Annual Report
EL 23767

"801" Project
Base Metals
and
Phosphate

Barkly Highway, NT

For the Period ending
17th September 2013

Tenement Holder: Minerals Australia Pty Ltd (100%) Date: October 2013

Author: Peter S Collings – Chief Geologist Minerals Australia Pty Ltd

Distribution:
NT Department of Mines and Energy
Minerals Australia Pty Ltd – Perth

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SUMMARY

EL 23767 was granted to Jacaranda Minerals Ltd ("JML") and Minerals Australia Pty Ltd ("MAPL") on 18th September 2012 for a period of six years. JML and MAPL are partners in the Jacaranda Alliance Joint Venture ("JAJV").

Subsequent to the reorganisation of the JAJV, on 12th September 2013 the transfer of EL23767 by JML to 100% ownership by Minerals Australia Pty Ltd was approved by the Department of Mines and Energy (D93511).

The EL as granted comprised an area of 250 blocks (757.87 sq km) and is located on Aboriginal Freehold Land owned by the Wakaya Aboriginal Land Trust, 260km east of Tennant Creek in the Northern Territory of Australia. A Deed for Exploration was executed with the Central Land Council in July 2012.

In late 2002, Conarco Minerals Pty Ltd (owners of JML), while carrying out a regional reconnaissance geochemical survey, discovered strongly anomalous geochemical lead (750ppm Pb) and arsenic (150ppm As) in weathered Cambrian sediments at a location named "801" Literature search by Conarco also discovered drill holes previously drilled in the area containing anomalous lead values up to 370ppm Pb.

Follow-up work by Conarco defined a broad area within EL23726 and EL23767 containing anomalous lead geochemistry with coincident magnetic response defined from interpretation of the NTGS Barkly airborne geophysical survey. Additional magnetic modeling also revealed several magnetic targets. The targets range in depths from200m to 300m, including anomaly in the northeast corner of EL23767.

In July 2013, consulting geologists SRK Australia carried out a detailed geological assessment of the exploration potential of the area of EL23767 and the adjacent EL29652. SRK's study included geological modeling and interpretation based on available government geophysical data and results of previous drilling in the region, including core drilling by JML and MAPL in EL23726 in 2008.

1. TENURE

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The tenement schedule for "801" is as follows:

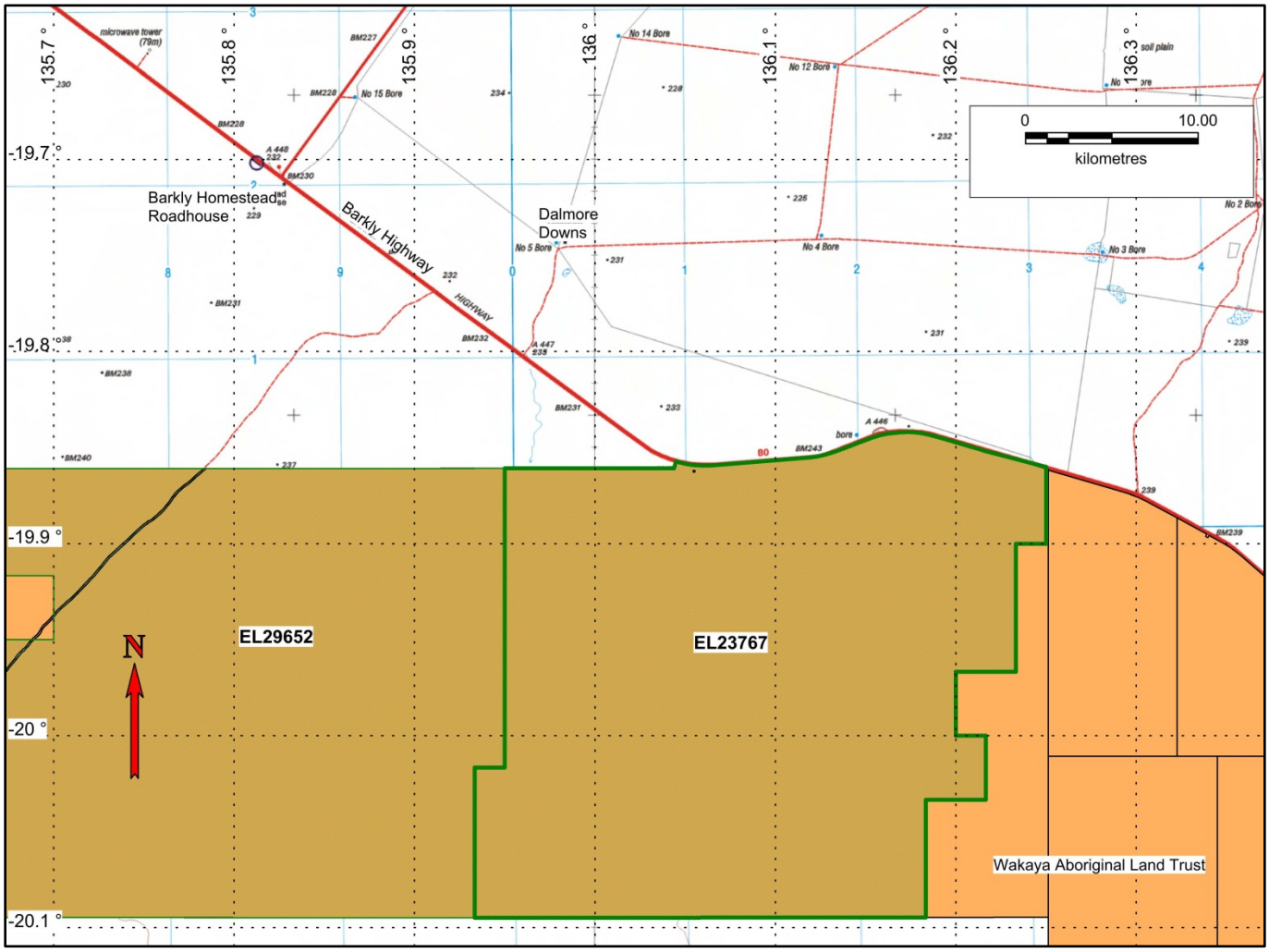
TENEMENT NUMBER	EL23767
REGISTERED HOLDER	Minerals Australia Ltd (100%)
GRANT DATE	18-Sep-2012
EXPIRY DATE	17-Sep-2018
CURRENT AREA	250 blocks
ANNUAL RENTAL	$8,000 plus GST
EXPENDITURE COMMITMENT 2011-12	$19,000

2. INTRODUCTION

EL 23767 was granted to Jacaranda Minerals Ltd ("JML") and Minerals Australia Pty Ltd ("MAPL") on 18th September 2012 for a period of six years. On 12th September 2013 transfer to 100% ownership by Minerals Australia Pty Ltd was approved by the Department of Mines and Energy (D93511).The EL as granted comprised an area of 250 blocks (757.87 sq. km).

The EL is located on Aboriginal Freehold Land owned by the Wakaya Aboriginal Land Trust, 260km east of Tennant Creek in the Northern Territory of Australia. A Deed for Exploration was executed with the Central Land Council in July 2012.

Figure 1: EL23767 location map

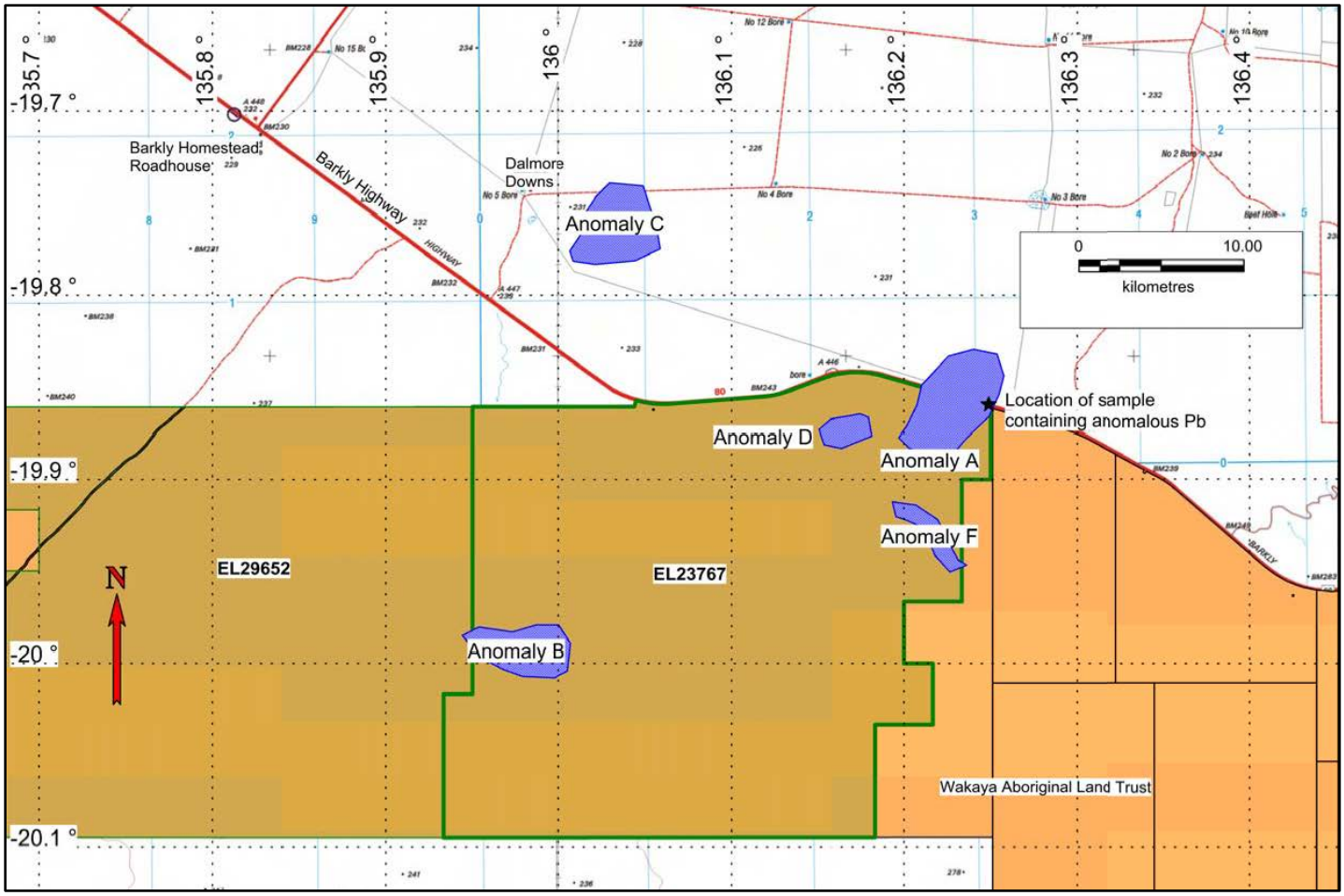


In late 2002, Conarco Minerals, the owners of Jacaranda Minerals Ltd, after carrying out a regional reconnaissance geochemical survey, discovered strongly anomalous geochemical lead (750ppm Pb) and arsenic (150ppm As) in weathered Cambrian sediments. Conarco named this location “801”. A follow-up literature search by Conarco identified previous exploration drill holes in the area containing anomalous lead values up to 370ppm Pb.

Subsequent work by Conarco defined a broad area within EL 23726 adjacent to the north of EL23767 containing anomalous lead geochemistry with coincident magnetic response defined by interpretation of the NTGS Barkly airborne geophysical survey. Additional magnetic modeling also revealed several magnetic anomalies in EL23726 and EL23767. Estimated depths to these targets range from 200m to 300m. The location anomalous lead sample and of the magnetic anomalies identified by Conarco are shown in Figure 2.

Core drilling of five holes in EL23726 by the JAJV in 2008 tested three of the identified magnetic anomalies. In all cases no mineralisation was identified and the magnetic anomalies were adequately explained by the magnetic susceptibility of the basement lithologies intersected.

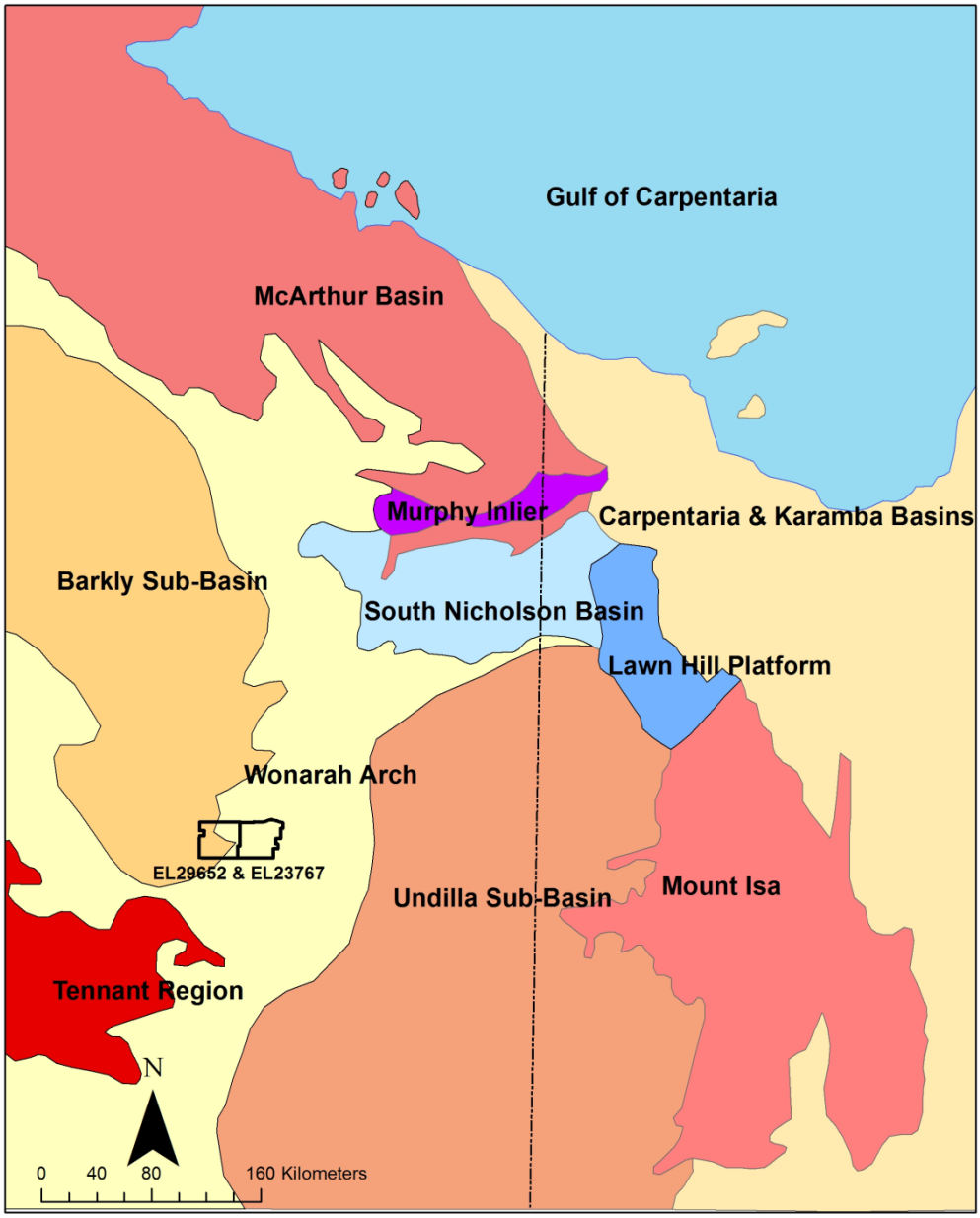
Figure 2: Location of original magnetic anomalies



3. GEOLOGICAL SETTING

EL 23767 is located over part of the Northern Australian Craton within the central Georgina Basin. EL23767 is interpreted to occur within the northern extension of the Davenport Province of the Tennant Creek Region and south of the South Nicholson Basin. The units of the Palaeozoic Davenport Province are overlain by middle Cambrian sedimentary rocks of the Georgina Basin and a thin cover sequence of the Carpentaria Basin.

Figure 3: Regional geological setting of EL23767



4. PREVIOUS EXPLORATION

There is no record of any significant previous exploration in the area ofEL23767.

The Wonarah phosphate deposit immediately adjacent to the east of EL23767 tenement was identified in1967 by the US industrial minerals and chemicals group, IMC Development Corporation ("IMC"). Between 1967 and 1970 IMC undertook regional mapping, geophysical, drilling and test work activities in the Wonarah region.

During 1983-1984, CRA Exploration Pty Ltd ("CRAE") carried out an exploration program for phosphate in an area immediately to the south of the Wonarah deposit. CRAE completed a low level (80m) aeromagnetic survey at 1km line spacing which suggested potential for phosphorite at 20-30m depth. Although tracks and drilling grids were prepared CRAE withdrew from the project due to low prevailing world phosphate prices and the lack of infrastructure at the time in Central Australia.

MInemakers Ltd currently control the Wonarah phosphate deposit and have identified a significant resource of phosphate. Their exploration drilling has approached the eastern boundary of EL23767 and it is thought probable that the phosporite continues at depth into EL23767.

Hancock Exploration Management Services drilled five core holes in EL23276, immediately adjacent to the north EL23767 and EL29652 in 2008. These holes intersected approximately 100m of Cambrian dolostones and siltstones underlain by 60-100m of Kalkarinji Volcanics then Proterozoic basement units.

The location of all previous exploration drill holes is shown in Figure 12 superimposed on the regional magnetic image.

5. EXPLORATION BY MINERALS AUSTRALIA PTY LTD 2012-2013

In June 2013 SRK Consulting were commissioned to prepare report on the geology and prospectivity of EL23767 and adjacent tenement EL26952 (since surrendered).

All readily available public datasets, including geological, satellite and geophysical imagery were compiled by SRK for the purpose of interpretations compiled in this report. Datasets used are summarised as follows:

- 1:250,000 scale scanned geological map sheets and digital geology;
- Magnetic datasets and image enhancements;
- Gravity datasets and image enhancements;
- Radiometric imagery and satellite imagery;
- Stratigraphic / petroleum well and mineral exploration drillholes;
- Cultural data;
- SRTM and DEM images; and
- Published Literature.

5.1 Geology of EL23767

(from SRK 2013)

Geologically, the tenement has been interpreted to occur within the northern extension of the Davenport Province of the Tennant Creek Region and south of the South Nicholson Basin. The Davenport Province is the southernmost extension of the Tennant Creek region, which also consists of the Warramunga and Tomkinson Provinces in the centre and northern area respectively.

The Warramunga Group (ca 1880-1870 Ma) is interpreted as the oldest units within the region and consists of turbiditic greywacke, siltstone and shale, which were deposited in deep marine settings. Economic gold and copper has been recognised within these sequences. These units underwent deformation and greenschist metamorphism during the Barramundi Orogeny (~1870 Ma), which was widespread and affecting much of northern Australia (Blake and Page, 1988). Following inversion, these units were intruded by large granitic bodies. In the north of the region, the Warramunga Group is unconformably overlain by the Ooradidgee Group (1840 Ma), which is composed of siliciclastic sedimentary rocks and bimodal volcanics (Claoue-Long et al., 2007).

Overlying the Orradidgee Group is the Hatches Creek Group, which has been interpreted to have been deposited in an intracratonic sag phase basin in fluviatile to marine settings, during post- Barramundi and Leichhardt Extension events. The Hatches Creek Group consists of successions of sandstone, basalt and rhyolitic volcanics, which are up to 10 km thick. Sills are recognised to intrude this group, possibly co-magmatic to the bi-modal volcanism. These units underwent two periods of

deformation resulting in upright folding. Granites of the Devils Suite intruded the sequences at approximately 1710 Ma (Blake and Page, 1988).

Sedimentary rocks of the Georgina Basin overlie the Proterozoic sequences within EL 23767 forming part of a relatively thin cover sequence. Deposition of the Georgina Basin within the central Georgina Basin region commenced during the Edicarian, post the initial onset of deposition in the southern region during the Crogenian (ca 840 Ma). Extensive flood basalts of the Kalkarindji Group also blanket much of the region and underlie the Georgina Basin sedimentary sequences.

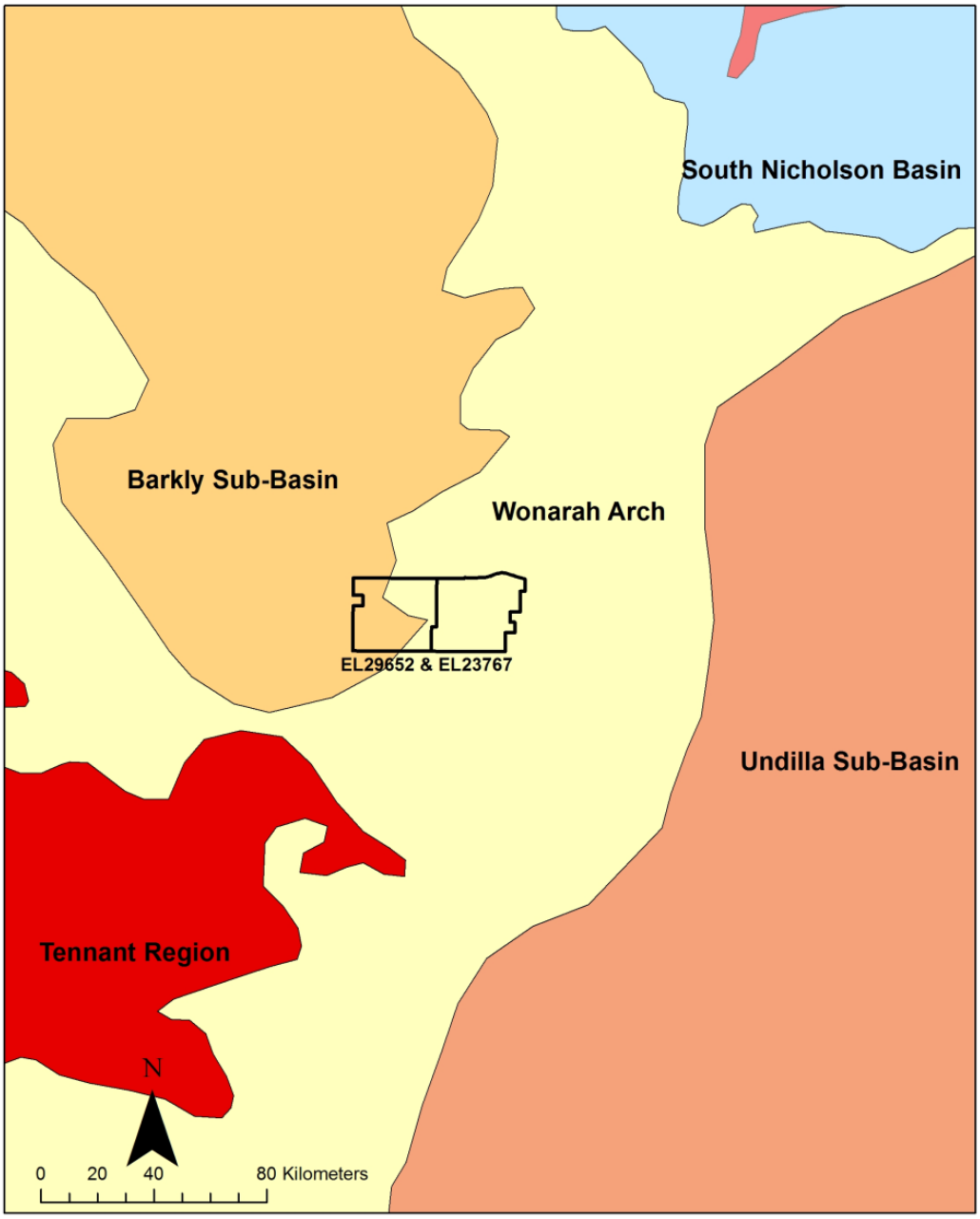
The majority of the project area lies under extensive cover of the Cretaceous Carpentaria Basin, which was deposited as the result of a major marine transgression during the Aptian to Early Albian and which inundated much of northern Australia (Kruse et al., 2008). These sequences form a broad thin flat lying sheet over much of the Northern Territory from Arnhem Land south toward the Queensland Border.

5.1.1 Georgina Basin (840-400 Ma)

EL23767 and EL29652 are located within the Central Georgina Basin, which forms as a relatively thin near flat lying sequence of Middle Cambrian carbonates and dolostones.

Two Sub-basins of the Georgina Basin are evident within proximity of EL23767 and EL29652, which are separated by the Wonarah Basement High to the east (Figure 4). E L 23767 is situated on the eastern fringes of the Barkly Sub-basin, which extends westward into central Northern Territory. To the east of EL23767 beyond the Wonarah Basement High, the Undilla Sub-basin is recognised. The Wonarah Basement high forms as a pronounced broadly north-south trending gravity high to the east of the tenement and defines the boundary between the eastern Undilla Sub-basin and western Barkly Sub-basin.

Figure 4: Distribution of Sub-Basins in the Central Georgina Basin



Basin rocks within EL23767 include units of the Barkly and Narpa Groups, which are defined in Table1. Within the region, the Wonarah Formation is interpreted as widespread and locally overlies the Gum Ridge Formation and Kalkarindji Volcanics, which locally are termed the Helens Creek or Peaker Piker Volcanics. The Wonarah Formation hosts phosphorite deposits at Wonarah, immediately east of EL23767.

Table 1: Schematic stratigraphic column from west to east

(from Shergold et al. 1976)

	Central Georgina Basin		
	Barkly Sub-basin	Undilla Sub-basin	
	Camooweal Dolostone		
Barkly Group		Ranken Limestone	Narpa Group
	Anthony Lagoon Beds	Wonarah Formation	
	Gum Ridge Formation	Thorntonia Limestone	

Basin rocks within EL23767 include units of the Barkly and Narpa Groups. Within the region, the Wonarah Formation is interpreted as widespread and locally overlies the Gum Ridge Formation and Kalkarindji Volcanics, which locally are termed the Helens Creek or Peaker Piker Volcanics.

The Middle Cambrian sedimentary units within this region are characterised by cherty and dolomitic limestones with the carbonate strata interleaved with clastic beds varying from shale and siltstone. Drilling within the broader area indicates a predominance of the Wonarah Formation transitioning into the lateral equivalent Anthony Lagoon Formation to the west (Figure 5 and Figure 6).

Figure 5: Schematic cross section of the Wonarah Basement High within EL23767

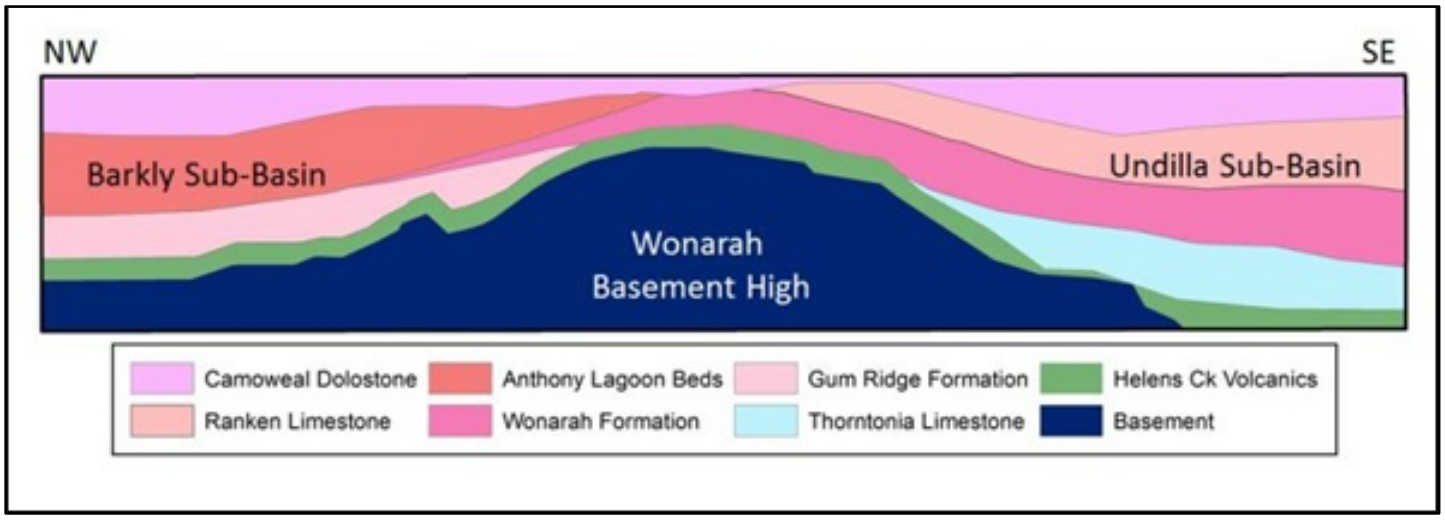
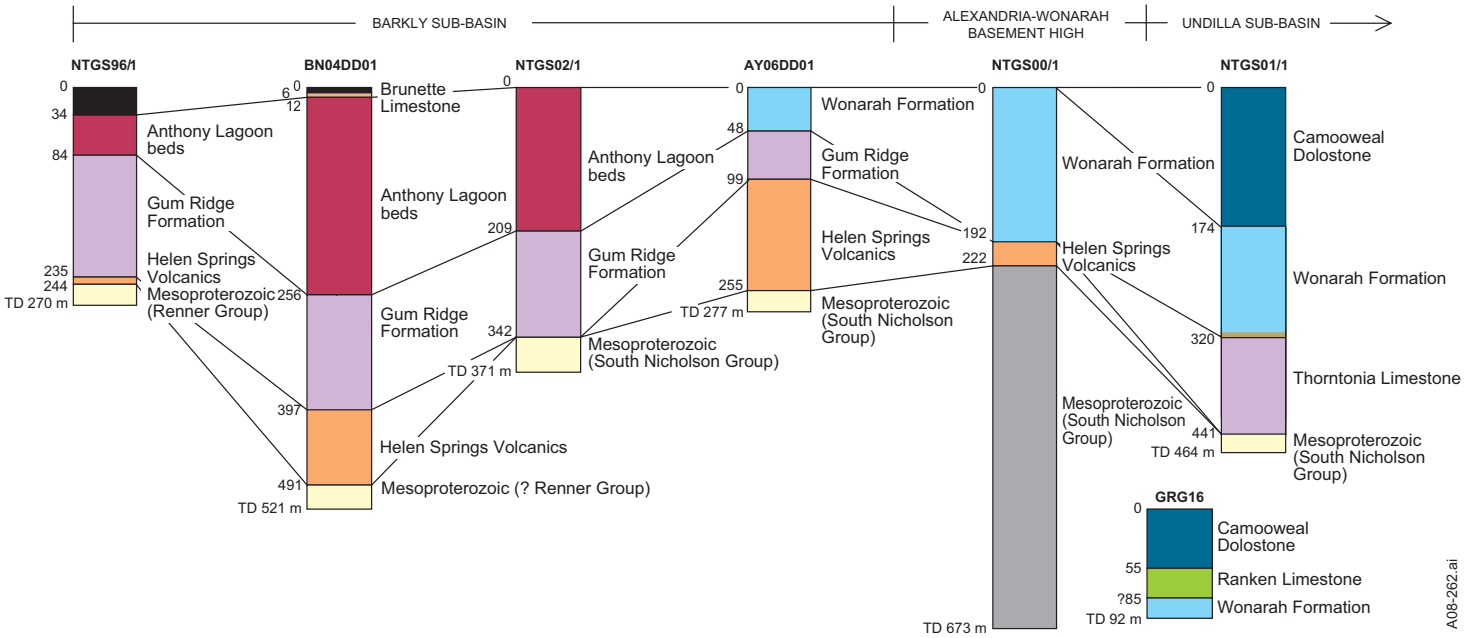


Figure 6: Drill sections in south of EL23767 showing distribution of Georgina Basin sediments

(source Kruse et al; 2008)



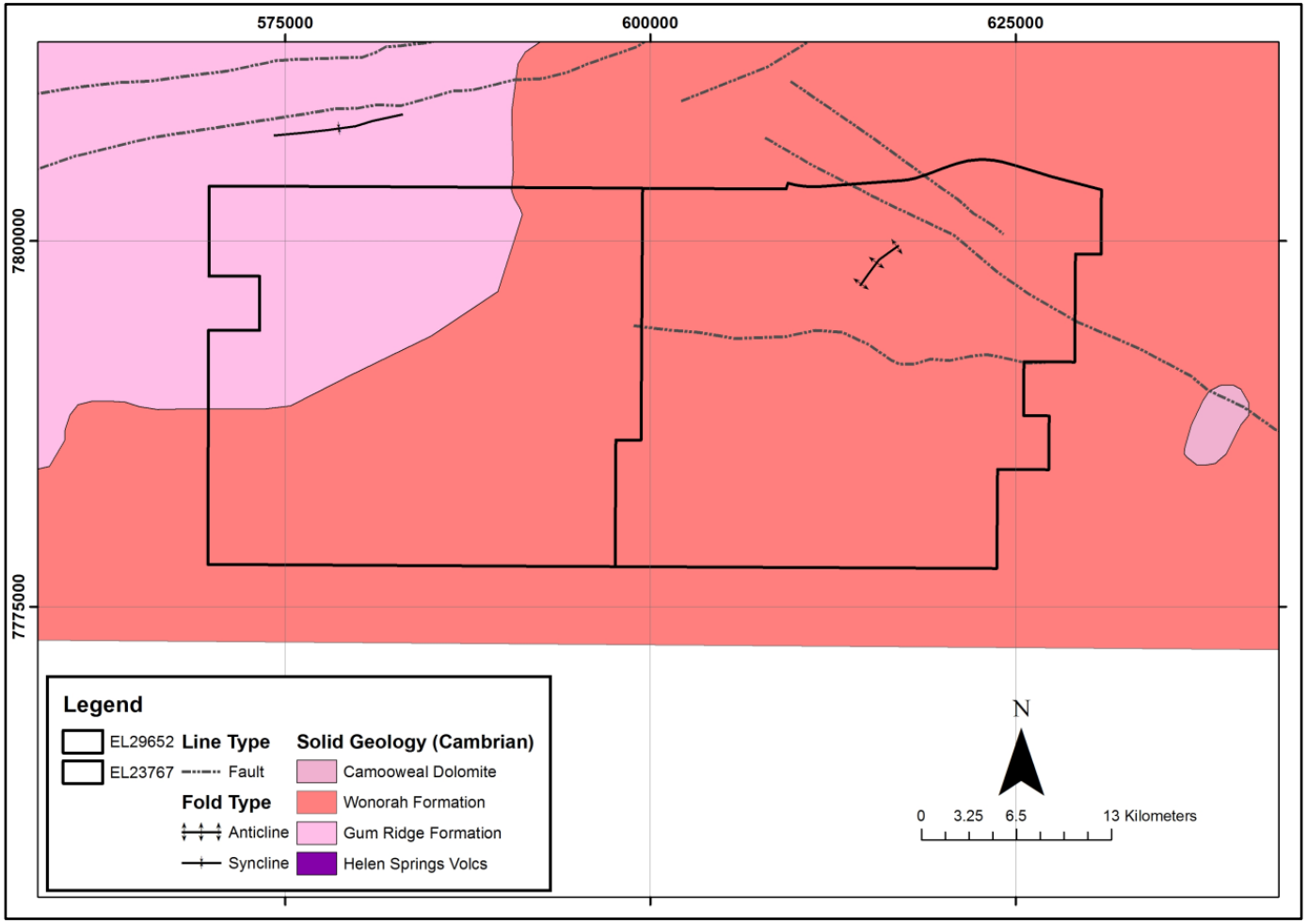
The Georgina Basin sequence within the tenement is relatively thin with no drill intercepts within proximity of the tenement exceeding 400 m (Figure 6). To the northeast and northwest of the tenement the preserved Georgina Basin sedimentary sequence is also thin with drilling intercepts rarely exceeding 100 m (i.e. Hancock Prospecting mineral exploration holes DDH001 to 5). Within the Southern Georgina Basin thicknesses are recognised to exceed 2,000 m (Kruse et al., 2008).

5.1.2 Cambrian Solid Geology Interpretation

Solid geology interpretations of the undercover extents of the Cambrian units have been conducted based from outcropping geology and drilling (Figure 7). The Wonarah Formation has been interpreted as widespread, blanketing much of the tenement. Extending westward deeper into the Barkly Sub-basin, the Anthony Lagoon Beds becomes the dominant lithology. The Gum Ridge Formation is interpreted within the northwest of the tenement where recognised in outcrop. The Thorntonia Limestone has not been interpreted within the area (and this interpretation is supported by drilling and published regional mapping / analysis of the Barkly Sub-basin (Figure 6). The Kalkarindji Volcanics do not outcrop but has been intersected in Hancock Exploration core holes in EL23267 to the north of EL23767 with thickness varying from 23m to 62m. This unit was completely absent in one core hole.

Within the tenement the Middle Cambrian sequence maintains a relatively flat lying character with minimal folding and faulting recognised based from the magnetic and published map data. Folds appear typically small scale (<1-2 km) with gentle dips likely. Some faulting appears to have affected the Kalkarindji Volcanics, with linear breaks evident within the magnetic datasets. To the south, the Georgina Basin sequences are known to have been deformed by the Early Cambrian to Late Devonian Alice Springs Orogeny, which resulted in moderate folding and faulting. Folding and faulting resulting from this event reactivated basement faults and the minor folding evident within the Kalkarindji Volcanics may be related to this orogenic event as well.

Figure 7: Cambrian Solid Geology of EL23767 and EL29652



5.1.3 Davenport Province – Tennant Region (1840 – 1660)

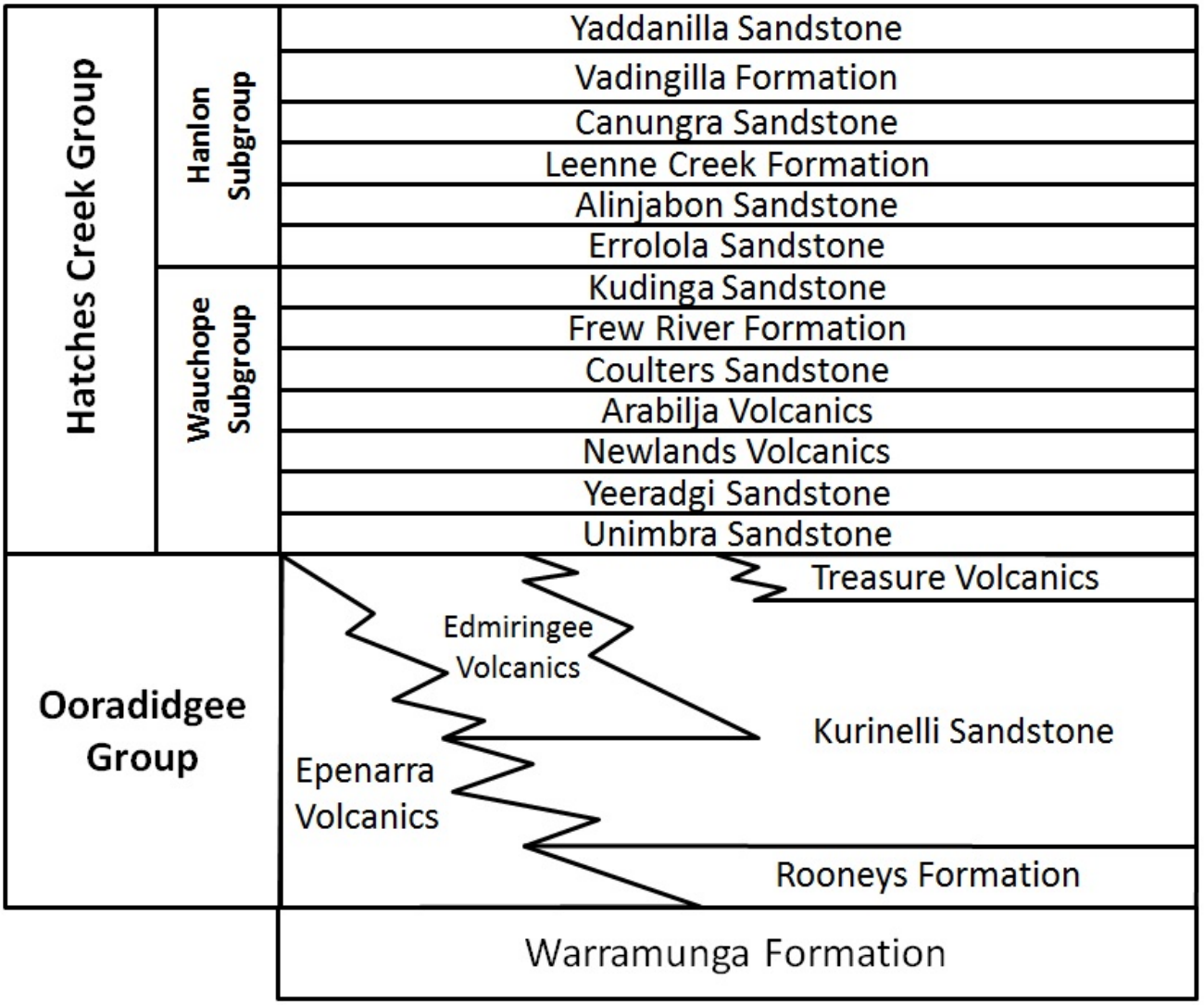
The Tennant Creek Region of the Northern Territory consists of three provinces, defined from north to south as the Tomkinson, Warramunga and Davenport. Within EL23767 and EL29652, units of the Davenport Province have been interpreted to extend north and northeast under Georgina Basin cover from outcropping distributions mapped within the Frew River 250 K map sheet to the south.

Compositionally the Davenport Province consists of the Hatches Creek and Ooradidgee Groups, which unconformably overlie a deformed and metamorphosed basement composed of the Warramunga Group. The Warramunga Group consists of turbiditic greywacke, siltstone, haematitic shale and felsic volcanics (Blake & Page, 1988). The Warramunga Formation was deformed and metamorphosed to greenschist facies at which time ironstones formed. These units are associated with Iron Oxide Copper Gold mineralising systems recognised within the broader Tennant Creek region (Wyborn, 2001). Postdating deformation of the Warramunga Group, granites intruded possibly of the Tennant Creek or Cabbage Gum granite suites (Blake and Page, 1988).

The Ooradidgee Group is a volcanosedimentary sequence composed of shallow marine to sub-aerial sedimentary rocks and bimodal volcanics, which demonstrate major lateral facies changes around volcanic centres (Claoue-Long, et al., 2008). The components of this group are defined in Table 2. The upper sequences consist of the Treasure Volcanics and the lateral equivalent Mia Mia Volcanics have been interpreted to have been deposited during the Murchison extensional event at approximately 1814 Ma. These units consist of thick (>1500 m) felsic lavas including rhyolite and rhyodacite with basaltic lavas in the lower sequences. Underlying these units are sequences of fluvatile to shallow marine sandstones and siltstones defined as the Taragan Sandstone, Kurinella Sandstone and lowermost Rooneys Formation. The Epenarra Volcanics is recognised as an extensive volcanic sequence consisting of up to 3000 m of felsic tuffs, porphyritic and mafic lavas.

The Ooradidgee Group was intruded by sills and dykes of granophyre and dolerite, which are interpreted as co-magmatic with the volcanics within this group. An approximate age of 1810 Ma has been interpreted for these sills by Claoue-Long, et al., (2008); however, Kruse et al., (2008) also suggests these may be constituents of the overlying Hatches Creek Group.

Table 2: Stratigraphic Column of the Davenport Province



The Hatches Creek Group overlies the Ooradidgee Group and consists of siliciclastic successions with subordinate volcanics. A rift-sag model has been proposed for the formation of these groups involving crustal extension in an intracratonic setting. Plumb et al., (1981) and Blake (1986) initially suggested the Hatches Creek Group may have been lateral equivalents to the McArthur Group in the north; however, this was later considered unlikely by Blake and Page (1988) based from U-Pb zircon data suggesting an older deposition of this group, occurring roughly equivalent to the Leichhardt Extension event.

The units of the Hatches Creek Group form a distinct layer cake type stratigraphy and have been sub-divided in the upper Hanlon Subgroup and lower Wauchope Subgroup. Fluvatile near shore deposition has been proposed for the Wauchope Subgroup, while the upper Hanlon Subgroup was deposited in entirely marine conditions. Within the group, internal sequences are laterally conformable and have been interpreted to have formed while transfer and normal faults were active, creating thickness variations across faults (Blake and Page, 1988).

The Hanlon Subgroup is composed of dominantly marine sequences of quartz and feldspathic sandstones with minor shales and siltstones recognised within the Vadingilla Formation. These sequences are up to 5000 m thick forming as a widespread conformable package overlying the more

volcanic Wauchope Subgroup.

The Wauchope Subgroup consists of both felsic and mafic volcanic horizons. The mafic volcanics are recognised as the upper most sequence and consist of regionally extensive lavas (Kruse et al., 2008; Blake and Page, 1988). The felsic sequences (Newland Volcanics and Arabulja Volcanics) consist of lavas, ignimbrites, bedded tuffs and coarse pyroclastic to fine ash beds that were erupted from a number of volcanic centres (Blake and Page, 1988). The Frew River Formation and Coulters Sandstone divide the mafic and felsic volcanic sequences and together are up to 1500 m thick. The Frew River Formation is interpreted to have formed in very shallow marine to sabkha conditions with stromatolites recognised. This unit is otherwise composed of kaolinitic arenite, fine grained siltstones, cherty mudstone and is dolomitic within the upper part (Kruse et al., 2008). Intersections from CRA mineral exploration holes targeting Tennant Creek style mineralisation in the northwest of EL23767 and EL29652 have been interpreted to have intersected these horizons.

The lowermost sequences of the Hatches Creek Group are the Yeeradgi and Unimbra sandstones and consist of largely feldspathic, quartz lithic and kaolinitic arenites. These units are discriminated by the presence of siltstones, mudstones and shales and rare carbonaceous beds recognised within the Yeeradgi sandstone. Minor rhyolitic lava lenses and pebbles are recognised within the Unimbra Sandstone.

Following deposition of the Hatches Creek Group, these units were deformed and metamorphosed by the Davenport Orogeny, which consisted of two periods of upright NE-SW and NW-SE oriented folding. Units were metamorphosed to greenschist facies as well as undergoing associated regional hydrothermal alteration, which is interpreted to have been resulted in localised mineralisation of Tungsten, Copper, Bismuth and Molybdenum (Blake and Page, 1988).

5.1.4 Proterozoic Solid Geology Interpretation

The Proterozoic sequences within EL23767 and EL29652 have been interpreted as belonging to the Davenport Province based from regional magnetic, gravity datasets and published literature and maps (Figure 8). There is a distinct gravity high trending northeast from the Tennant Creek region, likely correlating with the extension of the Davenport Province under Georgina Basin cover (Figure 9). South Nicholson Group units have been interpreted as absent over this region where Davenport Province sequences have been interpreted as shallow. To the east of the tenement, the Wonarah Basement High is evident as a prominent gravity high.

A thin sedimentary sequence of the Hatches Creek Group has been interpreted to overly the Undifferentiated Orradidgee Group Volcancis and has been interpreted to be somewhat restricted in extent. Based from the stratigraphic succession order these units may be the Unimbra Sandstone, which immediately overlie rocks of the Ooradidgee Group. Mineral exploration drilling by Hancock (DDH001, 2 and 3) intersected metasedimentary rocks within these interpreted units although no unit correlations were made within the drilling. These units have been described as fine to medium grained with quartz common throughout. A distinct (hydrothermal) alteration has been interpreted with an abundant green mineral, possibly chlorite noted. The presence of quartz and calcite veins with sulphides evident is also described. A red-brown colour is defined with a high quantity of haematite present.

Wyborn (2001) defines the clastic sequences of the Hatches Creek Group as relatively oxidised with common magnetite and haematite, which correlates with the above descriptions. Late alteration within the Hatches Creek Group has also been defined by Blake and Page (2008); however, this was more common within the felsic volcanic horizons. Recognised alteration assemblages include chlorite, muscovite, biotite and iron oxides, which again may correlate with observed intersections. Within drillhole AY06DD01, five kilometres to the northeast of the Hancock drillholes,

metasedimentary rocks have also been intercepted at approximately 155 m depth (Figure 10). Correlations proposed by Kruse et al., (2008) are poorly defined, interpreting these units as either of Hatches Creek affinity or South Nicholson Group. However, it appears more likely these units have a Hatches Creek affinity based from the broad similarities observed within the magnetic and gravity datasets and the proximity with Davenport Province units to the south (Figure 10).

Additional mineral exploration holes conducted by CRA in the 1980's targeting Tennant Creek style mineralisation are located directly over a gravity ridge to the northwest of the tenement (Figure 11). Units intersected were metasedimentary, with stromatolites of middle Proterozoic age defined. If of Davenport Province affinity the presence of stromatolites would correlate with the Frew River Formation, which has been recognised as a prospective for Pb-Au-Cu. Whilst an exact correlation of units was not made by the CRA geologists it seem likely these units correlate with the Davenport Province sequences interpreted.

5.2 Structure

The region surrounding EL23767 and EL29652 has undergone multiple phases of deformation and basin development. The underlying dominant NE-SW, E-W and NW-SE architecture, or structural fabrics, within the tenement is interpreted to be related to early fault development / reactivation associated with the Barramundi Extension (2050-1870 Ma), which were subsequently reactivated during the Barramundi Orogeny (1870-1820 Ma) and Davenport Orogeny (1730-1720 Ma). A number of northeast striking structures are observed to the northwest of the tenement and form as long strike length (interpreted strike-slip) features typically on the scale of 10's to 100's of kilometres beyond the tenement bounds. Upright folding on the scale of <1 km wavelengths have been defined within the Davenport Province sequences by Blake and Page (1988); however, these have not been recognised within the tenement based form the geophysical datasets.

Following deposition of the Hatches Creek Group these units were deformed and metamorphosed to greenschist facies during the Davenport Orogeny (1730-1720 Ma). This event has been interpreted as thick-skinned in nature and involved two episodes of upright concentric folding and faulting. Folding was initially along NW-SE trends followed by NE-SW trends resulting in fold interference patterns, which are observed within the outcropping units on the Frew River map sheet to the south of EL23767 and EL29652. These folds typically form on wavelengths of 10-20 km, typical of the Davenport Orogeny. Within the west of the tenement folding is evident within the Ooradidgee sequences and striking along a NE-SW trend. Wavelengths of approximately 5 km have been interpreted

Extensive faulting associated with the Davenport Orogeny has been interpreted within the tenements. To the northwest of the ELs, several long strike length features (>100 km) have been interpreted trending northeast and defining a distinct boundary between high mag and low magnetics (Figure 13). These structures are also observed to form anastomosing structures surrounding the interpreted Treasure Volcanics within the northwestern corner of the tenement. Within the Treasure Volcanics distinct NS and NW-SE oriented faulting between the enveloping strike-slip faults is observed likely activating during strike-slip displacement along the main structures.

Additional NE-SW oriented faults are observed within the east of the tenement, forming large scale features extending into the Tennant Region to the south. These structures are clearly defined by strong breaks within the magnetic data. E-W structures are displaced but also terminate some NE-SW oriented faults. These faults are largely focused within the center and south of the tenement and are interpreted to have had a thrust component to their movement history. These are interpreted to have formed contemporaneous to the main Davenport faulting event.

Some minor folding is observed within the tenement within the overlying Cambrian Kalkarindji Volcanics. These folds are typically 1-2 km wavelength and likely gentle in nature. These are interpreted to have formed as a result of far field stresses from the Late Cambrian to Early Devonian Alice Springs Orogeny, which affected much of the southern Georgina Basin. However, these structures more likely represent drape folding of the volcanic sequences over the underlying Davenport aged structures.

5.3 Intrusions

Several intrusions have been interpreted within the project area based from gravity and magnetic datasets. Within the center of the tenement five dykes have been interpreted to cross-cut the tenement along a general N-S to NE-SW strike. These features are likely composed of dolerite or gabbro and are intruded contemporaneous with the Treasure Volcanics and the Murchison extensional event. These features are interpreted as thin in nature and in some cases have been displaced by Davenport Orogeny aged faulting (Figure 14).

Along the southern fringes of the tenement a deep broad gravity low is observed and has been interpreted to relate to an early granite body of likely Tennant Creek Granite or Cabbage Gum Granite age (Figure 15). These granite suites have been dated at 1870 Ma and 1846 Ma respectively. This granite forms as a broad amorphous body covering approximately 33 kilometers in diameter in the solid geology interpretations. The full extent of this granite is interpreted as much larger based from the gravity signature, which has a 65 kilometer east-west extent and extends much further south within the Frew River region. The magnetic data suggests overlying sedimentary and volcanic sequences to the north within the tenement, constraining a possible age of emplacement to pre- Ooradidgee Group deposition.

To the north of the tenement, distinct sub-rounded granites coincident with gravity lows have been interpreted as correlating with Tennant Creek aged granites. These bodies tend to correlate with magnetic lows, suggesting a low magnetite content of these granites. These bodies are much smaller in diameter than the southern body extending less than 20 km in diameter

Figure 8: Interpreted Proterozoic Solid Geology EL23767 and EL29652

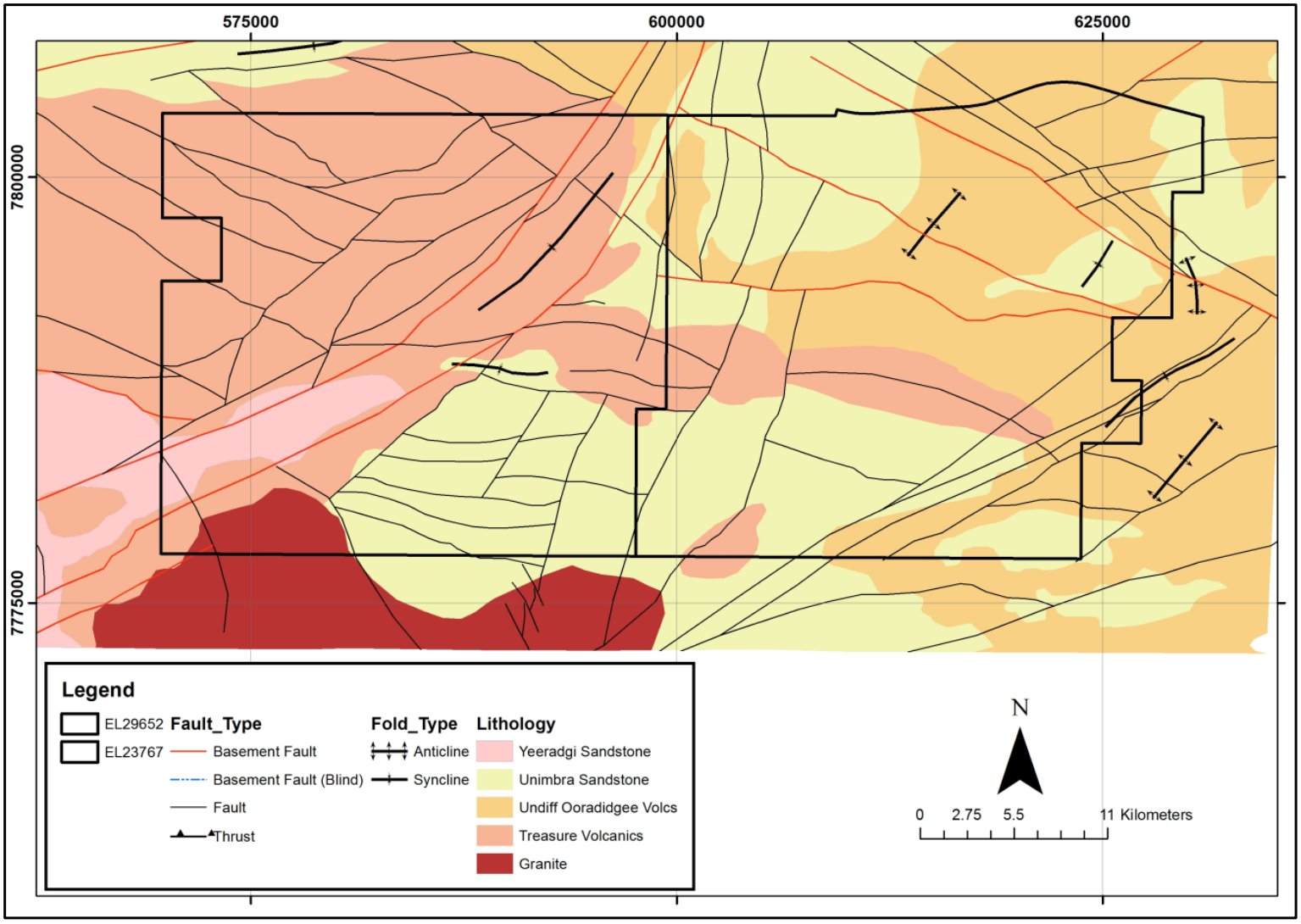


Figure 9: Interpreted Proterozoic Domains from Regional Residual Gravity

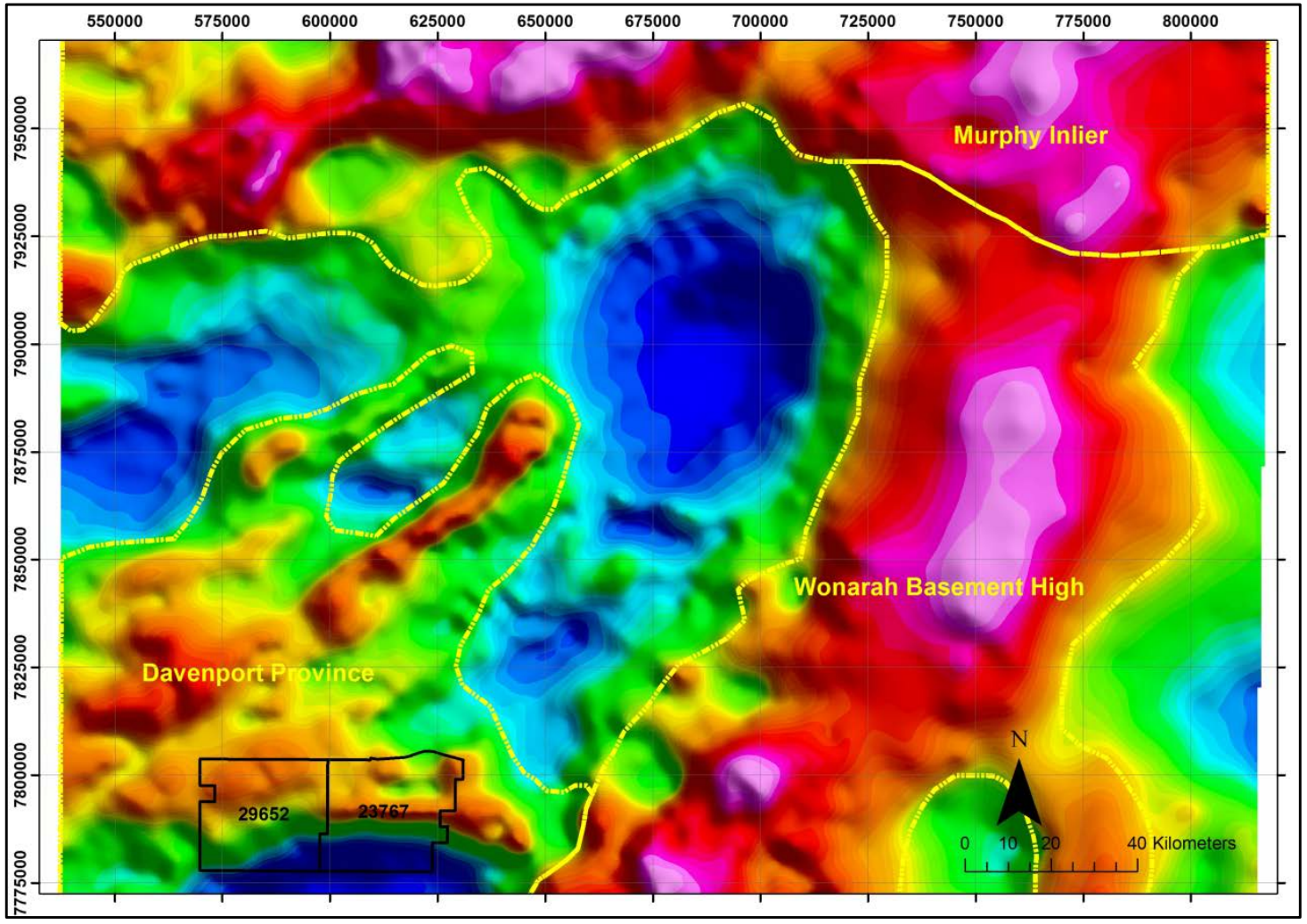


Figure 10: Regional Total Magnetic Image showing similar magnetic character between outcropping Davenport Province sequences and EL23767 and EL 29652

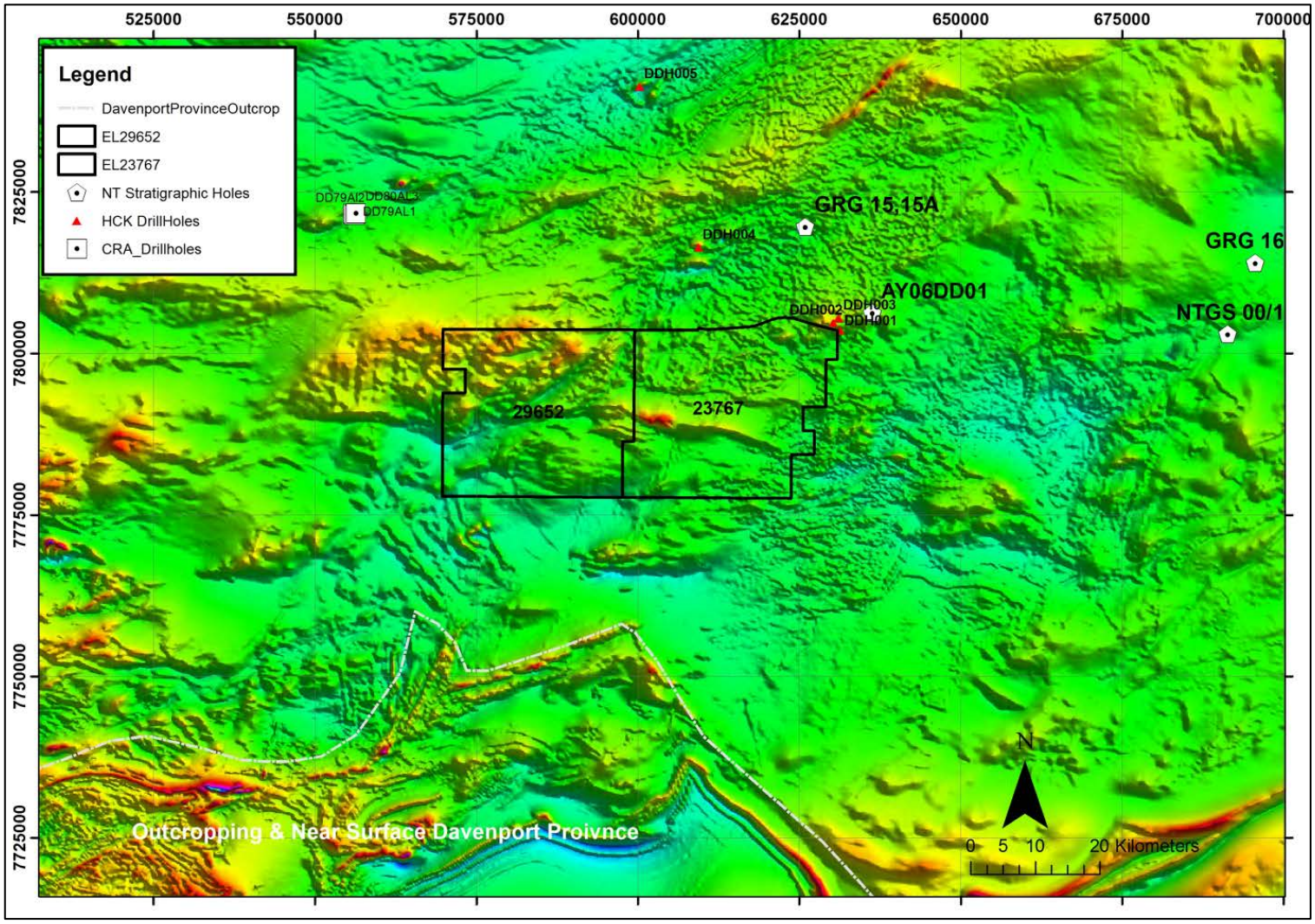


Figure 11: Mineral exploration holes and stratigraphic wells on regional gravity proximal to EL23767 & EL29652

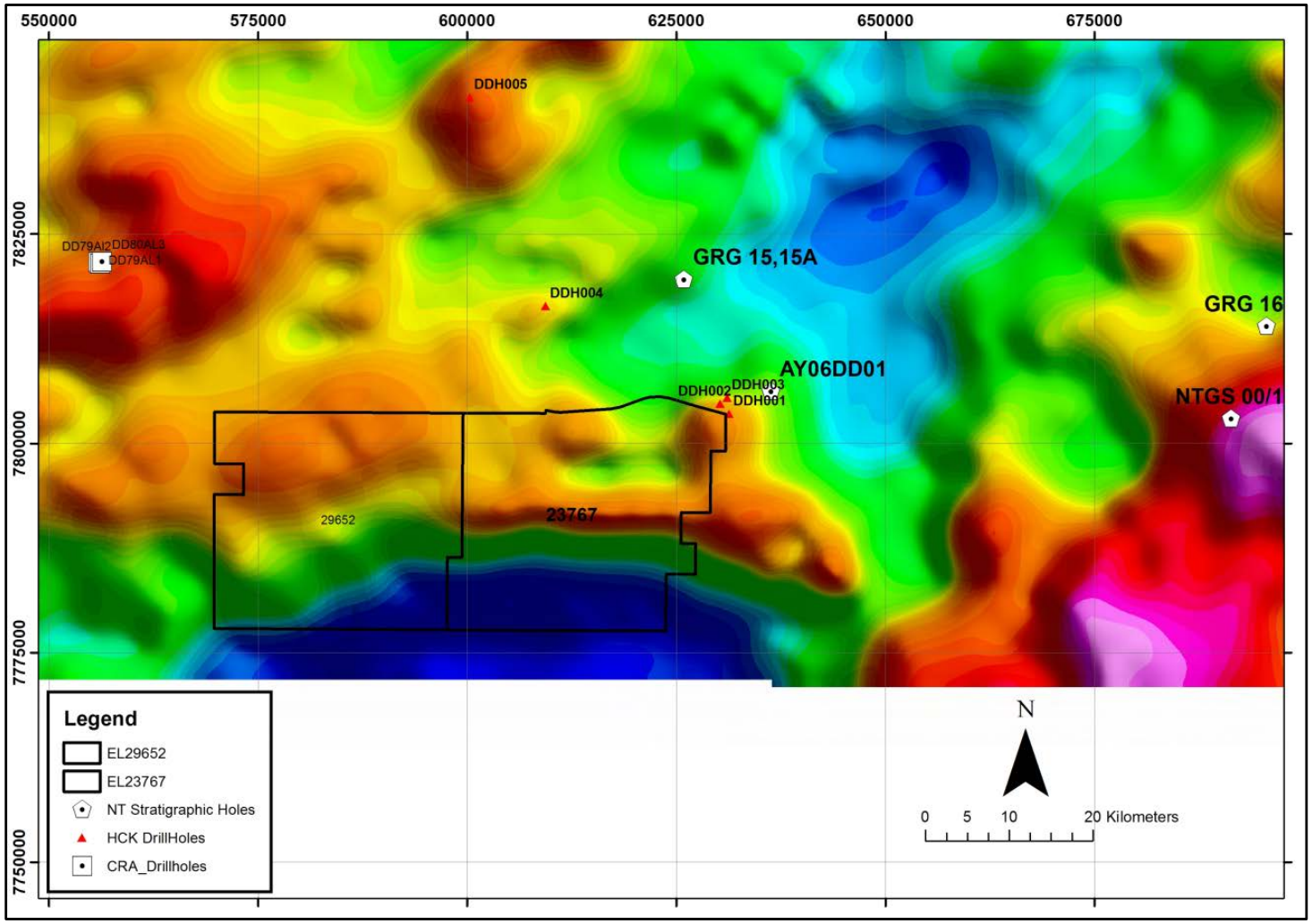


Figure 12: Location of all previous exploration drilling in the vicinity of EL2367 and EL29652 on regional magnetics

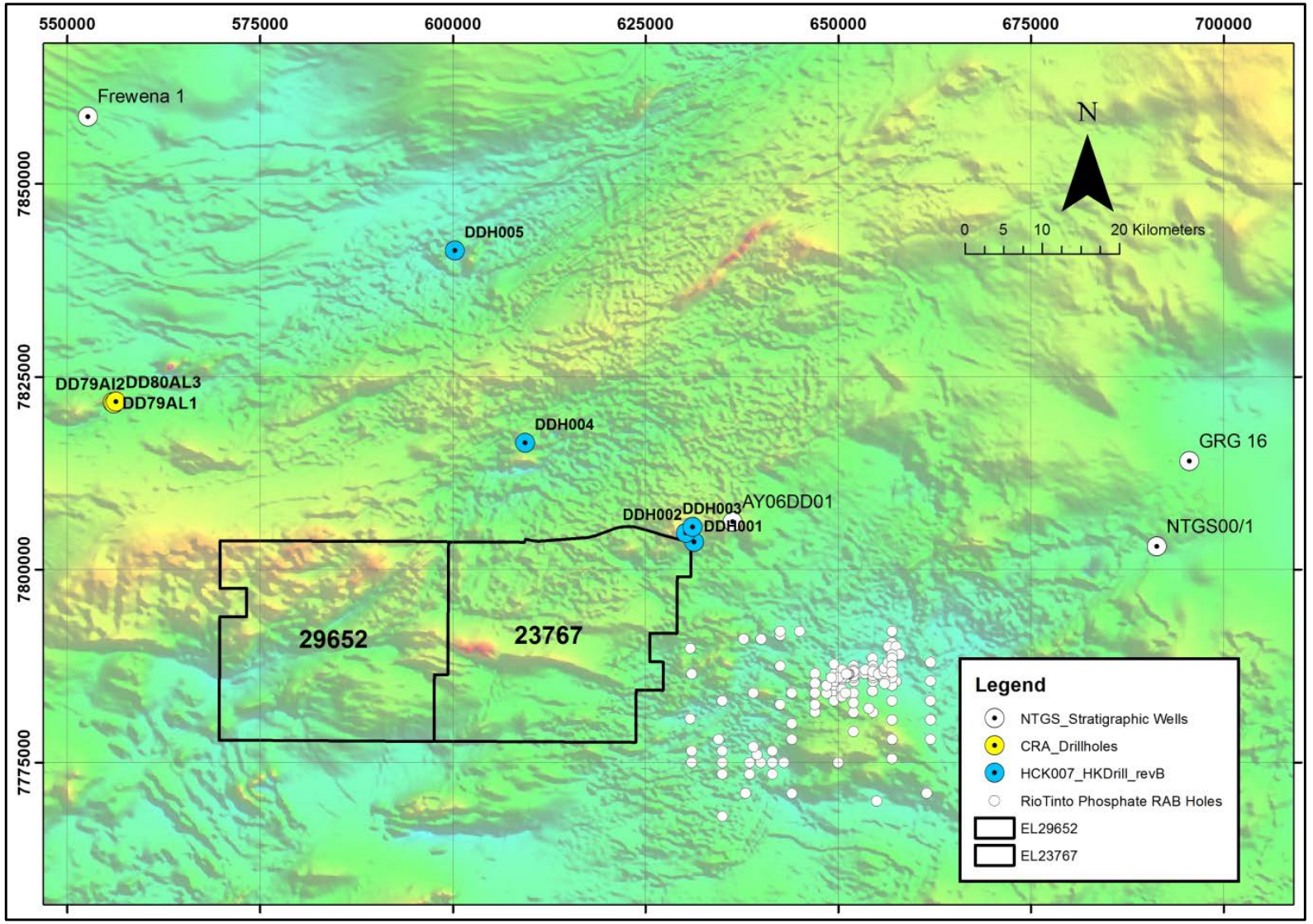


Figure 13: Interpreted structural elements on total magnetic Intensity Image

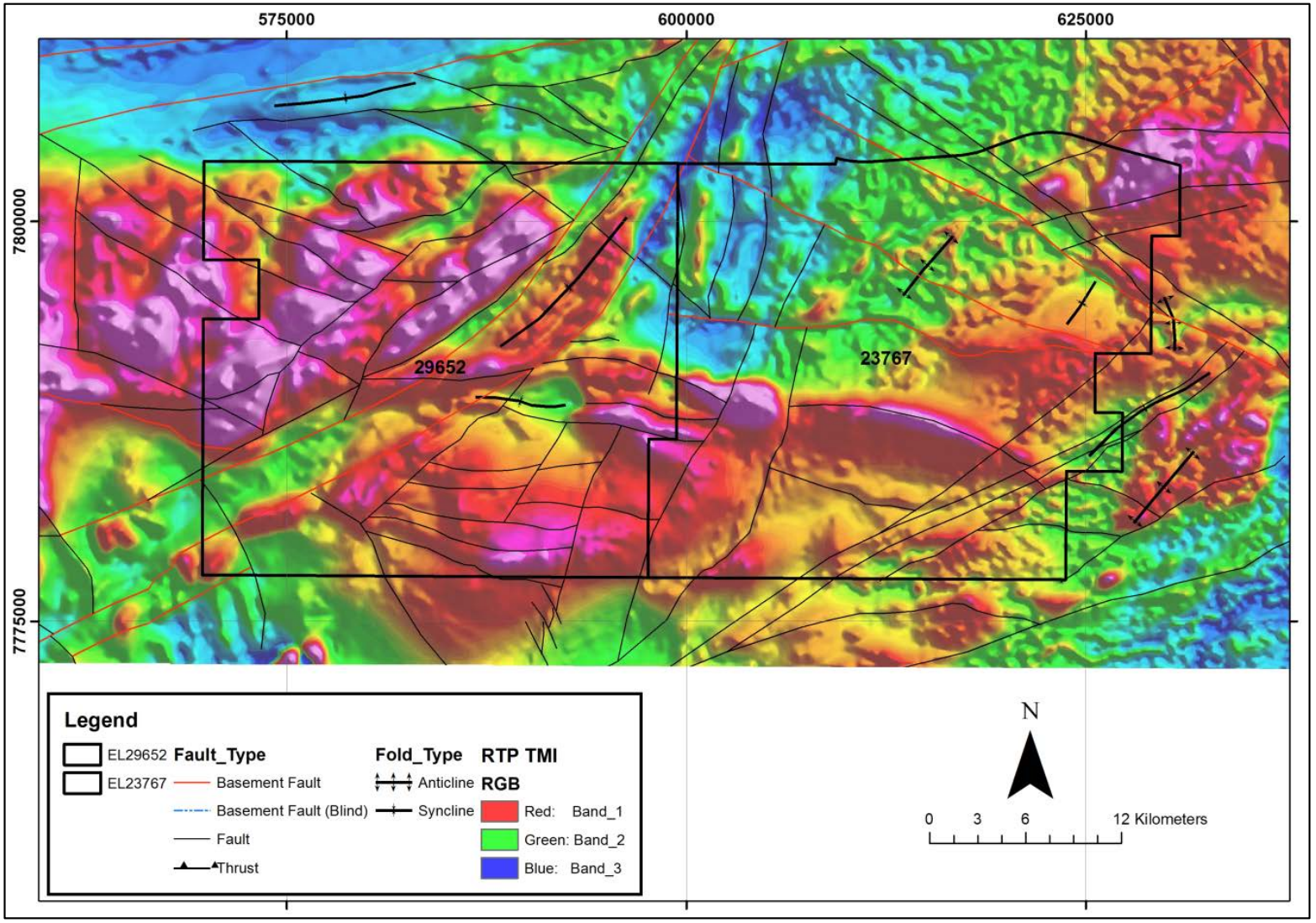


Figure 14: Interpreted basement dykes

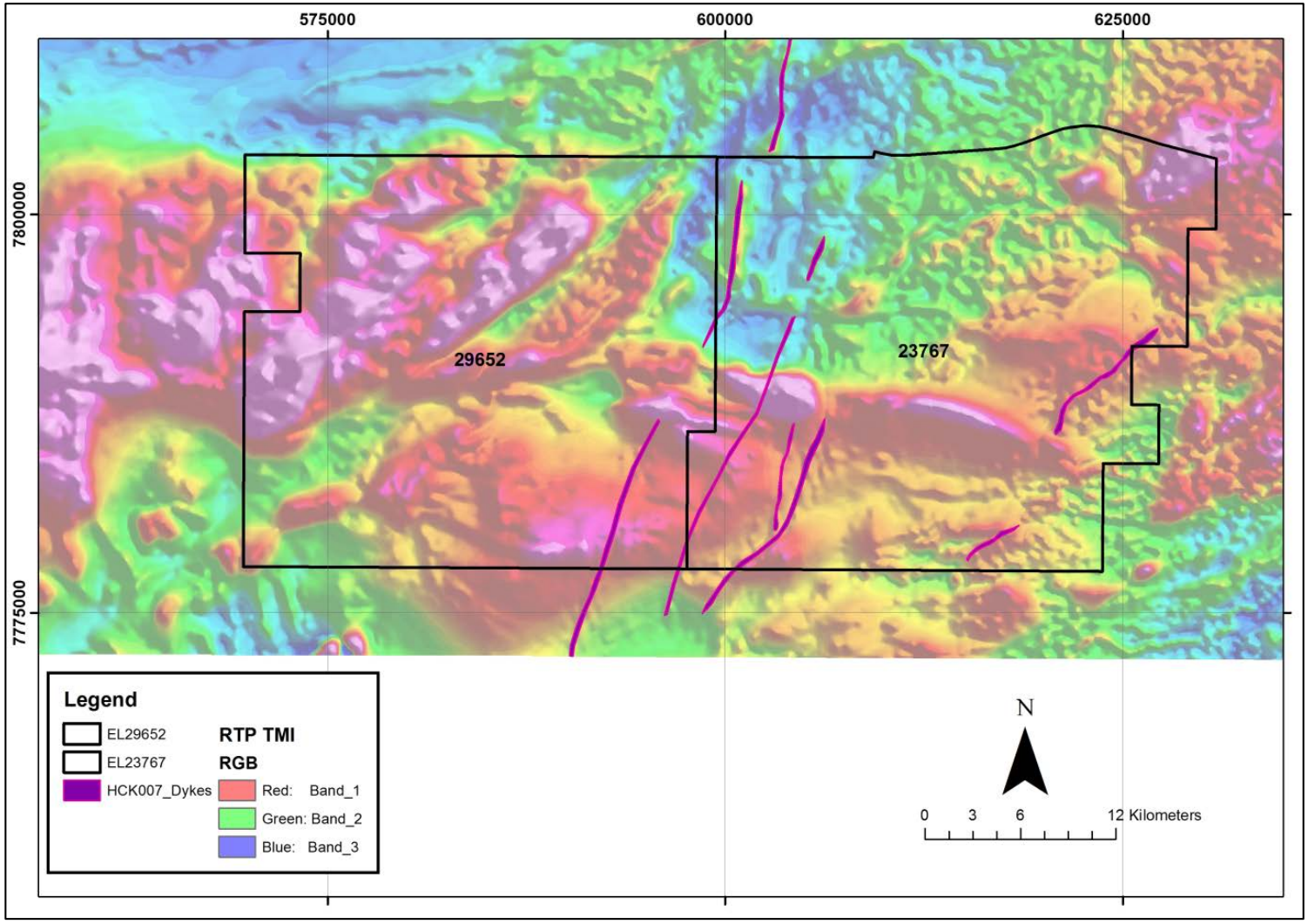
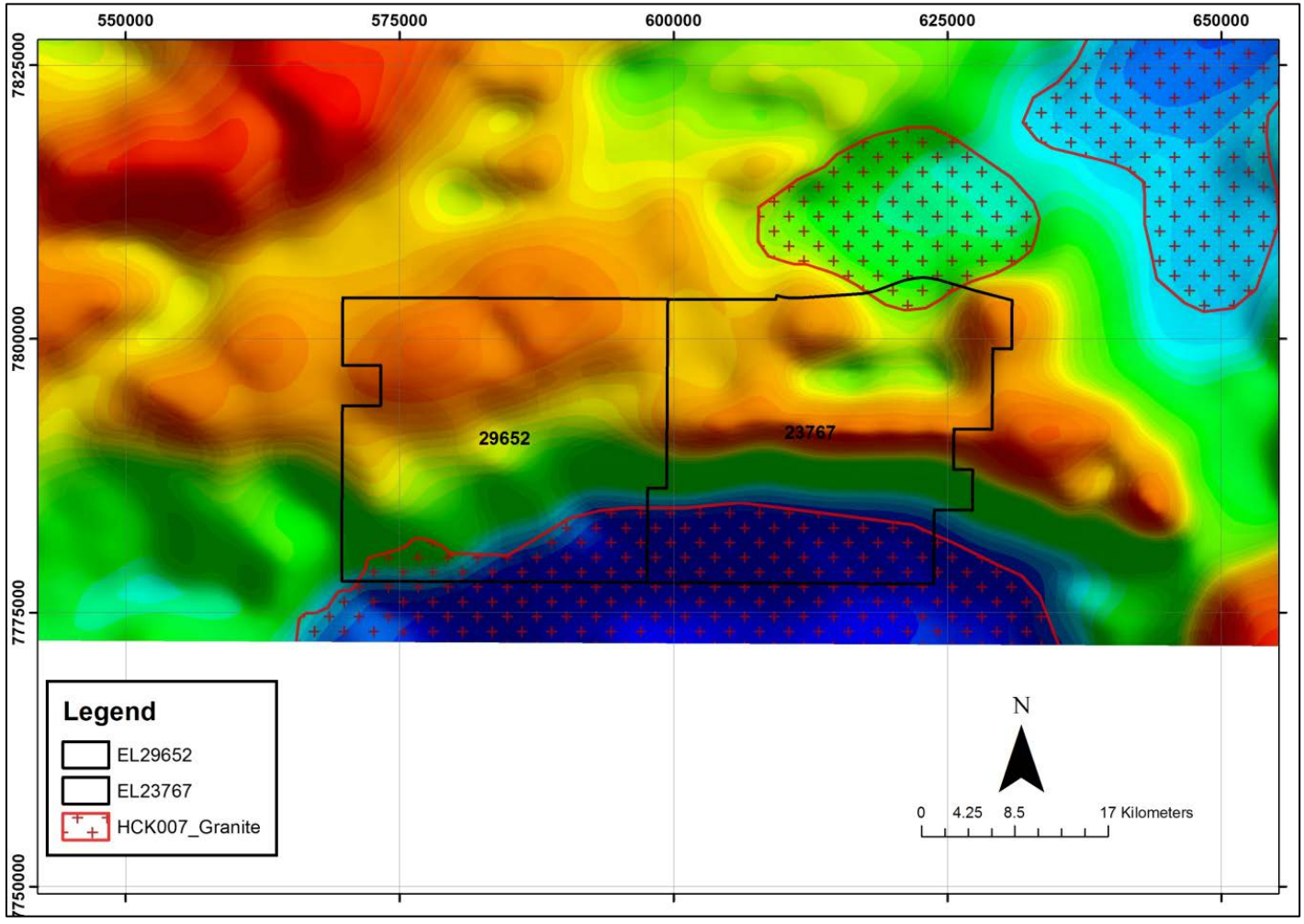


Figure 15: Interpreted intrusive bodies on regional gravity



6. PROSPECTIVITY

6.1 Basement magnetic anomalies

Figure 2 shows the location of magnetic highs originally interpreted by Conarco Minerals as mineral exploration target anomalies.

Anomaly A was explored with two vertical fore holes by the Jacaranda Alliance JV in 2008. No evidence of any mineralisation was found and the observed magnetic "anomaly" was adequately explained by the measured magnetic susceptibility of the core.

The current study and interpretation of the basement stratigraphy and structure from geological, magnetic and gravity data strongly suggests that the remaining magnetic "anomalies" in EL23767 indicate only a reflection of the different stratigraphic units and the fault structures. They are considered not to represent viable exploration target anomalies.

The interpreted degree of faulting in the basement may present exploration opportunities if an appropriate exploration model is formulated. However the thickness of Cambrian sediments tends to obviate exploration other than by prohibitively expensive detailed geophysical exploration and core drilling.

6.2 Phosphate

The most apparent exploration target in EL23767 is the potential for the extension of the Wonarah phosphate occurrence into the eastern side of the EL.

The Wonarah Formation has previously been interpreted as extending to the west side of the Wonarah Basement High and there is a high probability that phosphate mineralsation extends into EL23767. The potential economic viability of such mineralisation will be dependent on its depth below surface and this can only be evaluated by systematic grid reverse circulation drilling.

7. CONCLUSIONS AND RECOMMENDATIONS

It is concluded that there are no obvious, viable targets, achievable at reasonable exploration cost for base or precious metal mineralisation in EL23767. The eastern section of the EL has some potential for phosphate but the economic viability of the phosphate will depend very significantly on the depth of the phosphate and the potential tonnages which may be present relative to the adjacent Wonarah phosphate deposit. It is considered that any phosphate located in EL23767 would not support a "stand alone" project.

It is recommended that the holders of the adjacent, very large Wonarah phosphate deposit be approached to negotiate a farm-in agreement on the potential phosphate in EL23767.

8. PROPOSED EXPLORATION PROGRAMME FOR 2013-2104

The planned exploration program for 2013-14 includes;

Wide-spaced grid scout reverse circulation drilling in the eastern half of EL23767 to evaluate the potential for phosphate mineralisation.

PROPOSED EXPLORATION EXPENDITURE 2013-14

Reverse circulation drilling, logging, sampling and analyses	$50,000
TOTAL	$50,000

EXPENDITURE STATEMENT 2012-2013

Annual expenditure for EL23726 from 18th September 2012 to 17th September 2013 was $25,100. Details are provided separately.

9. COPYRIGHT

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