Final Report

SEL24768 - Toko
Marqua Project

Reporting Period: 09.08.2006 – 08.07.2009

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Map Sheets: 1:250,000 Tobermorey
1:250,000 Hay River –Mount Whelan Area
1:250,000 Hay River

SUMMARY

SEL24768 was originally granted to Elkedra Diamonds N.L. (Elkedra) in August 2006. The tenement was subsequently transferred to Uramet Minerals Limited (Uramet) in 2007, originally covering an area of 794 km^2.

Exploration consisted of reprocessing of regional government magnetic data, sampling for diamonds, regional reconnaissance work and surface sampling. Uramet concluded that the chances of an economic base metal or phosphate deposit being discovered in the area to be low.

Elkedra explored the ground for diamonds during 2006 to 2007, and concluded that the prospect of the area hosting an economic diamond deposit was remote.

This report details all exploration work carried out by Uramet and Elkedra within SEL24768 since it was granted in August 2006.

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1. INTRODUCTION

Exploration License EL24768 formed part of the Uramet's Marqua base metal project and Marqua phosphate project.

The Marqua project area is located approximately 550 km east of Alice Springs, NT, with good road access 40 km off the Plenty Highway and a network of established minor roads and station tracks.

An Aboriginal Areas Protection Authority (AAPA) clearance survey was conducted over the tenement prior to field work and any area of cultural significance was avoided.

This report details all work carried out on the tenement sine it was granted in August 2006 until its surrender in July 2009.

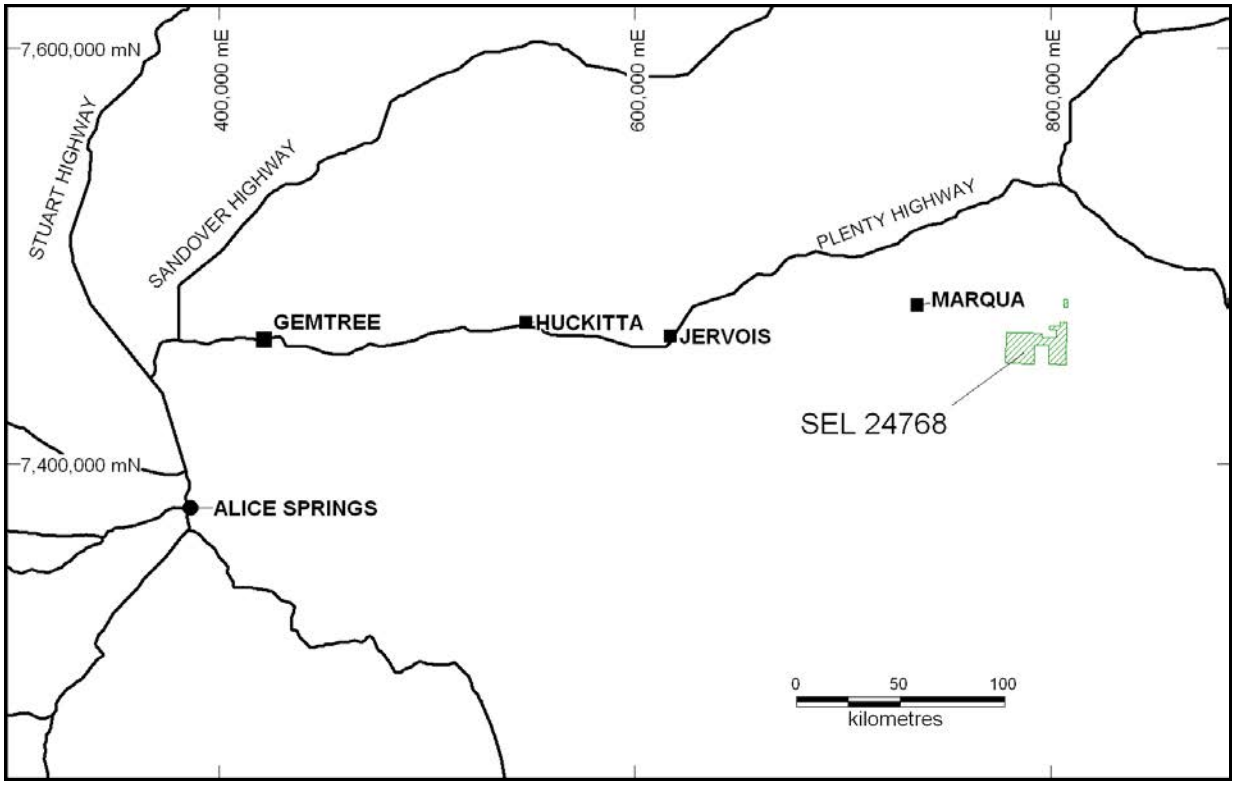

Figure 1. Location plan for SEL24768.

2. TENURE

SEL24768 was granted on 9 August 2006. The SEL originally comprised 251 sub-blocks, covering an area of 794 km^2. A 50% area reduction was made in 2008, reducing the size to 124 sub-blocks with an area of 392 km^2. The tenement was surrendered on 8 July 2009.

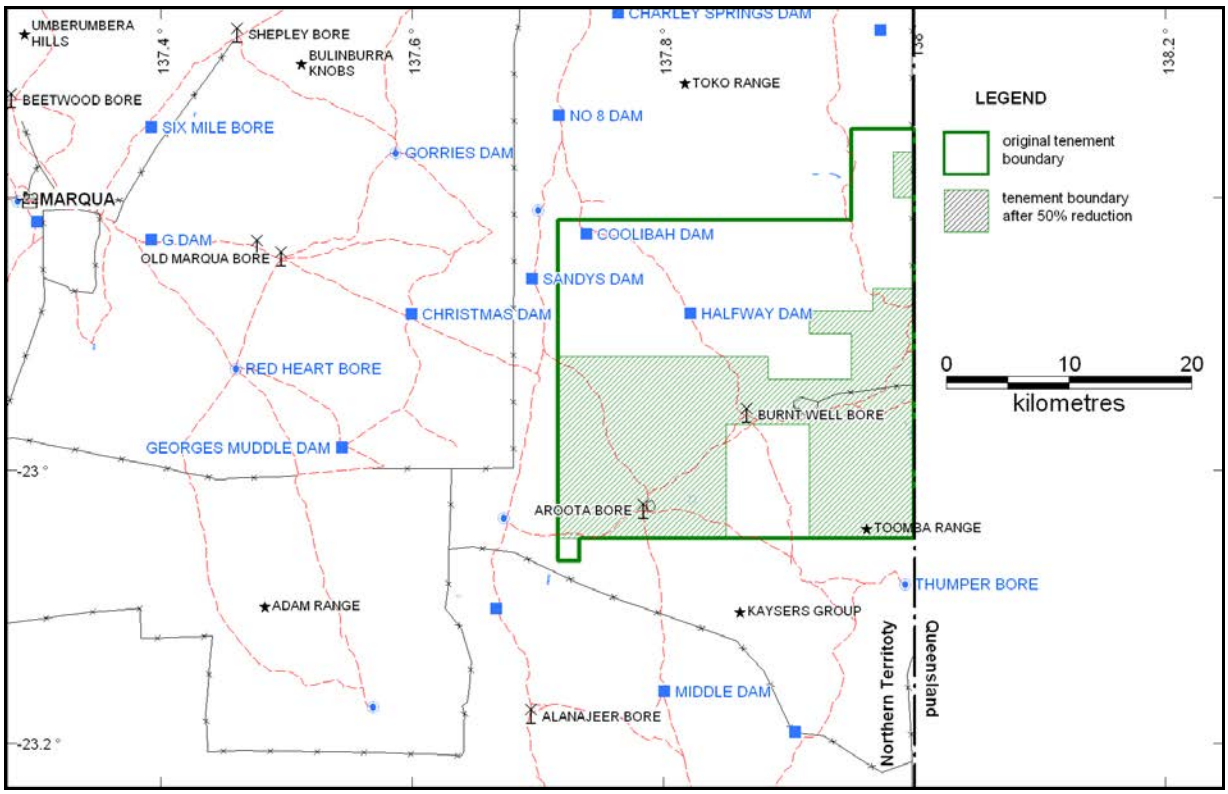

Figure 2. Tenement location plan for SEL24768.

3. GEOLOGY

3.1. Regional Geology

The project area is part of the southern Georgina Basin, comprising Neoproterozoic to Cambro-Ordovician platform cover of sedimentary rocks (dominantly sandstone, shale, limestone, dolostone) overlying the Precambrian basement of the Northern Australian Craton. This Precambrian basement is exposed along major fault systems on the southern margin of the basin.

The Northern Territory Geological Survey (NTGS) has recognised the mineral potential of the southern Georgina Basin and recently prepared a comprehensive review of both government and private exploration undertaken, and has now developed from various authoritative sources applicable ore genesis models (Dunster et al., 2007).

Since the 1960's, the basin has been considered prospective mainly for Mississippi Valley Type (MVT) lead-zinc mineralisation. More recently, however, the potential for other commodities in a variety of geological settings has been investigated, and the basin is now regarded as having potential for several styles of mineralisation. For example:

- Mississippi Valley Type Pb-Zn (MVT)
- Carbonate-Hosted Pb-Zn (Irish Type)
- Stratiform Shale-Hosted Base Metals

The area is also envisaged as having potential for phosphate hosted Cambrian limestone. In 1969 exploration in the southern Georgina Basin identified locally phosphatic intervals in the Arthur Creek Formation and the Thorntonia Limestone in the Ammaroo area. In the NT part of the Georgina basin the Wonarah deposit was discovered in the early 1970's.

Prospective ground for phosphate rock within Middle Cambrian units can be defined along the margin of the basin and on basement highs within the basin.

The Ordovician Mithaka Formation and Nora Formation have been mentioned previously as potential phosphatic units.

3.2. Tenement Geology

The Toko tenement at the Marqua project area is located in the structurally complex south-eastern portion of the Georgina Basin, which is comprised of basement granitoids, Neoproterozoic tillites and arkosic sedimentary rocks, overlain by Cambrian and Cambro-Ordovician limestone, dolostone, shale and clastic sedimentary rocks of the Toko Syncline (Figure 3). These units have been disrupted by multiple folding and faulting events. Faulting in the project area generally trends northwest and individual faults have been locally offset by later northeast trending faults.

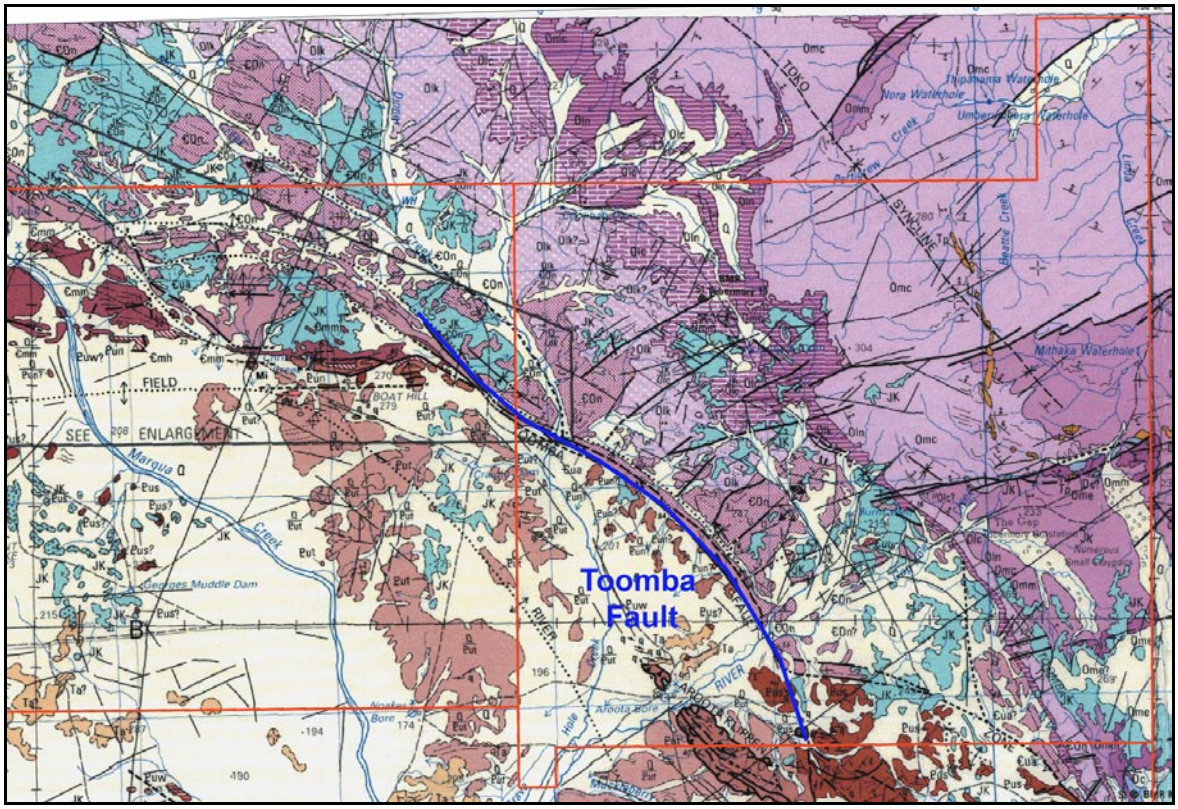

Figure 3. Geological map of the Toko tenement area.

Part of the regionally significant Toomba Fault Zone lies in the western part of the Toko tenement and segregates a structurally complex zone dominated by arkosic sediments to the southwest from limestone, dolostone and sandstone of the Toko Syncline to the north. The Toomba Fault Zone is a reverse fault which dips ~45° towards the southwest and lies in close proximity to a number of parallel folds and faults including the Field River Anticline.

The Neoproterozoic Yardida Tillite, which comprises diamictite, siltstone, sandstone, and arkose, is exposed within the Field River Anticline core and the younger Black Stump arkose crops out further to the east.

Younger rock units that typically form hill capping plateaus and mesas include the Tertiary Austral Downs limestone, a partly silicified lacustrine limestone underlain by a lateritic palaeosol, and Cretaceous clastic sedimentary rocks. The Cretaceous beds are commonly associated with zones of silicification both within beds and penetrating the underlying Cambro-Ordovician strata.

4. PREVIOUS EXPLORATION WORK

The Marqua project area has been subject to lead-zinc exploration for over 30 years. Mapping of the Marqua area (Tobermorey map sheet) was carried out by BMR 1959-1960 and subsequent re-mapping was done throughout the 1970's and 1980's. Exploration for base metals during that time was mainly focusing on rock chip and stream sampling. During 1977-1978 and 1983 BMR drilled several cored stratigraphic holes in the area. Anomalous zinc levels were found in these holes (BMR1979/36).

Subsequently Agip showed interest in base metal exploration in 1981 covering the tenement area (CR19830328). Reconnaissance mapping and rock chip sampling demonstrated that base metals are anomalous within the Late Proterozoic Wonnadinna Dolostone and Thorntonia Limestone. Sixteen holes were drilled during 1982 to test the zinc anomalies over a strike length of 8 km.

Saracen Minerals drilled nineteen percussion holes in 1988 (CR19880057) with the aim of detecting possible platinum-group element mineralisation. No platinum group elements were detected.

MIM explored the area in the early 1990's to test for Pb, Zn and Carlin-style Au and Pt (CR19920506). Re-assays of Saracen Minerals percussion drill holes and ten additional drill holes within the prospective units concluded that mineralisation is structurally controlled.

In conjunction with regional re-mapping of the Tobermorey map sheet, NTGS drilled cored stratigraphic hole NTGS99/1 west of the Toko tenement area.

The NTGS re-evaluated the area as part of the southern Georgina Basin Geology and Resource Potential Report in 2007 and concluded that the Marqua area remains prospective for base metals since the lithostratigraphy of the area was not fully understood until recently (Dunster et al., 2007).

5. WORK CONDUCTED BY URAMET AND ELKEDRA

5.1. Desktop Review

5.1.1. *Marqua Project - Base Metals*

The compilation of historical data focusing on base metal potential within the project area was continued during the reporting period.

Work by previous exploration companies has shown that base metal anomalies occur within the Cambrian Thorntonia Limestone, Red Heart Dolostone and Arthur Creek Formation and the Late Proterozoic Wonnadinna Dolomite.

5.1.2. *Marqua Project - Phosphate*

The Ordovician Mithaka Formation and Nora Formation (Figure 3) that outcrop within the Toko SEL were targeted for phosphate exploration within the tenement. The prospective Nora limestone units outcrop over 20 km along the Toomba Fault system. Sandstone and mudstone of the Mithaka Formation covers an area of 10 km by 6 km in the eastern part of the tenement but is largely concealed under thin regolith cover.

The formation of high-grade phosphate rock (known as phosphorite if it contains greater than 15% P_2O_5) requires a generally shallow deposition and slow accumulation rate of sediment and the existence of a trap favouring accumulation of organic matter.

Regions favourable to a large-scale phosphate deposition occur along an ocean margin where deep upwelling currents trap phosphate rich waters in lagoons and embayment. In this environment phosphate accumulates at the water-sediment interface in association with thick layers of organic sediment (black shales).

5.1.3. *Magnetics Interpretation*

During 2006 NTGS magnetic survey data was stitched and reprocessed by Dr D.R. Cowan (geophysics consultant). The separation filter product was found to be the most useful for highlighting structural elements and an interpretation of magnetic linears is shown below in Figure 4.

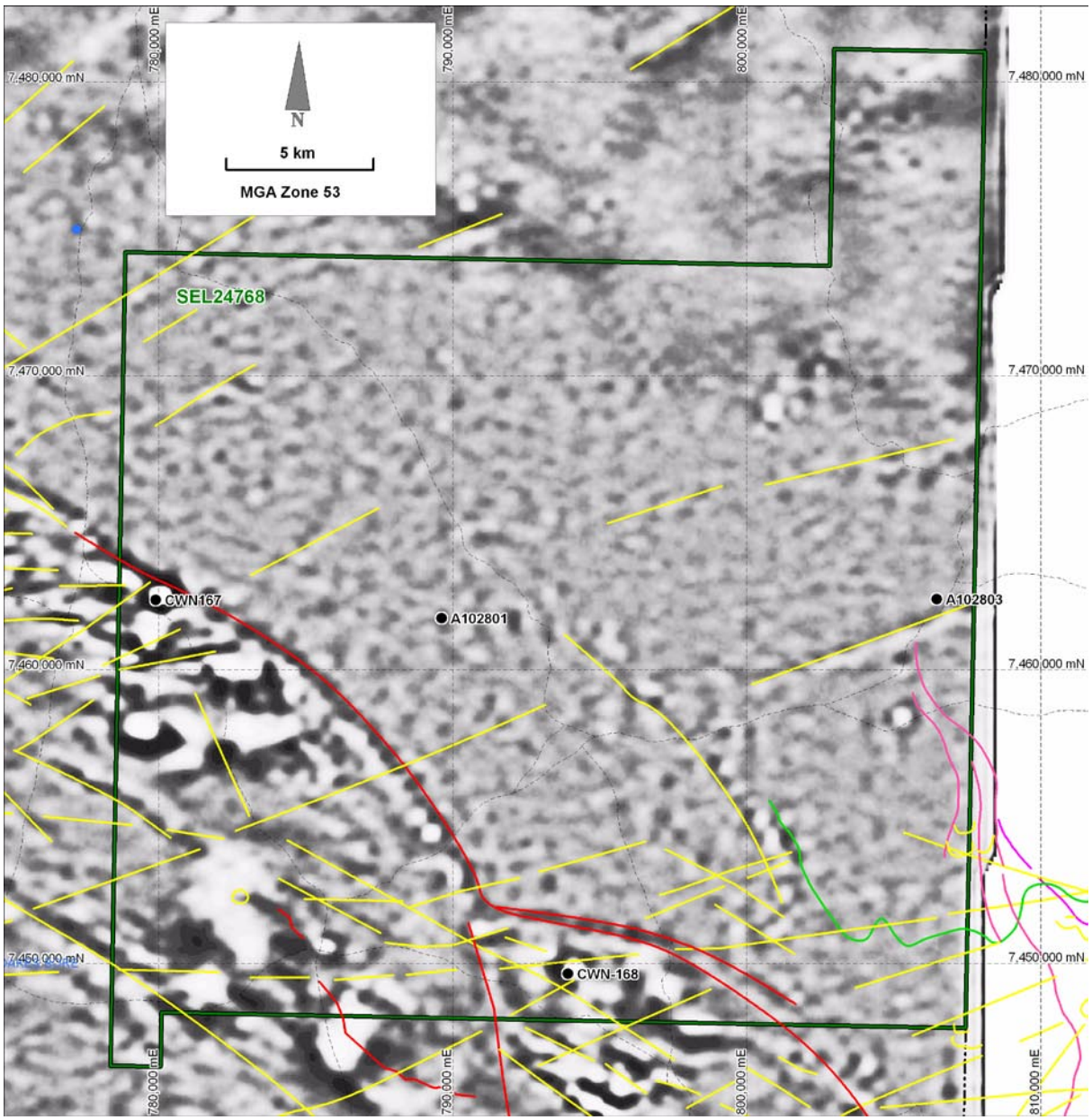

Figure 4. Separation filtered magnetics for SEL24768 (stitched from NTGS surveys) showing interpreted magnetic linears (yellow), Toomba Fault Zone (red), interpreted palaeochannel (pink), and present-day watershed divide (green). Previously drilled magnetic anomalies CWN-167 and CWN-168 are shown.

5.2. Radiometric Interpretation

During the reporting period NTGS radiometric survey data was stitched and reprocessed by Dr D.R. Cowan (geophysics consultant) to give the imagery presented below (Figure 5). A number of U anomalies of interest were highlighted including one near Aroota bore that has previously been investigated and another in the north hosted in Carlo Sandstone that has yet to be visited. A number of areas of elevated potassium northeast of the Toomba Fault are of interest.

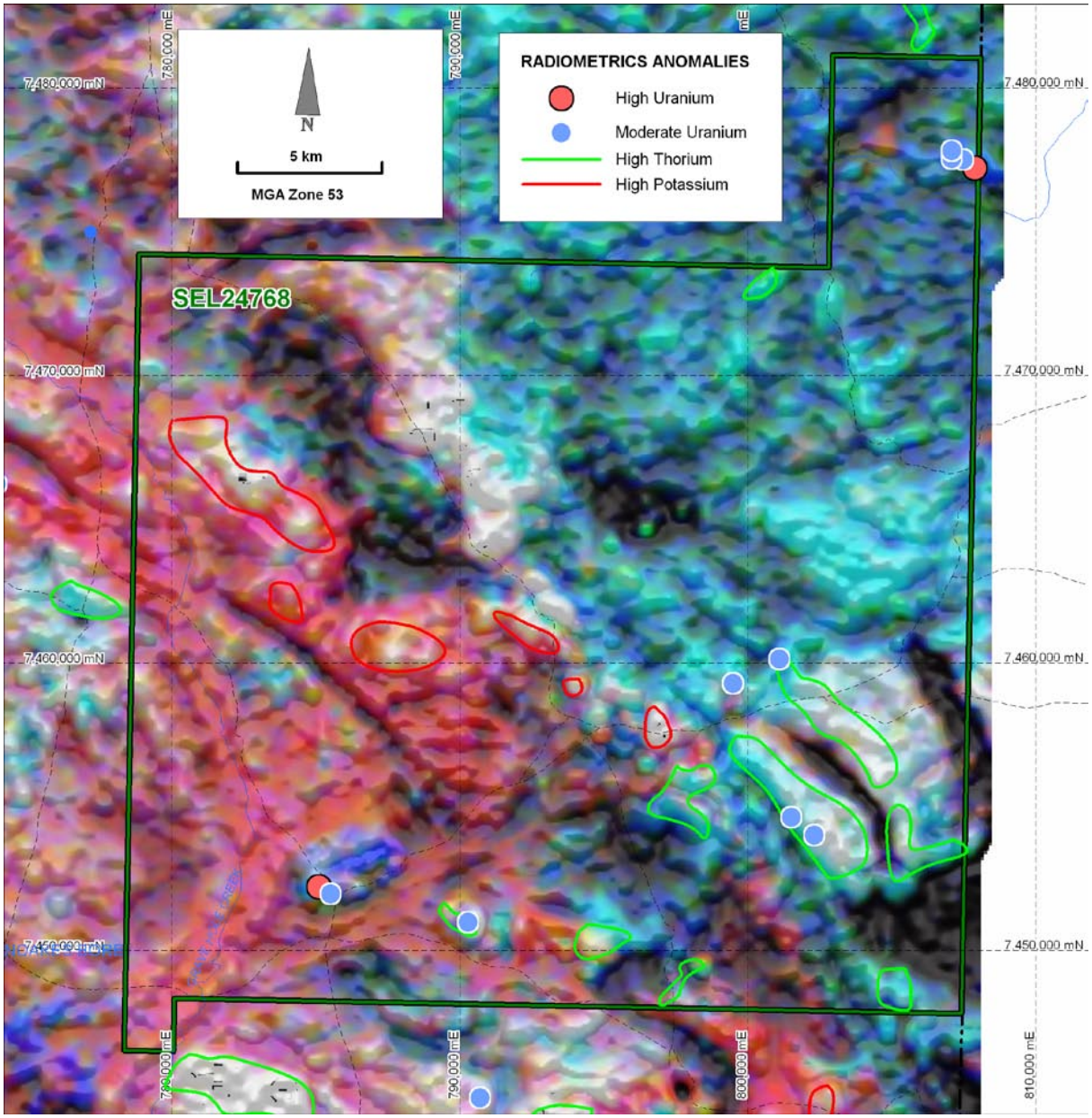

Figure 5. RGB (red = K, green = Th, blue = U) radiometrics draped over total count radiometrics. Zones high in Th and K are outlined and uranium anomalies of different intensity are identified.

5.3. Regional Gravity Interpretation

During the reporting period the NTGS East Arunta Gravity Survey data was reprocessed by Dr D.R. Cowan (geophysics consultant) to give the residual gravity image presented below for part of the SEL (Figure 6). Residual gravity highs are located in the core of the Field River anticline at Gravehole Creek and parallel to a splay of the Toomba Fault to the east.

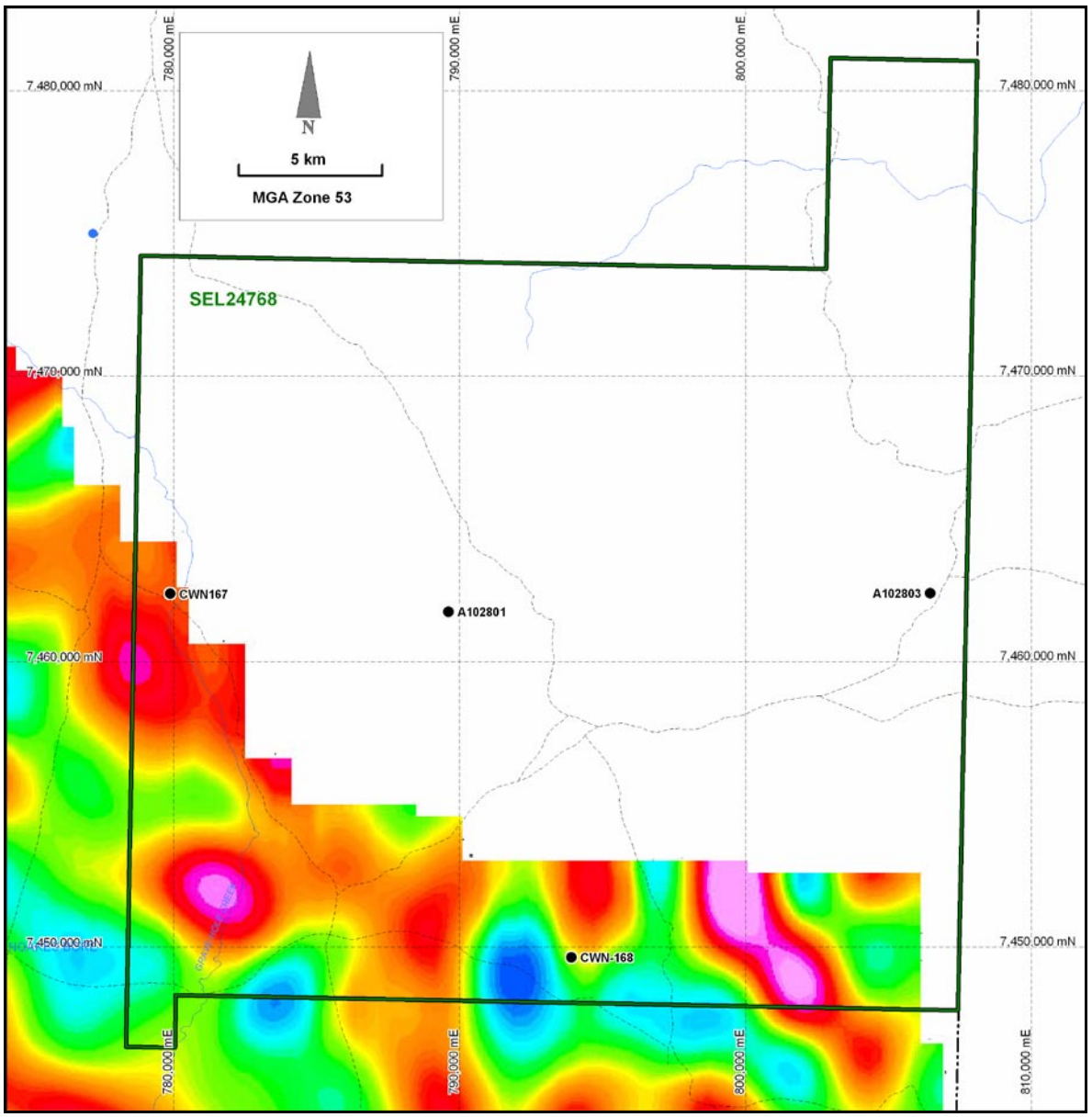

Figure 6. Residual gravity image processed by Dr D.R. Cowan from the 2006 East Arunta Gravity Survey data.

5.4. Mini-bulk Sample Final Results

Mini-bulk samples of approx. 4 tonnes of -10mm screened gravel were extracted from two sample sites (A102801 – Craigie East; 789622E; 7461766N, MGA94, Zone53 and A102803 – Poodyea Creek; ; 806466E; 7462416N, MGA94, Zone53) in late 2005 prior to consolidation of the underlying ELs into the SEL. These sites previously showed promising indicator mineral recoveries. Laboratory test-work was aimed at recovery of +0.3 mm diamonds and indicator minerals. Final results are reported here (see Appendix).

In 2006 the samples were shipped to Tristate Research Laboratories in Mildura, Victoria for screening, sizing and de-sliming. Two fractions: the +0.3-1.2 mm and +1.2-4.0 mm fractions, were subsequently shipped to Perth for diamond and indicator mineral recovery.

The +1.2-4.0 mm grain-size fractions were tested for the presence of macrodiamonds using an X-ray flow-sort machine at Diamond Recovery Services, Welshpool. Sample A102803 was passed through the X-ray flow-sort twice. The resultant concentrates were examined under the microscope but no +1.2 mm diamonds were recovered.

The +0.3-1.2 mm grain-size fractions were processed through a mini-DMS plant at Diatech Laboratories, Welshpool, resulting in iron-rich concentrates of 10 to 15 kg size. The concentrates were treated in acid to remove iron oxides and then separated into several magnetic fractions (Non-magnetic, M6/7 and M4/5) before being observed for diamonds and indicator minerals. The final concentrates were ~100 g in size. No +0.3 mm diamonds were recovered from either sample however, 5 chromites were recovered from the M4/5 fraction of sample A102801 and 65 chromites were recovered from half the M4/5 fraction of sample A102803. Recovery rates for synthetic diamond spikes (added to the samples prior to screening in Mildura) were high (90% in both cases) so that the processing can be regarded as technically of a high standard and any +0.3 mm diamonds present would have been recovered (detailed results reported in Appendix).

Following observation, the concentrates were submitted for microdiamond extraction by peroxide fusion at NADL Laboratories, Wangara; 12 small microdiamonds (~0.1 mm size) were recovered from the Craigie East sample (A102801) and 1 small microdiamond (~0.1 mm) was recovered from the Poodyea Creek sample (A102803). These small diamonds were probably released from disaggregated composite grains.

The test-work has shown that while a number of microdiamonds are present, no macrodiamonds or large microdiamonds were recovered and therefore the chances of a commercial source of diamonds being present in the area can be regarded as low.

5.5. Reconnaissance Work

The Nora and Mithaka Formations (Figure 7) were investigated for their phosphate potential during the field season. Phosphatic, shell-rich zones have been identified and sampled for commercial laboratory assaying.

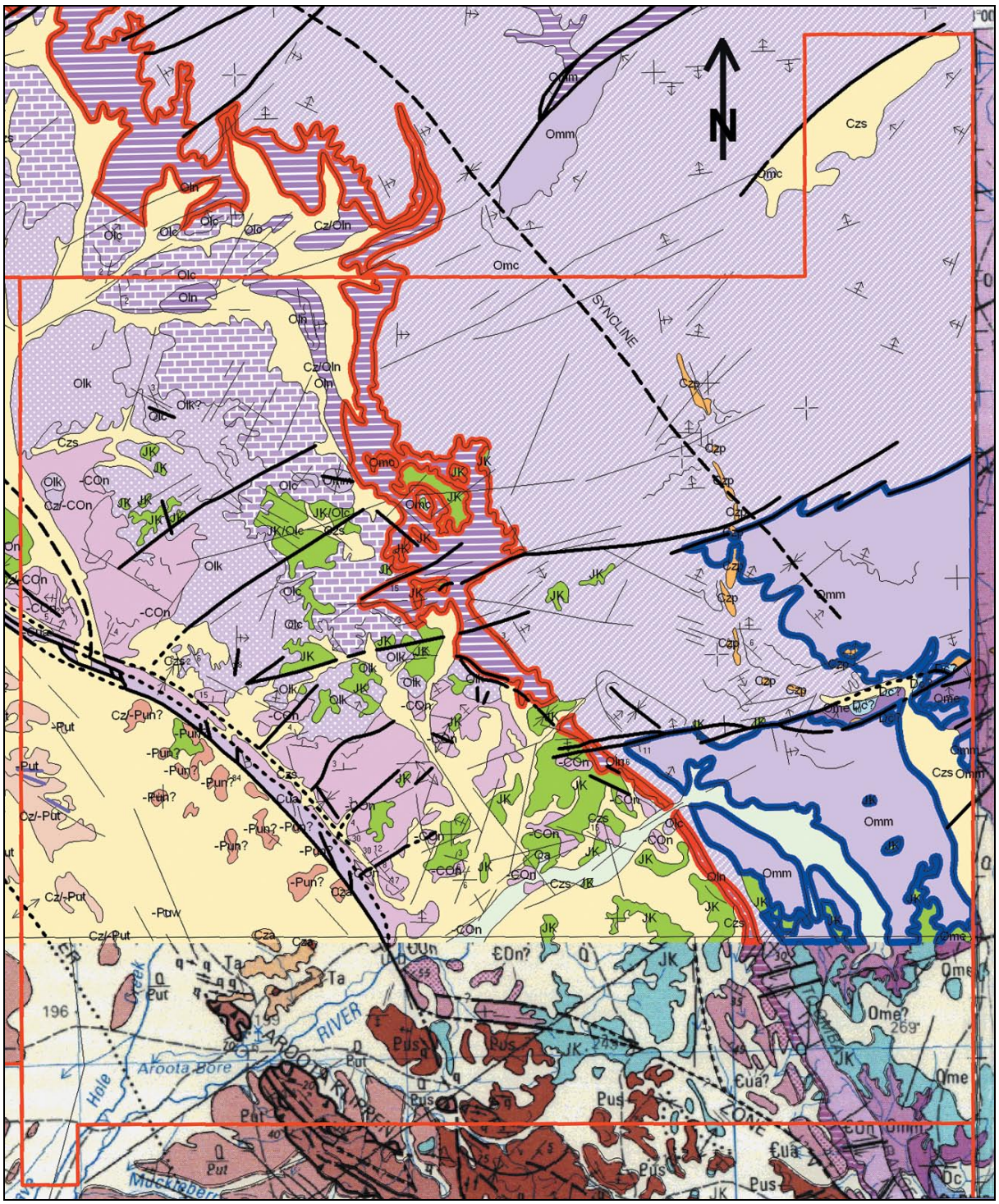

Figure 7. Mithaka and Nora Formation outcrop that contain shelly beds. Note red outline – Nora Formation, blue outline – Mithaka Formation.

5.6. Geochemistry

5.6.1. *Analysis for Phosphate*

Laboratory geochemical analyses were undertaken on 13 samples collected from 11 sites within the Nora Formation. Samples were analysed at Genalysis Laboratory in Perth, W.A. for Ag, Al, As, Ba, Ca, Ce, Cu, Fe, K, Mg, Mo, Ni, P, Pb, S, Sr, U, V and Zn. The elements were determined by multi-acid digestion and ICPOES/ICPMS. The results (included in full in digital form as Appendix 1) do not indicate any potential for economic phosphate deposits.

XRD analysis was undertaken on one (1) sample of a potash-rich rock at ANU, Canberra. The dominant mineral constituent was alunite (Figure 8). The sample comes from an area mapped as Mithaka Formation but the alunite-rich rock may be a younger alteration product.

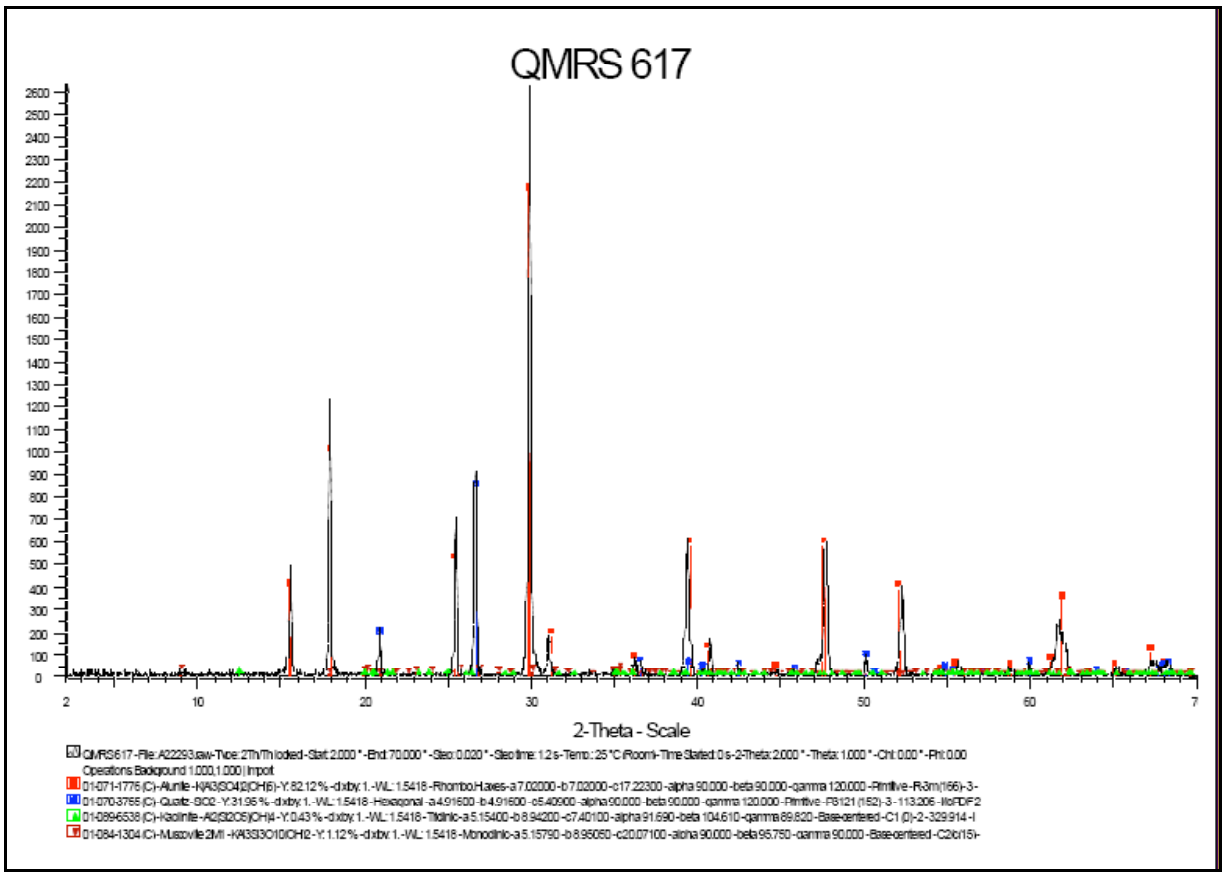

Figure 8. XRD spectra of sample QMRS617 (799 466 mE, 7 456 509mN) MGA54 identified as potash.

6. CONCLUSION

Elkedra concluded that the chances of a commercial source of diamonds being present in the area can be regarded as low.

No substantial phosphatic rocks were located within the tenement, and field reconnaissance did not delineate any targets considered to be prospective for base metals. Therefore no further work by Uramet is warranted.

7. REFERENCES

Dunster JN, Kruse PD, Duffett ML and Ambrose GJ. 2007. Geology and resource potential of the southern Georgina Basin, Northern Territory, NTGS