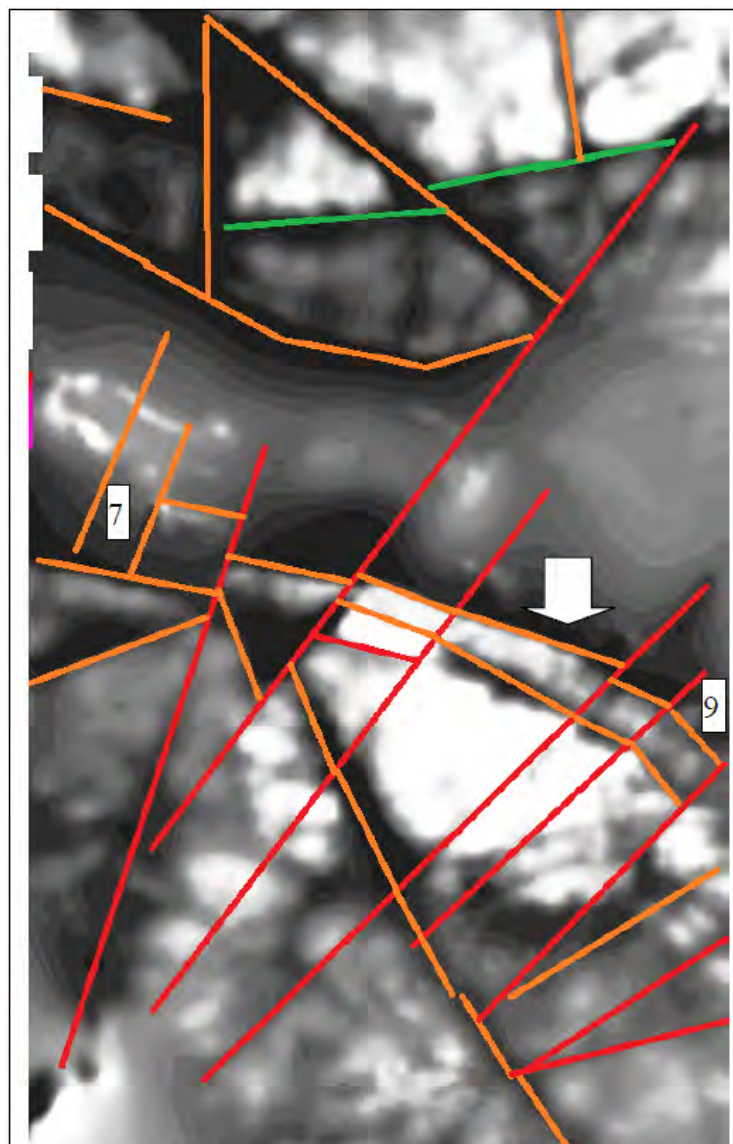
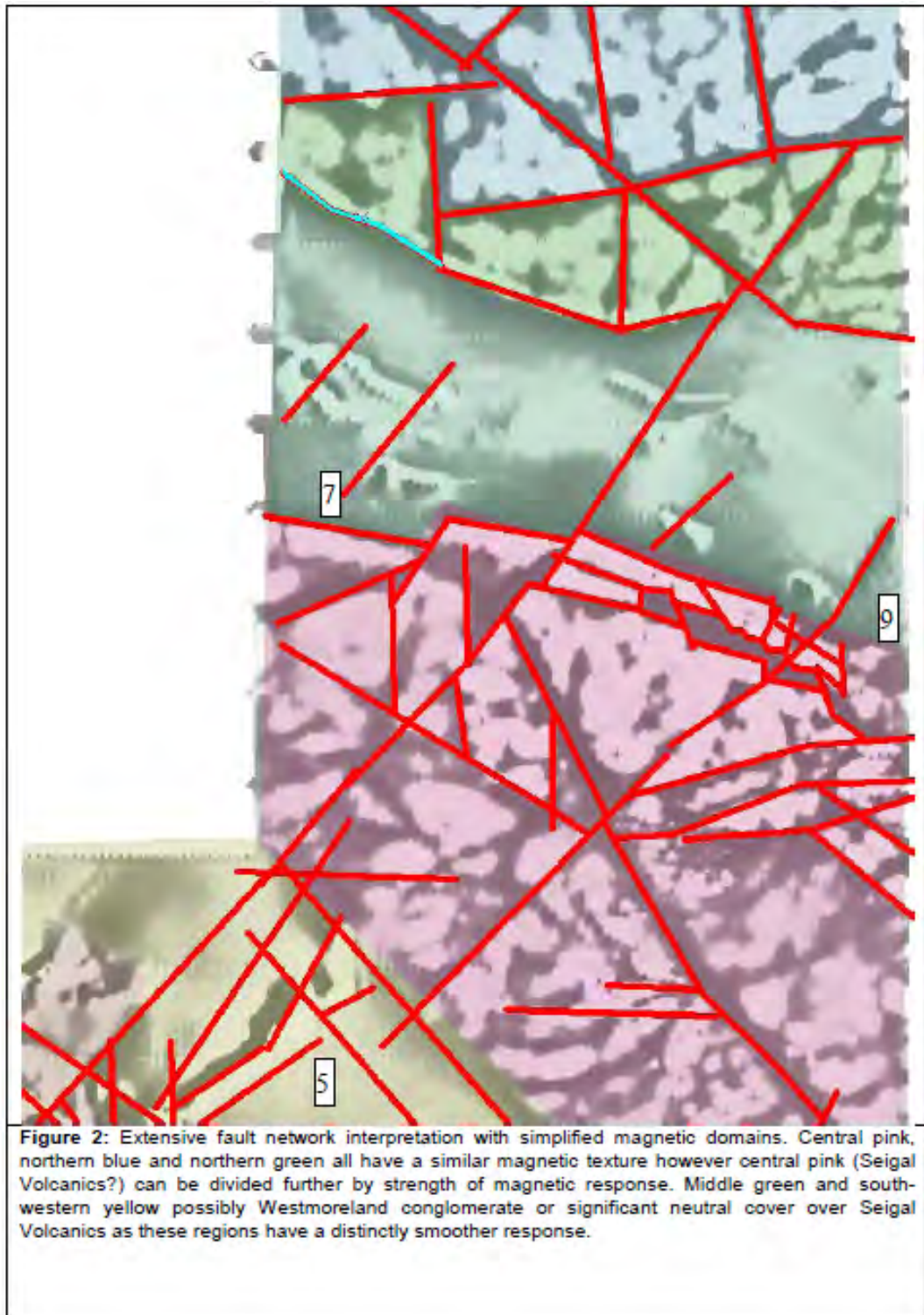
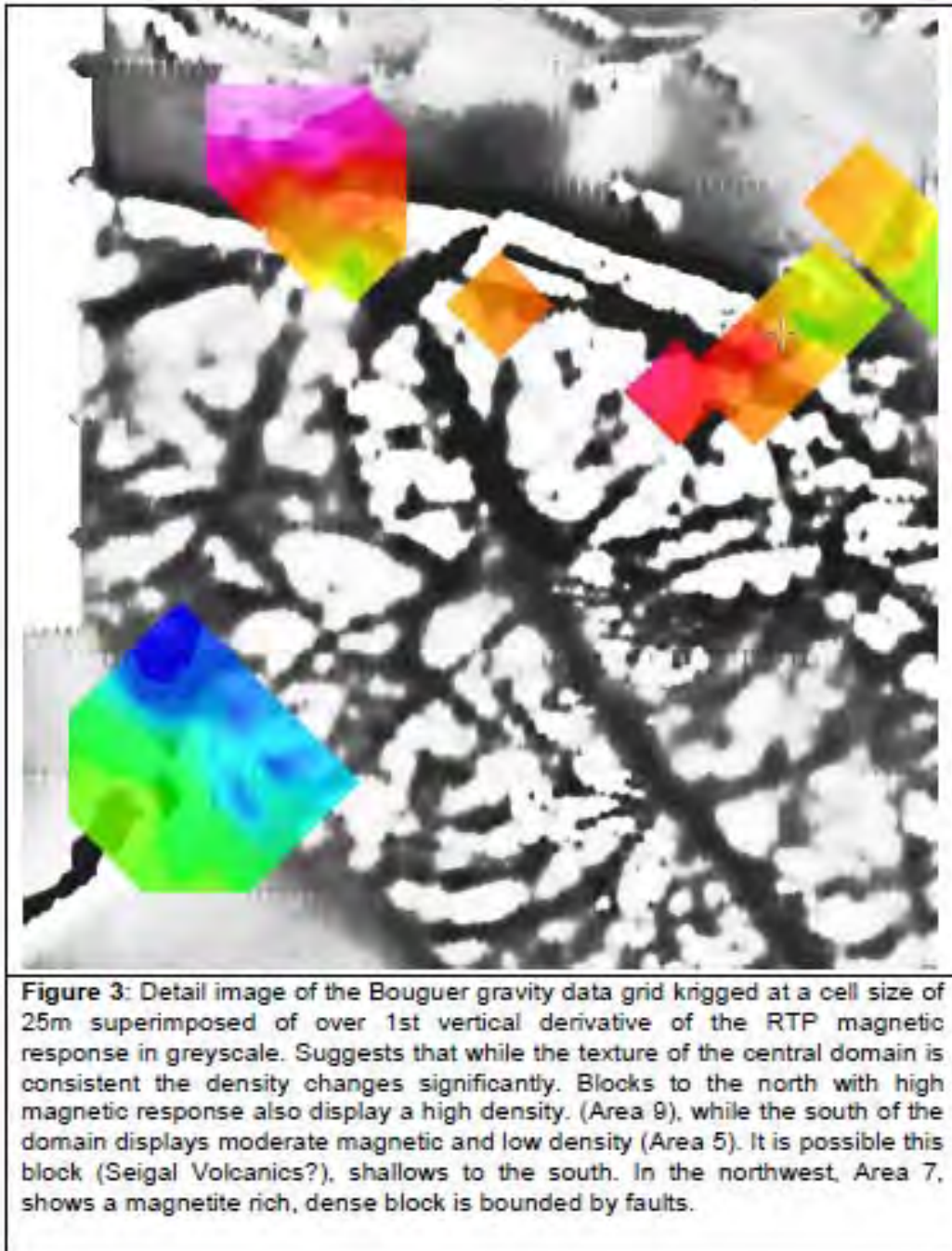


Figure 1: RTP Greyscale image of magnetic data with superimposed Fault Interpretation of Area 9 and Area 7,. Possibly three generations of faulting. Arrow indicates Area 9 where faults that might be younger than indicated as they are E-W trending, potentially the same generation as the green faults.



Initially, various images of filtered magnetic and gravity data were used to try to generate a map of interpreted faults and magnetic domains. Quantitative magnetic interpretation was complicated by the obvious presence of remanent magnetisation in many of the magnetic units and images of Vector Residual Magnetic Intensity (VRMI) were used to assist in mapping magnetic units. The widely spaced areas of detailed gravity data limited its application for structural interpretation but it was used in detailed modelling along a profile.



The structural interpretation shown here covered a much larger area than Block 9, and also used data in the adjoining EL24645 which will be reported separately. The gravity line numbering system used in the next section of the report is related to the line numbers shown in Figure 3, but not identical. Line 3000 in Figure 3 equates to Line 303 in the PGM report, Line 4000 equates to Line 304 and so on.

This was a complex area to interpret with magnetic data complicated by remanence, sparse gravity data and few realistic geological constraints. The magnetic modelling used profiles extracted from a TMI RTP grid and this is likely to be distorted by remanence. Nevertheless it was an attempt to construct a plausible geological model, consistent with the known stratigraphy and interpreted structure.

Objective 5 – Area 9

- Gravity lines 304 and 305 discarded due to proximity to NE-SW fault
- Gravity line 303 utilised for gravity and magnetic modelling.

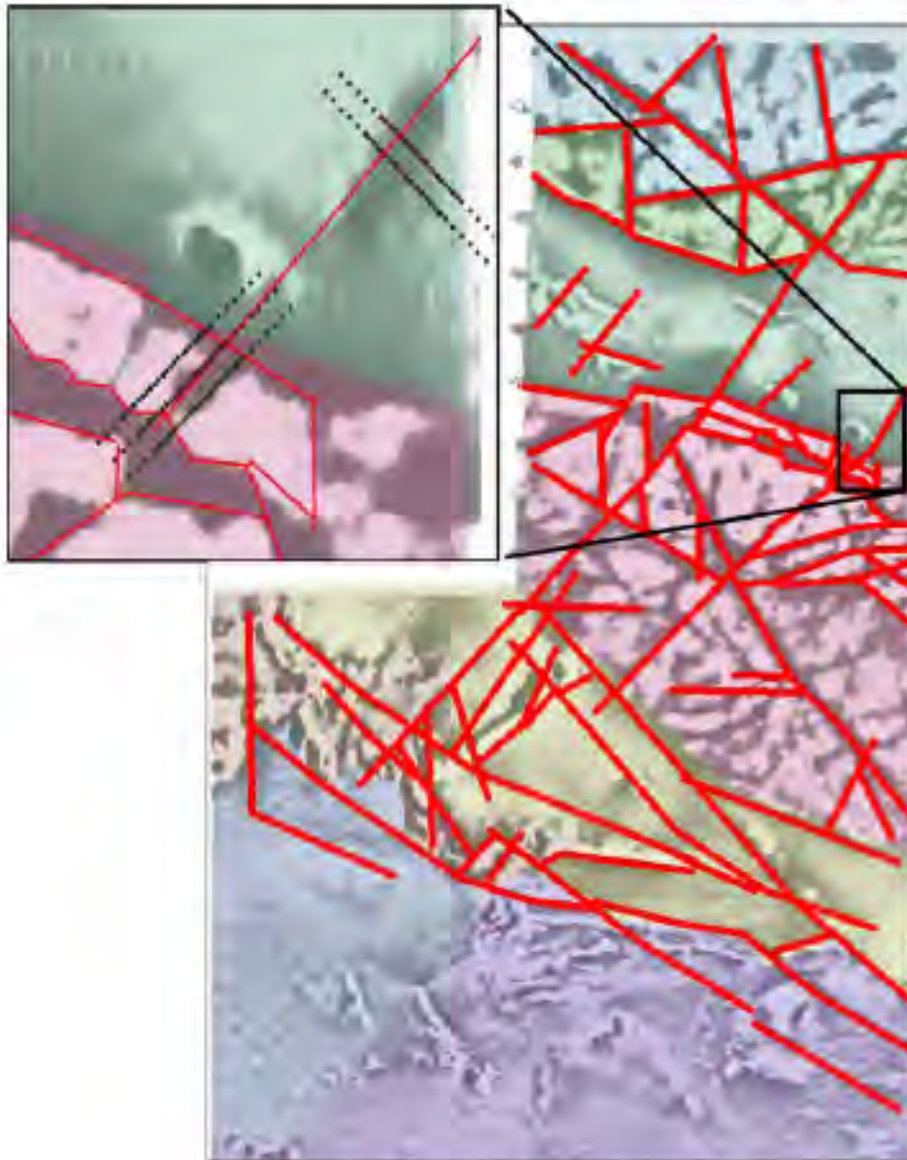


Figure 26. Greyscale RTP image of the magnetic data highlighting the location of area 9. Inset shows detailed greyscale image of aeromagnetic data

Area 9 poses a challenge as there isn't significant gravity data in the region to determine a regional trend. The gravity data does indicate a domain trend with the southern domain showing a higher density and the northern domain showing a lower density. Unfortunately the position of the gravity stations suggests is that lines 305 and 304 (the southernmost northeast striking lines) are parallel to and on top of a significant fault line so not beneficial for use in modelling as the fault has destroyed local magnetite and due the low angle, the feature will have a negligible apparent dip. Line 303 was chosen for modelling as is perpendicular to major block boundary was deemed significantly distant from the NE-SW fault. The results of the 2.5D gravity and magnetic modelling (Figure 27) indicate the fault separating the Seigal Volcanics in the south (orange) from the northern block is north dipping. The northern block shows a low density with a moderate-low magnetic response. This block may be a thin block of Seigal Volcanics under significant cover or Westmoreland Conglomerate.

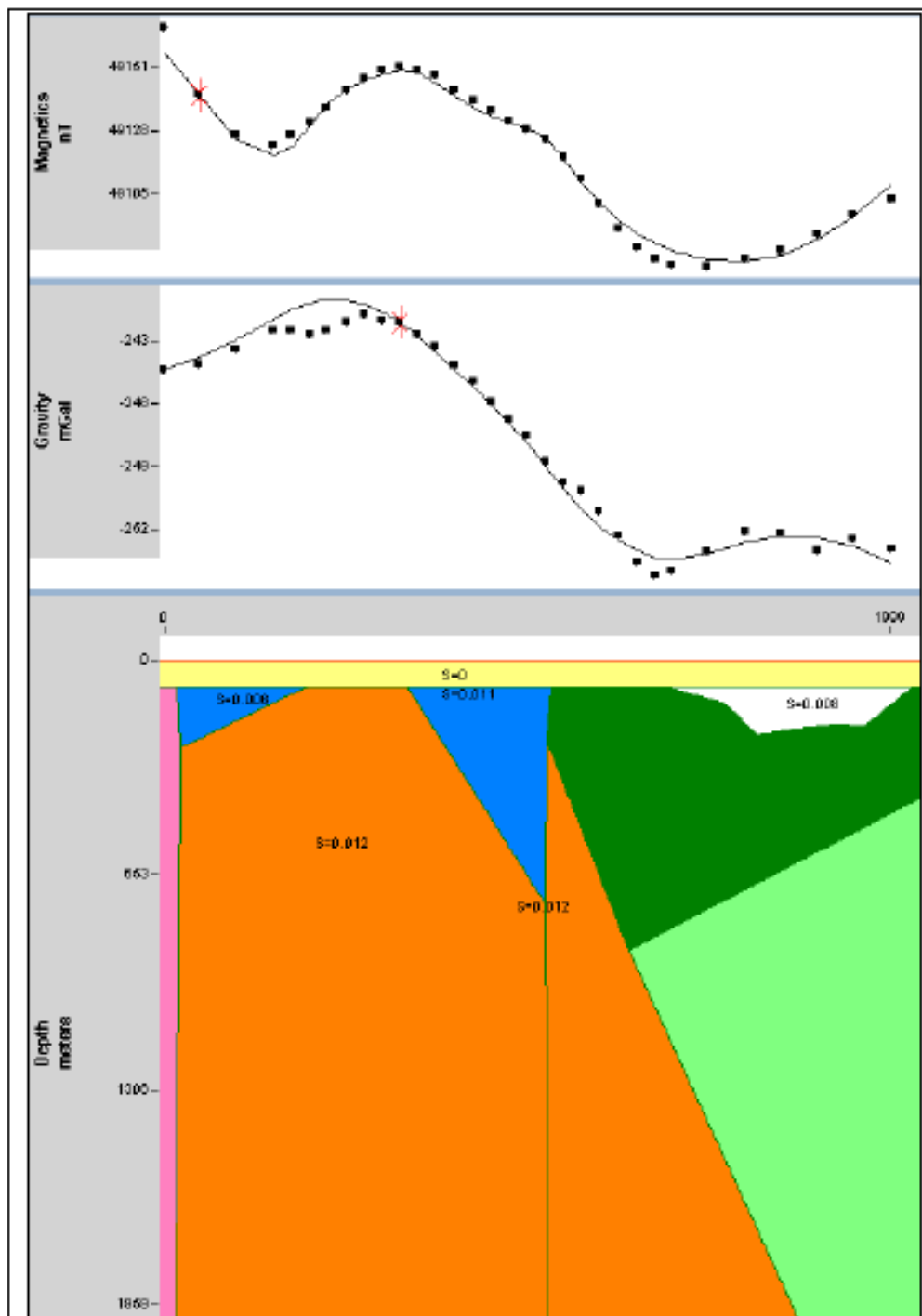


Figure 27: Line 303 S->N

RTP magnetic response and bouguer gravity anomaly model. The orange body is the Seigal Volcanics which is fault bounded to the north. The blue lithology has a low magnetic response which may be due to magnetite destruction resulting from fluid flow along the fault lines. The green bodies have a lower gravity and magnetic response than the orange while the white body is a dense, moderately magnetic body placed to account for high frequency gravity anomalies to the north.

Summary:

Area 9 straddles the boundary between a thick succession of magnetite rich Seigal volcanics and a lighter block with lower magnetite. This may be Westmoreland Conglomerate or a thinner layer of Seigal volcanics under thicker cover.

2.2 Greenfields Geophysics

In addition to the modelling undertaken by PGM, this author also attempted to generate 2D models on specific flight lines to estimate depth to magnetic basement as a guide for drilling. Since modelling was only attempting to estimate depth to basement, the models used measured TMI profiles (and the first vertical derivative of TMI) only, while recognising that remanence would probably distort the apparent dip and susceptibility.

The TMI image surrounding Block 9 shows two sub parallel bands of magnetic highs trending WNW – ESE and dislocated by apparent faulting and possible demagnetising alteration in the immediate area of interest. These dislocations make magnetic modelling difficult and prone to errors, particularly since the most useful models are 2D. Consequently it was decided to try to develop 2D models for these same features further west, away from these dislocations, where the 2D approximation seems more reasonable. The flight line chosen for modelling (Line 301061) is shown in Figure x. It extends beyond the boundary of EL27426, into the adjacent EL24645, and data from both tenements was used to develop 2D models. Although the models are centred a significant distance west of the main area of interest it was hoped that the depth to magnetic source could be extrapolated to guide drilling in Block 9.

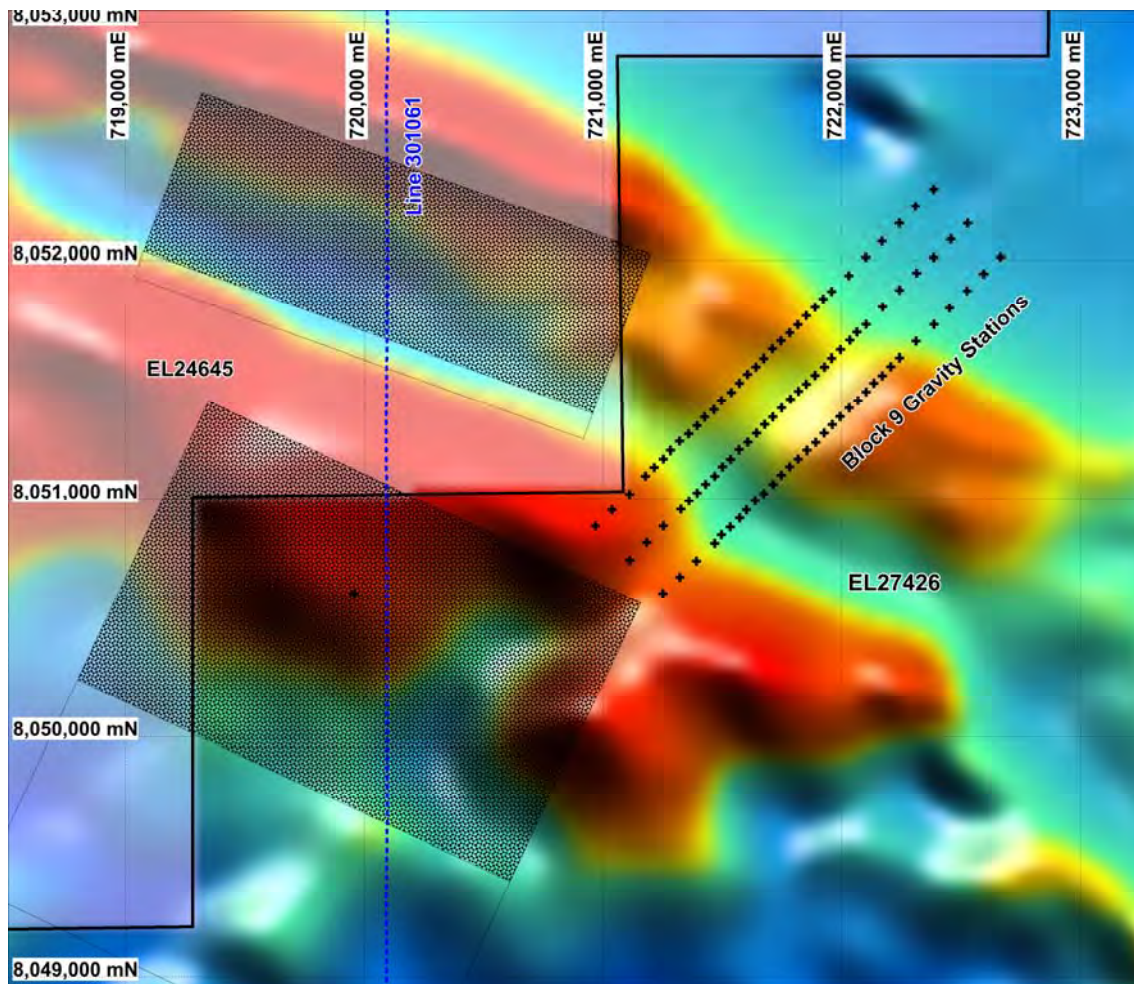


Figure 4

Models were developed which fitted both TMI and the 1st vertical derivative (FVD) along Line 301061 to a reasonable approximation. Figure 4 also shows the location of the tops of

the models developed, both dipping steeply to the south and with depths to top in the range 50 to 100 metres. The models are not ideal but they should give some idea of the general depth of cover in this area.

The model is illustrated in section in Figure 5. The southern body has a depth to top of 100 metres and the northern body has a depth to top of 65 metres but the fit is less than ideal so these should be considered indicative only. The dips are unlikely to be correct as no allowance has been made for remanent magnetisation.

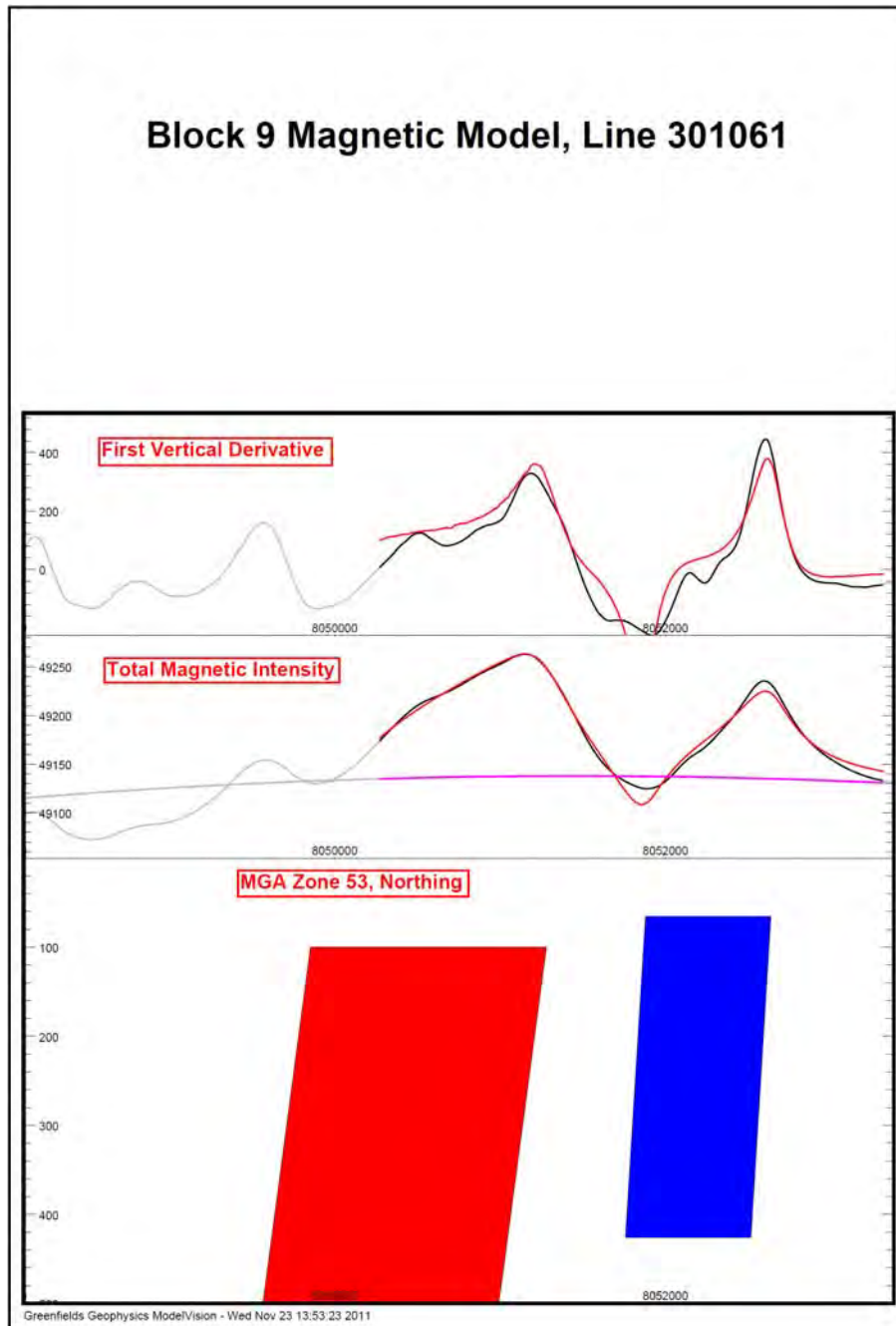
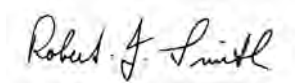


Figure 5 – 2D Magnetic Model along Line 310061

3. Conclusions

A rudimentary geological model has been developed for the area around Block 9 and indicative depths to the magnetic sources have been estimated in the range of 50 to 100 metres.

The model is not considered reliable in detail but it may provide some assistance in siting drillholes to test the area defined primarily by interpreted structures and possible signatures of demagnetising alteration.

A handwritten signature in black ink, reading "Robert J. Smith". The signature is written in a cursive style with a large, stylized 'R' and 'S'.

Robert J Smith

Appendix A

Block 9 - Gravity Profiles

