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AUSTRALIS EXPLORATION PTY LTD

Northern Territory Tenements: Geophysical Data Compilation, Processing and Target Generation.

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DRAFT

Resource Potentials were engaged by Australis Exploration Pty Ltd to carry out geophysical data compilation, processing and target generation for rock phosphate, uranium and base metal mineralisation over their Northern Territory tenements from available government and company open file geophysical datasets. The project covers approximately 25,000sqkm and consists of 15 tenements of which 14 are granted, located in the north east of the Northern Territory, close to the Queensland border.

The tenements cover the central northern region of the Georgina Basin which contains all of the large known phosphate deposits in the north east Northern Territory including Wonarah, Arrawurra, and Highland Plains. The tenements are underlain by Proterozoic sedimentary and volcanic rocks which may also be prospective for base metals and IOCG mineralisation, in addition to phosphate.

The geophysical data coverage is very good over the area with regional to semi-regional government aeromagnetics, radiometrics, gravity, landsat and aster datasets available. The geophysical datasets were compiled, processed and reviewed to determine if a characteristic signature could be detected from known mineralisation, which could then be used as a targeting tool over the tenements. It was found that with the exception of Highland Plains which has a discrete radiometric signature, no other major phosphate occurrences within the central northern region of the Georgina Basin appear to be directly associated a radiometric response. However there are elevated uranium responses within the vicinity (1km) of Alroy.

The tenements have been grouped into 3 sub-projects (North, Central, South) based on their location for the purposes of this exercise.

The Northern project is considered highly prospective for shallow phosphate mineralisation within the outcropping Wonarah Formation and likely extensions of this unit beneath recent cover sediments to the west of the project. Ten target areas which display some elevated uranium anomalism have been selected for priority follow up work, however there remains a number of additional outcrops of Wonarah Formation which should also be systematically sampled for phosphate mineralisation.

Two areas considered anomalous and prospective for base metal mineralisation located in the north of EL26314 and the west of EL26312 have also been selected The target area within EL26314 is considered to be relatively shallow (200m depth) whereas the target within EL26312 appears quite deep (400m-500m), however modeling of the data is required to validate this.

Some potential for Clinton Style Oolitic iron occurrences may also exist in EL26311, where the outcropping South Nicholson Playford Sandstone contains hematitic siltstones to ironstones. This area should be mapped and sampled to confirm.

The Central project is considered highly prospective for shallow phosphate mineralisation within the western tenements EL26310, EL26702 and EL26309. Wonarah Formation is likely present in the other tenements but at depths not currently considered economic as highlighted in drill hole NTGS01/1. There is some potential for base metals as Phosphate Australia mentioned in their prospectus that Minoil Services Pty Ltd 3m intersected a 3m band of “dark shale” that returned Cu-1500ppm, Pb-8000ppm and Zn-8000ppm and 17% Mn within the Alroy area. As such review of previous explorer’s reports should be undertaken to confirm the potential for SEDEX and manganese mineralisation within the project.

The Southern project has limited prospectivity for manganese mineralisation, as indicated by a number of reportedly stratiform manganese occurrences which are located immediately to the west of the project and are interpreted to be controlled by regional structures evident in the magnetic data which extend into the project. This could be confirmed through completing geological mapping and sampling focussed over the interpreted structural corridor, plus reconnaissance of a mapped manganocrete in the north east of the project tenement.

There remains small potential for uranium mineralisation, within the Austral Downs Limestone or palaeochannels, which could be quickly verified through field checking of stronger uranium responses with a spectrometer to determine the grade and extent of mineralisation.

The project tenement is not considered prospective for phosphate mineralisation due to the perceived depth to the phosphatic host sediments indicated by the mapped geology and geophysical responses, which indicate considerable thickness of younger, overlying sediments cover the area.

Target areas have been defined for each project area along with recommendations for follow up work.

It is believed that the compilation, purchase and processing of geophysical datasets has been successful in providing new information and imagery that has been used to generate target areas prospective for rock phosphate, base metals and uranium.

This report presents a summary of the data compilation, processing and target selection over Australis Exploration Pty Ltd, Northern Territory Projects.

2 SCOPE OF STUDY

The scope of the work undertaken for this project incorporated:

- Compilation of the available government geophysical survey data over the project area;
- Windowing, merging and processing of the geophysical and satellite data to highlight mineralogy, geology and controlling structures;
- Generation of a suite of imagery to assist in the delineation of target areas for Phosphate, Uranium and Base Metal mineralisation;
- Compile target areas for above commodities within the tenement areas;
- Provide the processed imagery and targets in suitable digital format for incorporation by Australis Exploration Pty Ltd into their GIS software package for interrogation and statutory reporting requirements.

3 PROJECT AREA

3.1 Location

The project area is located in the north east of the Northern Territory near the Queensland border and covers the central region of the Georgina Basin, figure 1. The project area consists of 15 tenements which cover an approximate area of 25,000 sqkm.

As the project covers a vast area the physiography varies greatly. However, it generally consists of open, grassy, clay rich soil plains, which are flat to gently undulating and are within the range of 200m-240m in elevation. To the south the area is dominated by undulating peneplain/sandplain with dunal systems developed. In the north and north east there are more prominent ridges and deeply incised plateaus where more resistant sandstone lithologies are abundant. tropical savannah grasslands, black soil plains and relatively flat alluvial plains. Some areas have more undulating terrain with low rocky outcrops and hills in others. The annual average rainfall is about 250-350mm, but can vary greatly from year to year, depending on the magnitude of the tropical influence. Stream and drainage channels are typically incised up to 1-2m into the alluvial plains.

3.2 Geology

Geology within the project area has been derived from the published 1:250,000 map sheets, figure 2. A full description of the geology is not provided here, however the project area has good outcrop towards the margins of the Georgina Basin in the north east where it abuts the South Nicholson Basin.

Elsewhere outcrop is variable and large portions of the project area are covered by recent tertiary alluvium and colluvium.

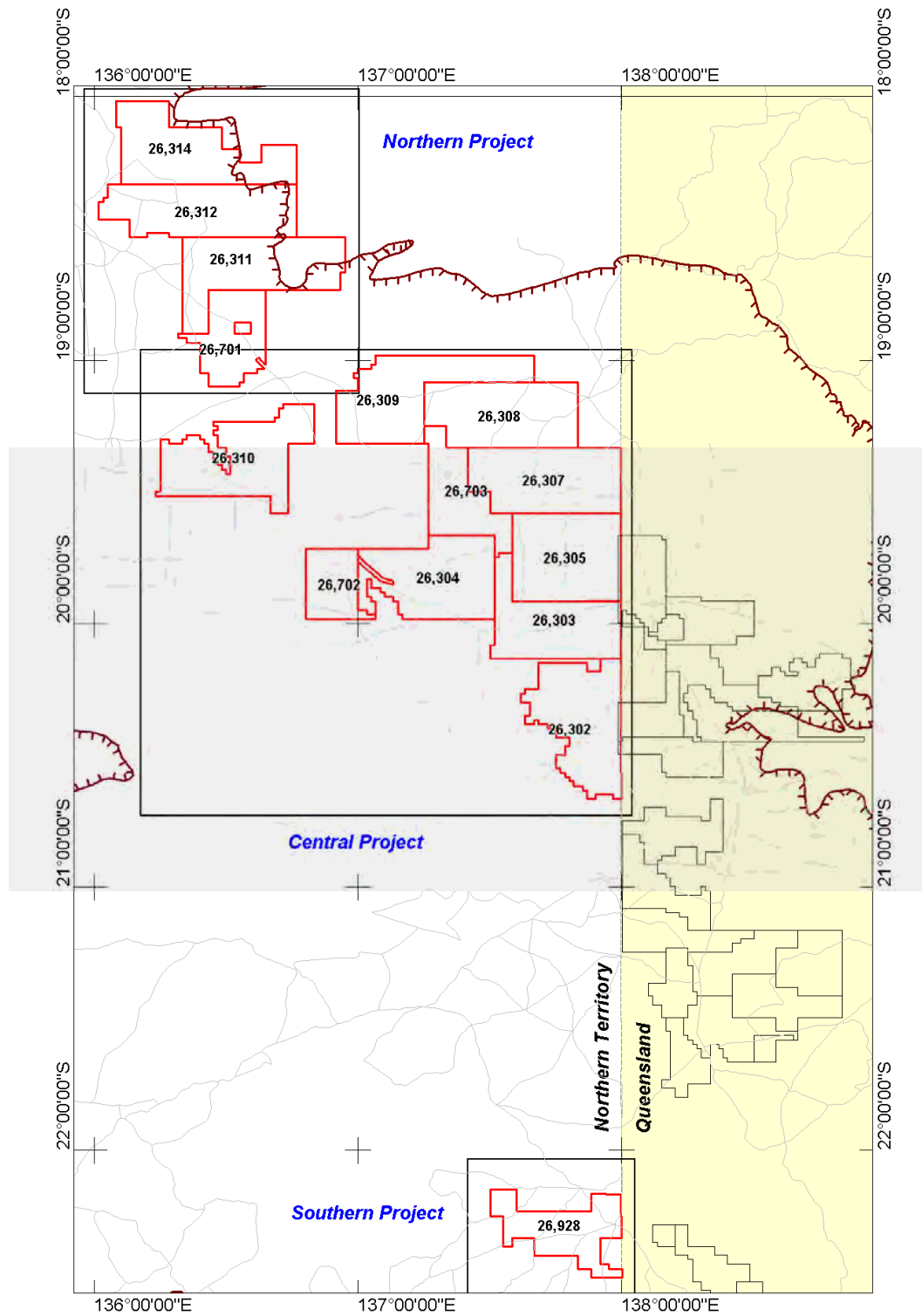


Figure 1: Project Location map. Australis NT Tenement outlines in red, Queensland Tenements in black. Outline of Georgina Basin = Dashed Brown line.

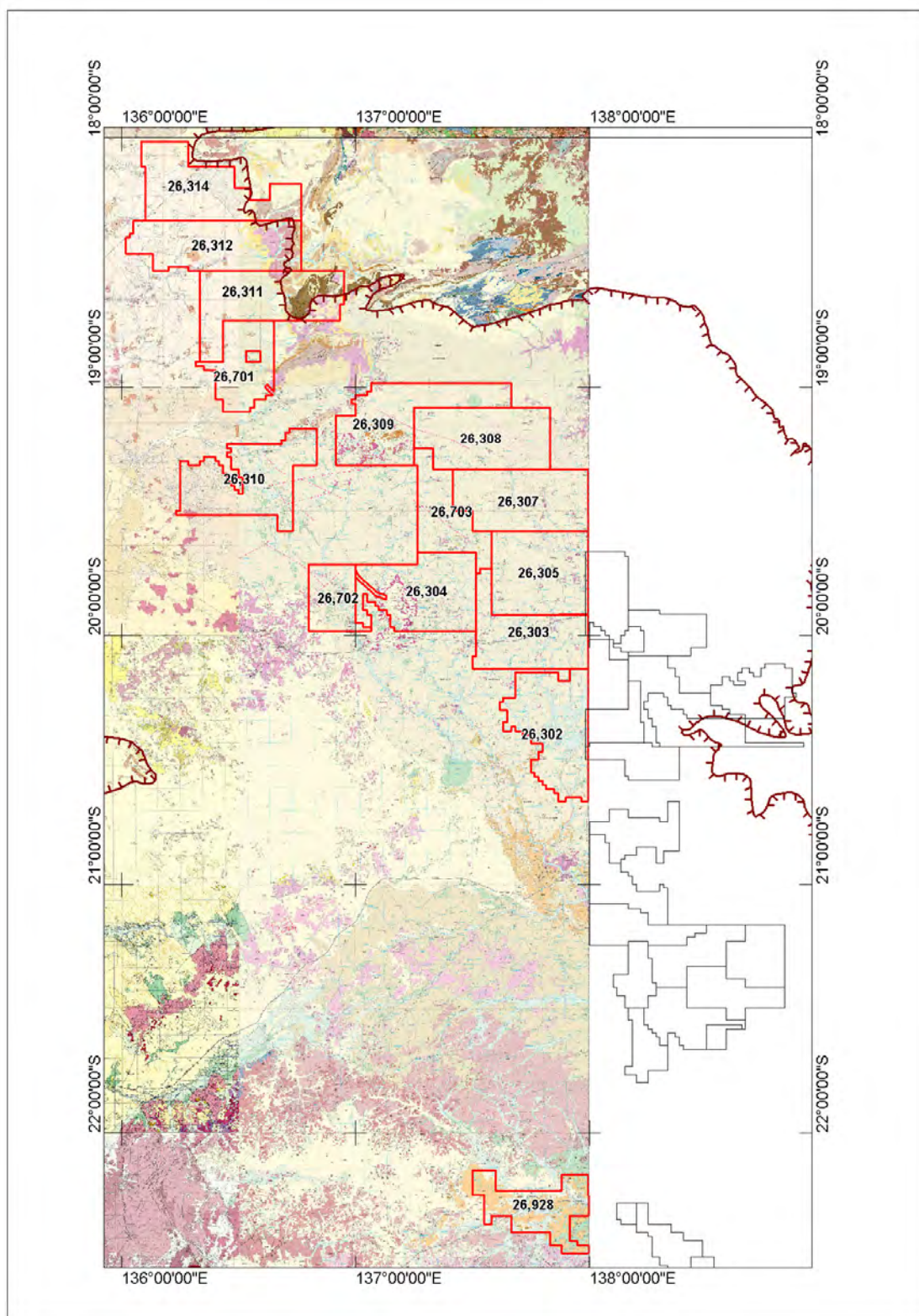


Figure 2: Project Geology map. Australis NT Tenement outlines in red, Queensland Tenements in black. Outline of Georgina Basin = Dashed Brown line.

4.1 Airborne Magnetic and Radiometric Data

The project area has been covered by good quality regional aeromagnetic surveys flown by Geoscience Australia (GA) and the Northern Territory Geological Survey (NTGS) generally with a 400m-500m line spacing. The aeromagnetic data was obtained from Geoscience Australia's Data Delivery System (GADDS) and the NTGS. The aeromagnetic survey coverage is shown as figure 3.

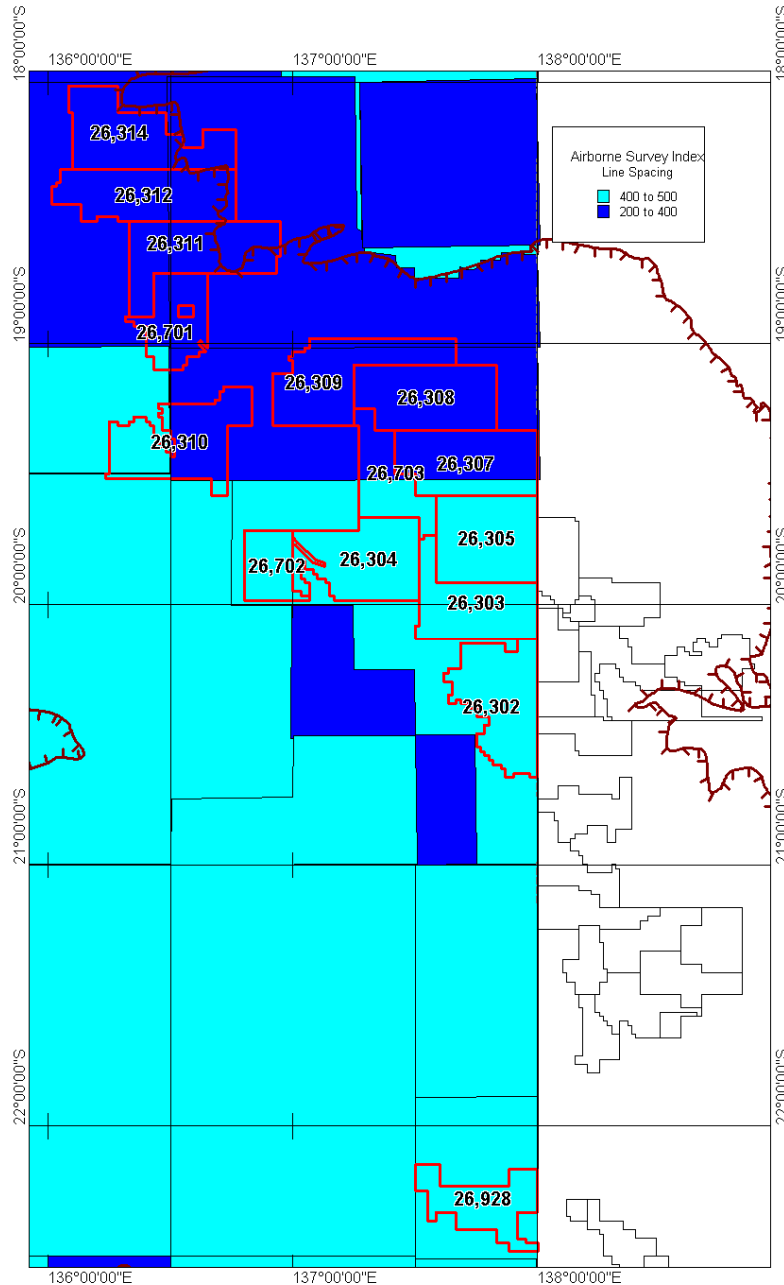


Figure 3: Aeromagnetic Survey Coverage Map.

4.2 Gravity Data

Gravity data consisted of regional surveys from GA and the NTGS. The data was collected on variable station spacings ranging from approximately 10km x 10km to 4km x 4km centres. The data was obtained from Geoscience Australia's Data Delivery System (GADDS) and supplied corrected to a bouguer density of 2.67g/cc.

Figure 4: Gravity Survey Coverage Map.

4.3 Satellite Data

Landsat 7 ETM+ data were obtained over the entire project area. The Landsat data was obtained from the NTGS and GA. The Landsat consisted of two images showing and aerial photo equivalent and a two composite false colour images. Aster data is available from the NTGS, however it does not provide full coverage. Due to the estimated time it would take to fully compile and process the available scenes over the project area, and considering that no discrete response was found attributable to phosphate mineralisation over the known Queensland occurrences examined within report RP-100315-1, the Aster data has not been used here.

Landsat 7 ETM+ is a thematic mapping instrument that records 7 bands of spectral radiation from visible to short wave infrared (SWIR) and thermal infrared (TIR). Spectral responses from different band can be processed to determine lithological and mineral assemblages and assist in geological mapping and area assessment. Landsat 7 ETM+ data resolution ranges from 15m for the panchromatic band to 90m for the SWIR band 7. Aster data measures the same spectral radiation as Landsat, but with higher discrimination achieved through recording over 14 spectral bands as shown in figure 5 below. Aster has a spatial resolution similar to Landsat with 15m for the VNIR out to 90m for the TIR.

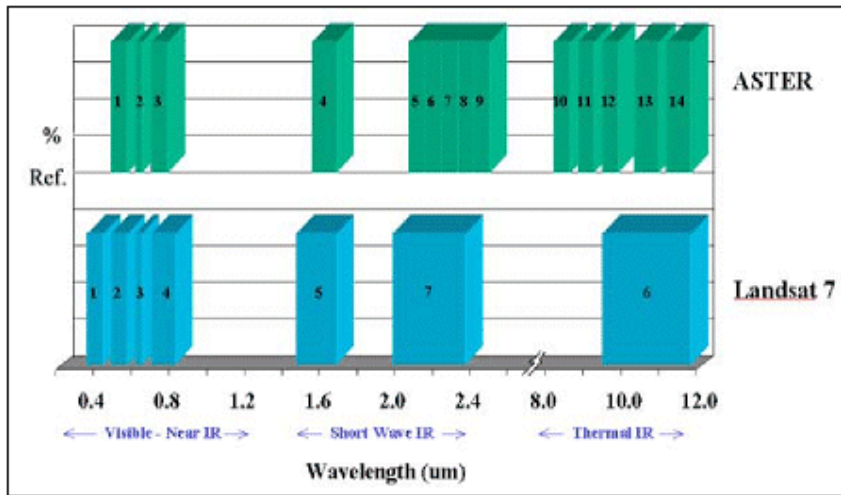


Figure 5: Spectral window comparison for Landsat and Aster.

Shuttle Radar Topography Mission (SRTM) data was obtained over the entire project area and surrounds. SRTM provides high resolution elevation data of the entire globe and is accurate to approximately 10m vertically and 90m horizontally.

5 DATA PROCESSING AND IMAGE GENERATION

5.1 Airborne Magnetic and Radiometric Data

All airborne magnetic and radiometric data were provided or obtained as levelled or finally corrected gridded datasets. The gridded datasets were re-merged at the optimal resolution to provide higher quality final image products. The merged datasets were processed to highlight and better define controlling structures, local lithological variations and anomalous features. Data processing of the magnetic data included calculation of the first vertical and second vertical derivatives, automatic gain control filtering, analytic signal and reduction to the pole and are explained further below;

The first vertical derivative (1VD) is theoretically the rate of change of the magnetic field with increasing height. In practice it has two desirable effects. Firstly it tends to sharpen and separate magnetic anomalies. Secondly it makes the mean background level of the data equal to zero. The second vertical derivative (2VD) is essentially completing the first vertical derivative on the data twice, and is the rate of change of the rate of change of the magnetic field with increasing height. It sharpens and separates anomalies even further and is also symmetric about zero.

Automatic gain control (AGC) was performed on the vertical derivatives in order to enhance magnetic features within the dataset. It is a process whereby magnetic anomalies or features within a dataset are all reduced to similar amplitudes. This is very useful for extracting fine detail from datasets that are otherwise dominated by one or two high amplitude features, as is sometimes the case where magnetite bodies are present.

Analytic signal (AS) processing converts negative portions of magnetic response to be positive, which can be helpful where remnant magnetization is present. Mathematically it is the square root of the sum of the square of each derivative of the magnetic field in its three principal directions (X,Y,Z).

Reduction to the pole (RTP) is the correcting of the magnetic field for the inclination of the earth's magnetising field in the survey area. It theoretically removes dipolar lows in strongly magnetic bodies and places the positive highs directly over the magnetic bodies. In practice it can result in artifacts, particularly if remanent magnetization is present, however it is recommended that it is always performed on all datasets as it assists in more accurately locating drill targets.

The radiometric data highlights signatures that can be related to surficial cover, regolith and outcrop. The merged radiometric grids were separated into individual radioelement Potassium (K), Thorium (Th) and Uranium (U). Apart from highlighting abundances of the specific radioelements, composites and ratios can delineate lithological variability and further refine anomalous responses. The best image for making geological assessment and interpretation is the Ternary Image which displays Potassium in Red, Thorium in green and Uranium in blue. High responses within individual radio-elements are displayed in their primary colour, and different concentrations of radio-elements are displayed as a combination of the primary colour.

Black or very dark areas occur where there is no radioactive response and can occur over silica rich rock or sands, or water bodies.

The subsequent processed magnetic and radiometric grid files were then imported into ERMapper to generate final georeferenced imagery including sun shaded, grey scale, composite and ratioed imagery. In addition to the imagery, contours files of the magnetic and radiometric data were generated to refine the extents of responses and provide actual magnetic and radiometric values. A full list of the generated imagery and vector products have been included in the appendices.

5.2 Gravity Data

Gravity data was obtained as point located data and were imported into the Geosoft geophysical processing software to generate processed grids in geodetic coordinates with GDA94 datum. Data and

image processing of the gravity data included generation of derivatives and utilisation of various sun angle shading in order to highlight basement geology and regional controlling structures.

5.3 Satellite Data

Landsat 7 ETM+ data was obtained as colour balanced, ortho-corrected imagery consisting of a 741,742 and 321RGB ratio image. The 321 RGB represents visible light and provide an “aerial photo” type of image, and the 741 RGB shows Fe rich rocks in red, vegetation green, quartz rich rocks in blue.

The wavelengths measured by the Landsat 7 showing some of the absorption features (which can also be applied to Aster and HYMAP) are displayed in figure 10.

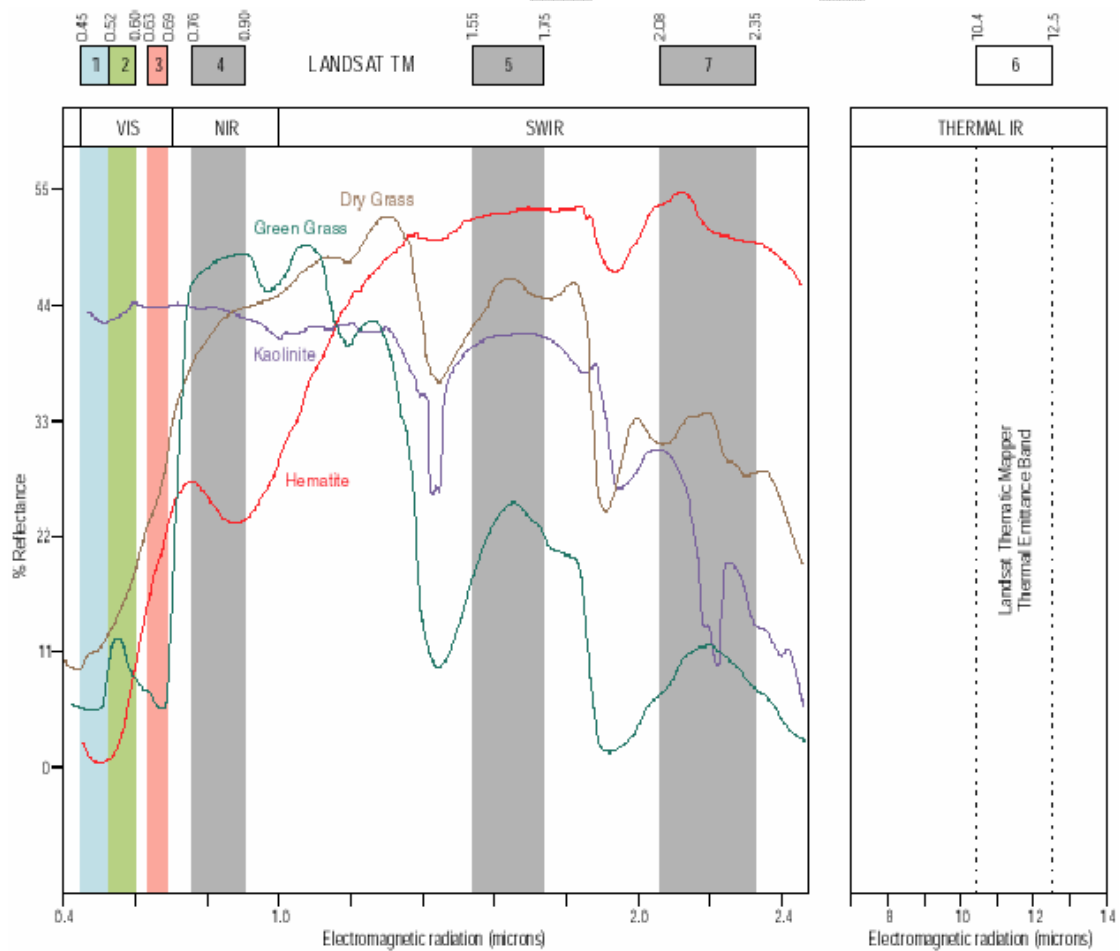


Figure 6: Landsat 7 ETM+ wavelength positions and spectra of selected surface materials (from Wilford and Creasey, 2002).

SRTM products including colour and sun shaded images were generated in ERMapper.

As part of this report a brief review of the geophysical responses from major phosphate, uranium and base metal deposits within the vicinity of the Project area was undertaken to determine if a characteristic response or signature could be detected that could then be applied to the Australis tenements.

The findings are summarized below:

Phosphate Deposits : (Wonarah, Arrawurra, Alroy, Buchanan Dam, Alexandria and Highland Plains)

Nearly all of the current Northern Territory sedimentary phosphate deposits are located distally from the margin of the Georgina Basin with the exception of the Highland Plains deposit, which like the major deposits in Queensland are located close to the Basin margin. All of the deposits are hosted within Middle Cambrian sediments. Highland Plains is locally hosted within the Water Hole Formation, and all the other Northern Territory sedimentary deposits are hosted within the Wonarah Formation, which is equivalent to the Beetle Creek Formation in Queensland.. A simplified stratigraphic sequence is provided in table 1. In contrast to the Queensland deposits and with the exception of Highland Plains, there is no strong surficial uranium response associated with any of the deposits. This finding was also highlighted in Khan et al 2007, where it was found during hand held logging that the high grade core from the Wonarah deposit induced only a marginal increase in the scintillometer count. There are also no direct magnetic or gravity signatures associated to the deposits, but they do indicate relative basement depths and both Alroy and Buchanan Dam are located close to magnetic and gravity features.

There does not appear to be a characteristic spectral response for phosphatic horizons in the Landsat imagery obtained, as it has likely been affected by recent processes including weathering, laterisation or erosion that may distort or mask the spectral response. However it is a useful surface mapping tool and appears to have greatly assisted in the NTGS regional mapping compilations.

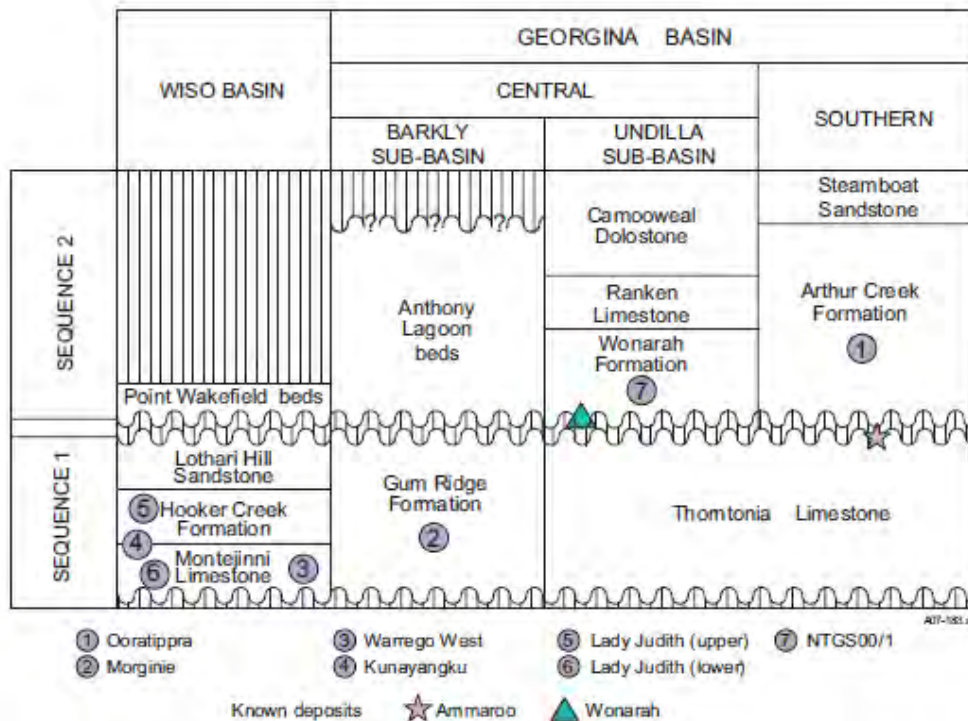


Figure 7: Schematic West to East stratigraphic transect across Wiso and Georgina Basins showing stratigraphic locations of phosphate occurrences. Extracted from NTGS Geological Survey Record 2007-003.

Uranium Deposits: (None)

There are no significant Uranium deposits or occurrences that have been discovered within the Georgina Basin in the Northern Territory. Elevated uranium responses can be attributed to enrichment from recent process and drainage systems. Below is a summary of the styles of Uranium deposits that may be located within the project area, however the prospectivity for discovery of a uranium mineral deposit is considered to be low.

The different styles are summarised in part below from Australia's uranium resources, geology and development of deposits by McKay, A.D., and Mieizitis, Y., 2001. Geophysical methods can provide a major role in detecting and delineating these styles of mineralisation.

Unconformity related deposits occur immediately below and above major unconformities that separate crystalline basement from overlying clastic sandstones of either Proterozoic or to a lesser extent Phanerozoic age. High grade deposits (1-14% U₃O₈) occur in clay altered and faulted sandstones immediately above the unconformity. Deposits immediately below the unconformity are usually medium to high grade deposits (0.3-1% U₃O₈), with mineralisation occurring in fault and

fracture zones of altered metasediments that often contain graphitic. Ranger and Kintyre are examples of unconformity deposits.

Sandstone uranium are usually contained in fluvial or marine margin sandstone. The host rocks are medium to coarse grained, poorly sorted and contain pyritic and organic matter. In this environment uranium is mobile under oxidising conditions and precipitates under reducing conditions. Sandstone uranium deposits can be subdivided into three main types: tabular, roll-front and tectonic-lithologic.

Tabular deposits consist of tabular or elongate lenticular zones of uranium mineralisation within selectively reduced sediments and are orientated parallel to groundwater flow.

Roll-Front deposits are crescent-shaped in cross section and mineralisation cross cuts bedding and extends from the overlying to the underlying impervious mudstone/siltstone layers. Mineralisation usually has a diffuse boundary with reduced sandstone on the down gradient side and sharp contacts with the oxidised sands on the up-gradient side.

Tectonic-Lithologic deposits occur along permeable fault zones which cut the sandstone-mudstone sequence. Mineralisation forms tongue shaped ore zones along the permeable sandstone layers adjacent to the fault, and may form vertically stacked mineralised zones.

Surficial uranium deposits are broadly defined as young (Tertiary to Recent) near surface uranium concentrations in sediment or soils. They usually have secondary cementing minerals including calcite, gypsum, dolomite, ferric oxide and halite. Uranium deposits in calcrete are the largest of the surficial deposits e.g. Yeelirrie and the main mineral is carnotite (hydrated potassium uranium vanadium oxide).

Base Metal Deposits: (MacArthur River, Mt Isa, Cannington, Century, Ernest Henry)

There are only a small number of known base metal occurrences within the Georgina Basin. In general these can be usually grouped into either Iron Oxide Copper Gold (IOCG) or Broken Hill Type (SEDEX) Lead-Zinc-Silver style deposits. Both styles of deposit generally display coincident magnetic and gravity anomalies and may have associated electromagnetic and electrical signatures. A number of papers exist on the geophysical signatures of some of the major deposits which go into further detail about the geophysical responses, and limitations. Of these the following are suggested for further reading (Anderson 1992 Osborne, Brescianini 1992 - Eloise, Fallon 1992 - Mt Isa, Webb 1995 - Ernest Henry, Christensen 2001- Cannington and Thomas 1992 - Century).

Phosphate Australia have noted in their prospectus that Minoil Services Pty Ltd explored for both phosphate and sedimentary base metal mineralisation in the Alroy area and noted that one hole

contained a 3m intersection of “dark shale” that returned Cu-1500ppm, Pb-8000ppm and Zn-8000ppm. This interval also contained 17%Mn and may suggest that the region could also be prospective for Mn mineralisation.

Other Occurrences

Clinton Style Oolitic Iron Ore

Iron Ore occurrences of the Clinton Oolitic Style are located within the South Nicholson Basin which abuts the Georgina Basin in the north east of the Northern Territory. They are Proterozoic to Cretaceous in age and formed in shallow marine environments and accumulated along passive continental margins during times of quiescence, extension and global sea level change (Ferenczi, 2001). Several ironstone beds up to 20m thick within the Mullera Formation containing hematite and goethite have been reported by Sweet 1984. The largest occurrence of this type is located in the Constance Ranges area in Queensland containing approximately 360Mt of 51% iron ore (Harms 1965). The occurrences are associated with narrow, strike extensive weak to moderate magnetic responses, and also have a discrete uranium signature.

Manganese

The major manganese occurrences and deposits of the Northern Territory have been summarized by Ferenczi NTGS Report 13, 2001. The main styles are sedimentary (Grooyte Eylandt), hydrothermal (Bootu Creek) and surficial. A number of manganese occurrences have been reported by the NTGS to be located within or close to the margins of the Georgina Basin e.g. Camp No 1 and Lucy Creek. In addition there may be further manganese mineralisation discovered through review of previous explorers open file reports as highlighted in the previous sections. Geophysics can be an important tool in detecting manganese mineralisation, with particular success shown by the application of both high resolution gravity, electrical methods and airborne electromagnetics. The airborne electromagnetic techniques has proven particularly successful at both the Bootu Creek and Grooyte Eylandt manganese deposits (OMH 2008 and Irvine 2001 respectively) in detecting mineralisation or the marker beds immediately adjacent to mineralisation.

7.1 Northern Project

Tenements EL26311, 26312, 26314 and 26701.

Geophysical data coverage includes full magnetics, radiometrics, gravity and Landsat.

The project area straddles the Georgina Basin and South Nicholson Basins with the majority of the tenure located over the Georgina Basin, figure 8. The southern project tenement lies immediately north of the Buchanan, Alroy and Alexandria phosphate occurrences, with the mapped margin of the Georgina Basin located in the eastern third of the tenure. The western two thirds of the tenements consisting of Georgina Basin sediments are dominated by recent cover and drainage systems, with outcropping Georgina Basin and South Nicholson Basin sediments plus Helen Springs Volcanics in the east. Outcrops of Wonarah Formation are mapped within EL26311, 26312, and 26701 and could potentially extend under recent overlying Cenozoic cover. As such the project is considered highly prospective for phosphate mineralisation.

Of the geophysical datasets both the radiometrics and satellite imagery are considered the most useful for outcrop interpretation and phosphate targeting in this project. In particular the Landsat imagery appears to have been extensively used by the NTGS for mapping outcrop geology, defining drainage and regolith landform mapping, as it has a close correlation to the published geology. The limitation of both methods are that they only show surficial responses. The ternary radiometric image and Landsat 742, figures 9 and 10, show good correlation to the mapped geology in the east where outcrop is good. The most significant responses are from thorium, which appear to be associated with Cambrian Helen Springs Volcanics and Wonarah Formation sediments. The significant thorium responses suggest that area has been subject to widespread laterisation and ferruginisation processes. Large regions of weak radiometric response especially in the western two thirds of the project, shown as light blues to greens and black in the ternary image represent recent drainages, black soil plains, silica rich material and surface water.

In the Landsat 742 imagery, outcropping Georgina Basin, South Nicholson and Helen Springs Volcanics are readily defined by their dark brown, black, red and blue responses.

Of particular note is that the Wonarah Formation within the project area does not have a significant uranium or uranium²/thorium response that can be used to discretely identify outcropping phosphatic material as it does for the Queensland occurrences. The Highland Plains phosphate occurrence does

have a discrete uranium and uranium²/thorium response but it is hosted within the Border Waterhole Formation, not the Wonarah Formation.

Target areas considered prospective for phosphate mineralisation have been selected over elevated or anomalous uranium or uranium²/thorium responses that are closely associated to mapped outcrop of Wonarah Formation sediments. These are mainly restricted along the eastern third of the project area, with some targets selected in the south, figure 11. There remain considerable further outcrops of Wonarah Formation, which have not been selected here but also require suitable sampling.

In addition there are no strong uranium responses within the project which indicate the potential for significant near surface uranium mineralisation.

The magnetic data highlight variably low to moderately magnetic basement volcanic rocks (Helen Springs Volcanics) which extend from outcrop in the east under Georgina Basin sediments to the west, figure 12. The response from the volcanics can be used to estimate basement depth, interpret potential sediment thicknesses and assist in prioritising defined target areas. Major structures and lithostratigraphic boundaries can be interpreted from the magnetic imagery, especially from the derivative products. Figure 13 shows the 1st vertical derivative as colour draped over the second vertical derivative in grey scale. It can be clearly seen that within the northern tenements EL26312 and EL26314 there is complex area of mostly north east trending structures and magnetic units which show evidence of shearing and faulting. The northern portion of EL26314 is considered prospective for base metal mineralisation as it corresponds to a corridor of major, variably magnetic, generally north east trending structures and is where magnetic stratigraphy from the south terminates.

The gravity coverage is quite good over the project area generally consisting of 4km spaced observations and highlights regional structures and broad features, figure 14. Further processing highlights more discrete gravity highs which can be broadly correlated and interpreted be due to volcanics, and gravity lows can be attributed to deeper basement and thicker basin sediment piles. Major regional structures which compliment the magnetic data can be interpreted where strong gradients are apparent. Small gravity variations over the project likely represent near surface changes in rock type, facies changes and increased silicification of the Georgina Basin sediments.

A discrete coincident gravity and magnetic anomaly located in the western extent of EL26312 indicates a zone where structures trending in different directions intersect which may represent a deep base metal (or IOCG?) target and should be considered for further investigation. The north east trending structural corridor indicated from the magnetics within the northern portion of EL26314, also has a weakly elevated gravity response.

The project is also considered prospective for base metals in EL26314 along north east trending structures and a coincident magnetic and gravity anomaly located in the south west of the tenement. a Clinton Style Oolitic iron occurrences may exist in EL26311, where the outcropping South Nicholson Playford Sandstone contains hematitic siltstones to ironstones.

This project is considered highly prospective for shallow phosphate mineralisation located within or close to the outcropping Wonarah Formation in the eastern and southern portion of the project. Areas considered prospective for base metal and iron mineralisation have been proposed for further investigation. The project is not considered prospective for extensive, near surface uranium mineralisation.

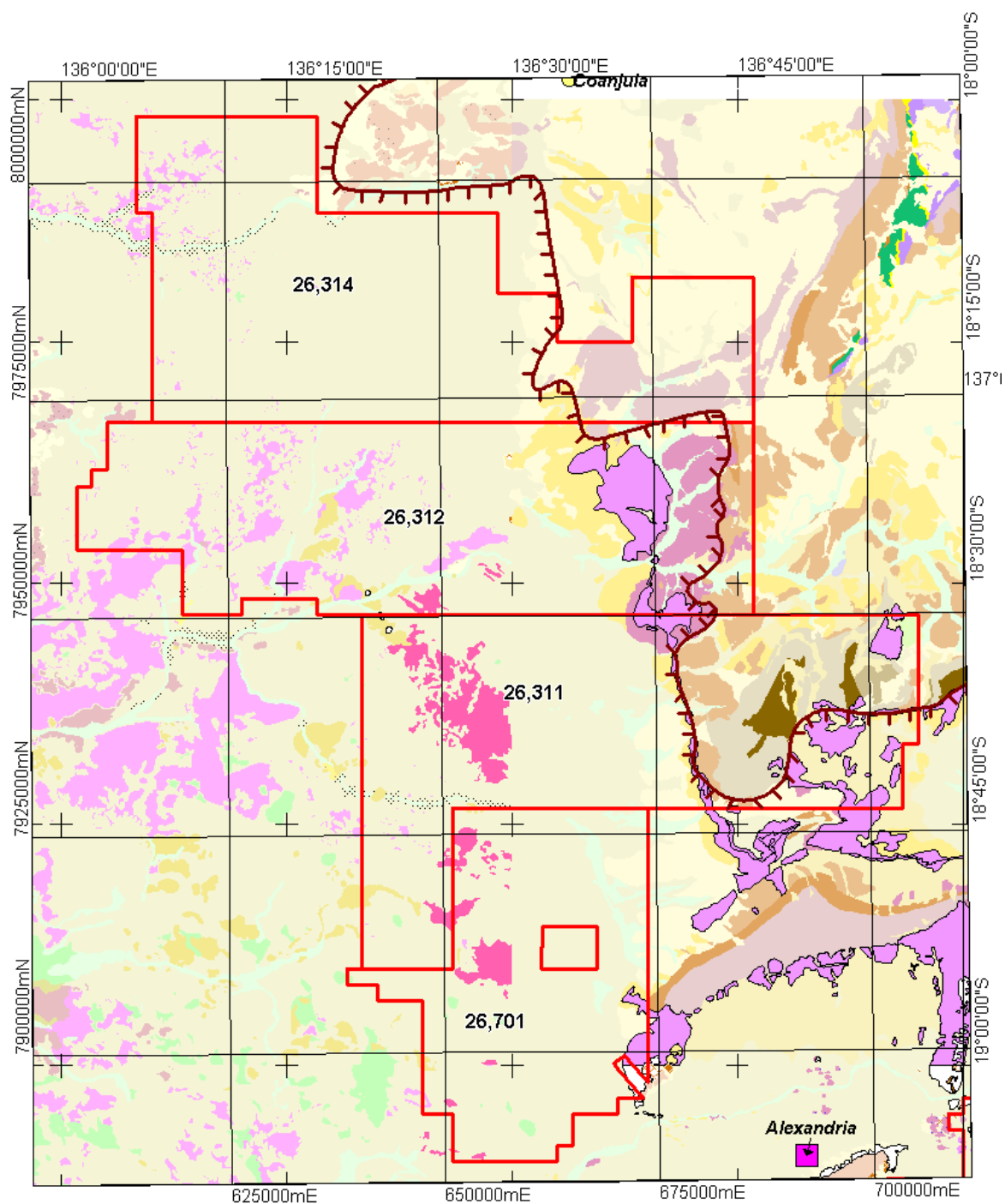


Figure 8: Northern Project Geology and Phosphate Occurrences.

Brown Ticked Line = Georgina Basin Outline. Wonarah Formation highlighted with black outline.

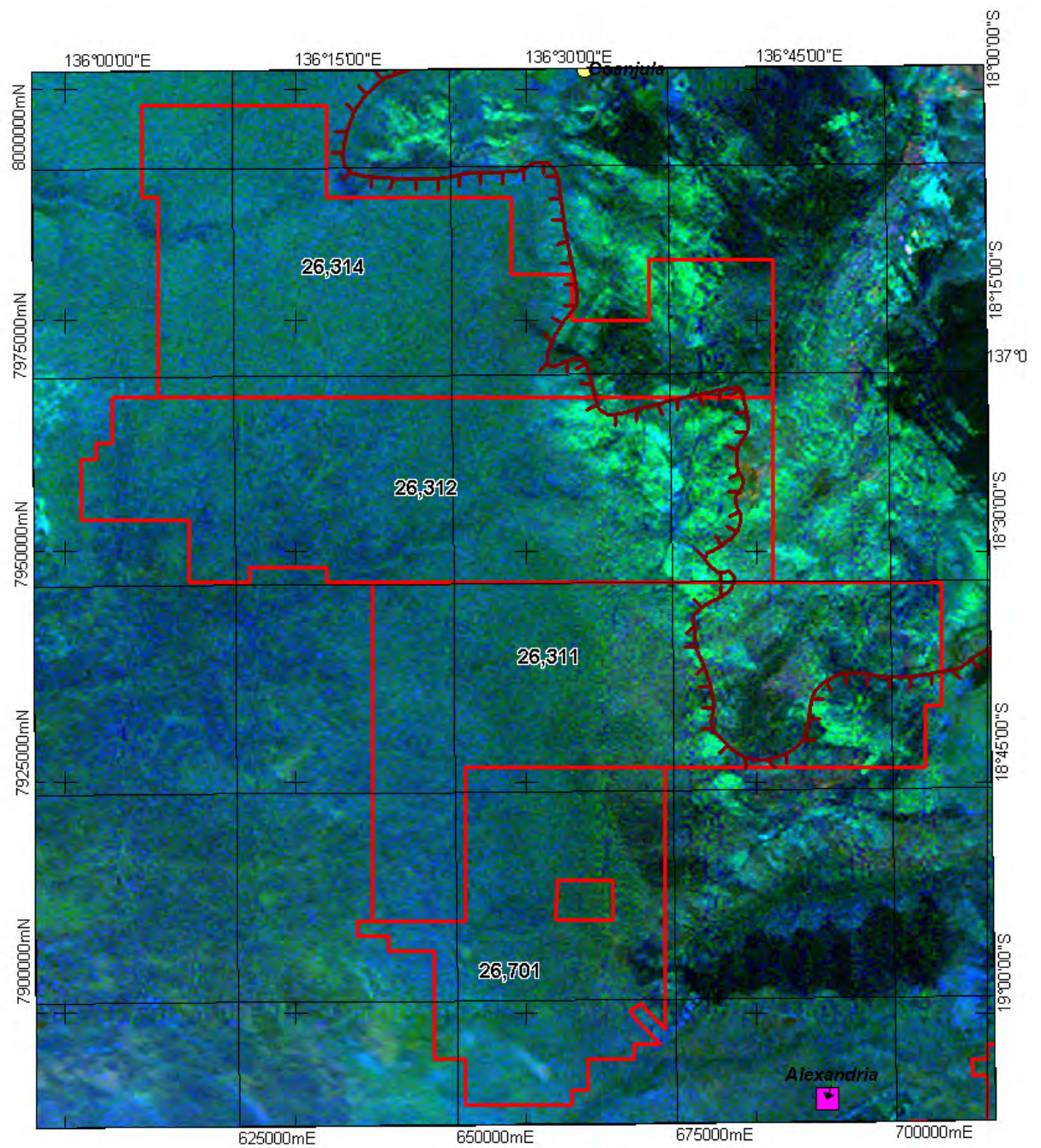


Figure 9: Northern Project Radiometric Ternary Image.

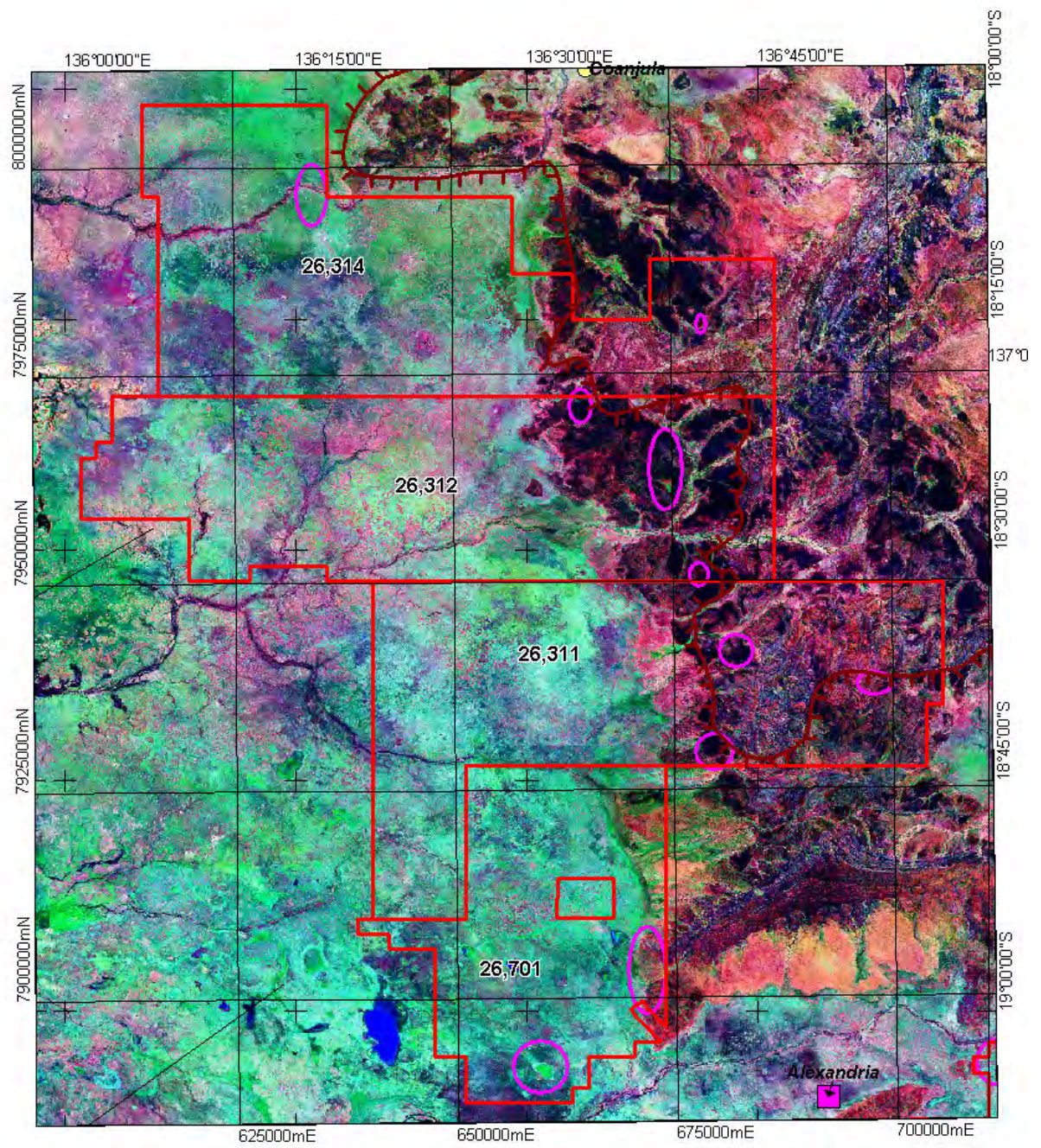


Figure 10: Northern Project Landsat 742 Image.

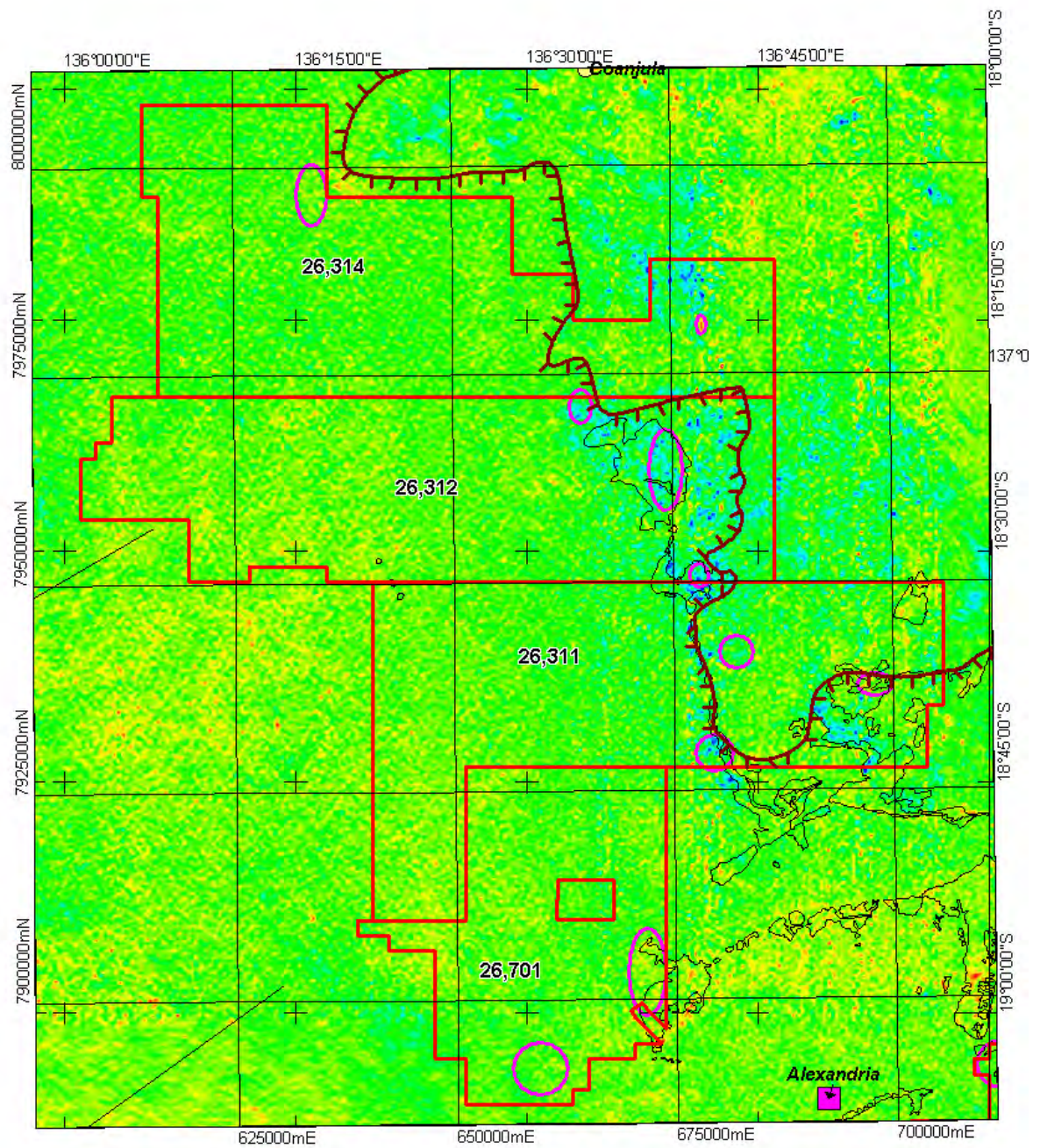


Figure 11: Northern Project uranium2/thorium image, with target areas (pink) and Wonarah Formation (black) outlines.

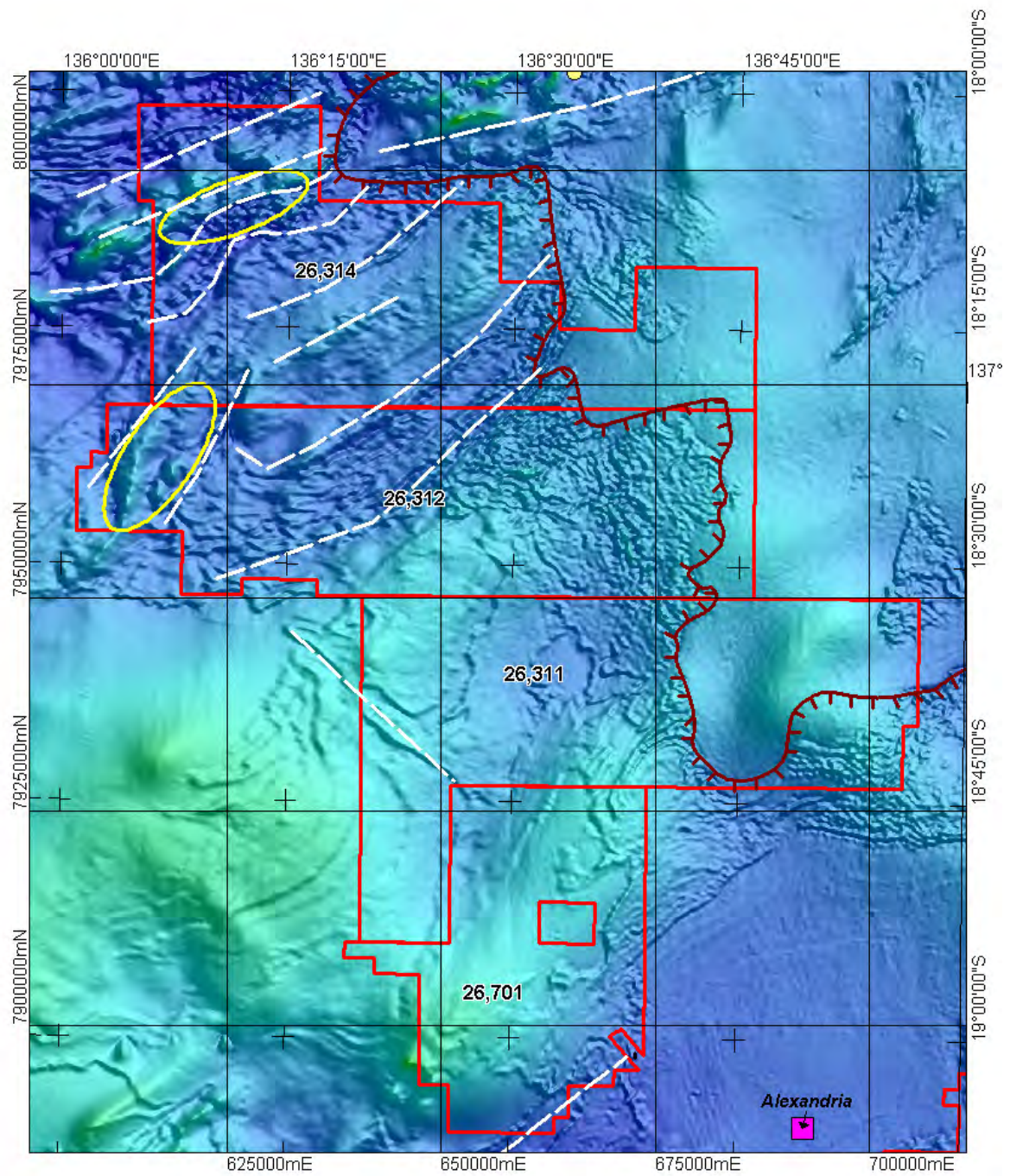


Figure 12: Northern Project Magnetic Image, with target zones and interpreted major structures.

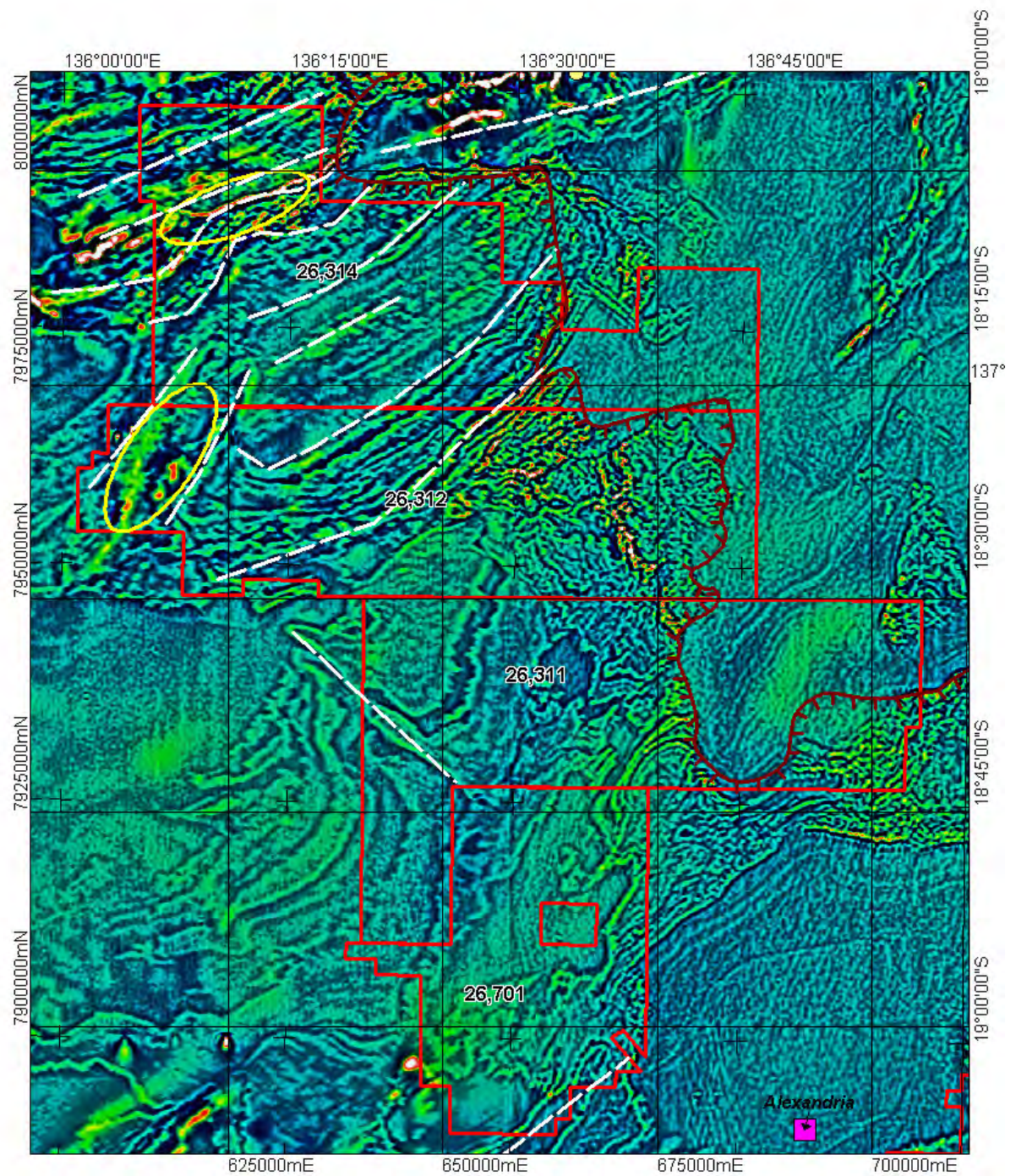


Figure 13: Northern Project Magnetic 1VD (colour) over 2VD (grey) Image, with target zones and interpreted major structures.

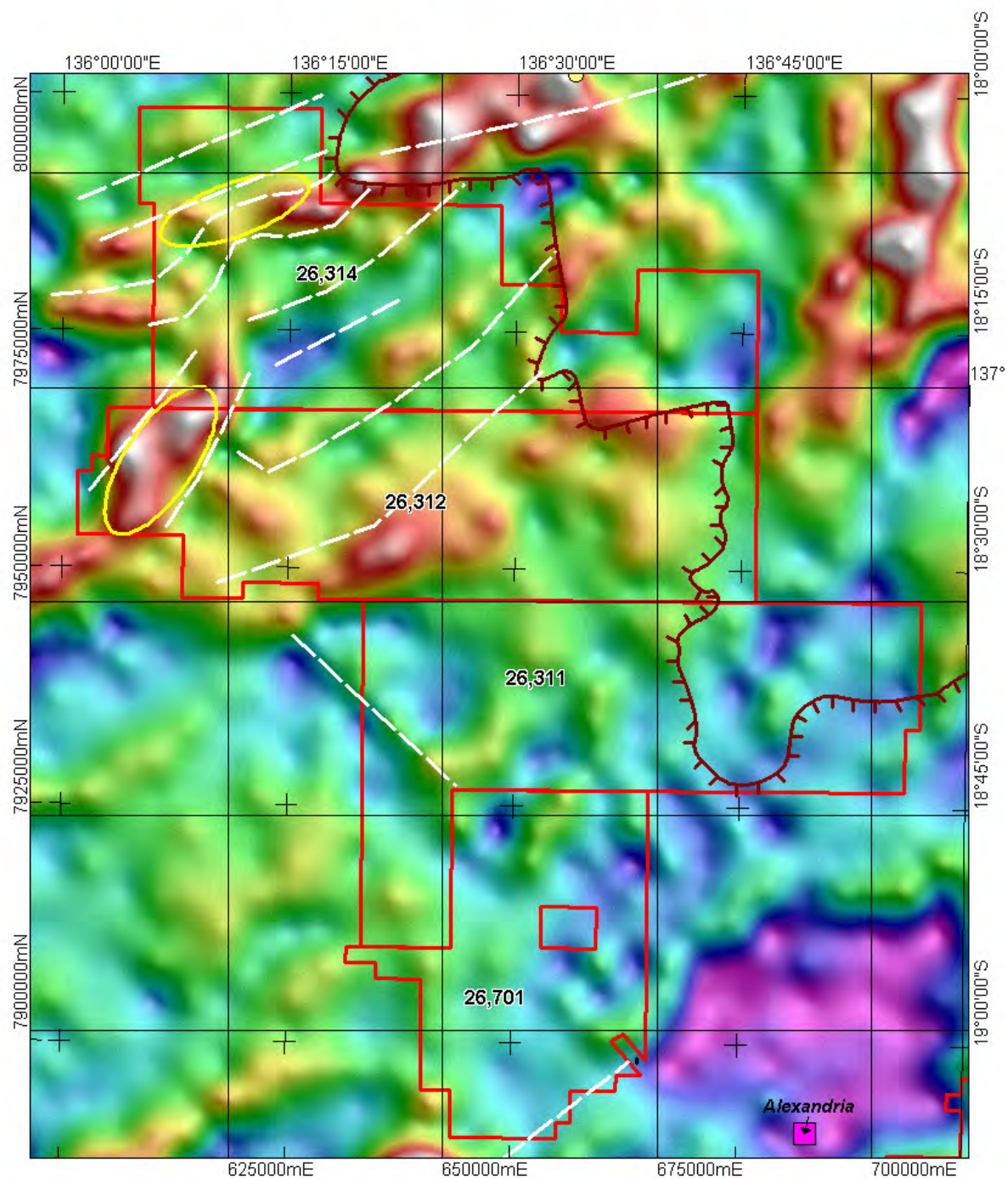


Figure 14: Northern Project Gravity 1VD Image.

8.1 Northern Project

This project is considered highly prospective for shallow phosphate mineralisation within the outcropping Wonarah Formation and likely extensions of this unit beneath recent cover sediments to the west of the project. Only a few target areas which display some elevated uranium anomalism have been selected, figure 11, and there remains a number of Wonarah Formation outcrops which should be systematically sampled for phosphate mineralisation.

Areas considered anomalous and prospective for base metal mineralisation located in the north of EL26314 and the west of EL26312 have also been selected, figures 13 and 14. The target area within EL26314 is considered to be relatively shallow (200m depth) whereas the target within EL26312 appears quite deep (400m-500m), however modeling of the data is required to validate this.

Some potential for Clinton Style Oolitic iron occurrences may exist in EL26311, where the outcropping South Nicholson Playford Sandstone contains hematitic siltstones to ironstones. This area should be mapped and sampled to confirm.

The area is not considered prospective for significant uranium mineralisation.

11

	Comment
	Small Uranium response close to Bas margin
	Small Uranium response close to Bas margin
	Small Uranium response close to Bas margin
	Elevated Uranium response associate
	Wonarah Fm
	Elevated Uranium response associate
	Wonarah Fm
	Small Uranium response close to Bas margin
	Elevated Uranium response associate
	Wonarah Fm
	Elevated Uranium response associate
	Wonarah Fm
	Elevated Uranium response associate
	Wonarah Fm
	Elevated Uranium response
	Anomalous Magnetic corridor

[illegible]

P			
	"		

Table 1: Target Summary.

9 CONCLUSIONS AND RECOMMENDATIONS

The compilation, purchase and processing of geophysical datasets has been successful in providing new information and imagery that has been used to generate target areas prospective for phosphate, base metals and uranium. The Northern and Central Projects are considered highly prospective for phosphate mineralisation, as the projects contain considerable outcrop of Wonarah Formation which host most of the major phosphate deposits within the central Georgina Basin. There exists some prospectivity for Clinton Style Oolitic iron in the northern Project and base metal minerals within all projects.

The base metal targets are all expected to be located under variably deep cover. Further work is necessary to estimate this depth, so that it can be determined if they represent economically viable targets prior to committing to potentially expensive exploration programs.

Recommendations for future work include:

- Completion of a full literature search and compilation of results from previous exploration activities.
- Complete depth to basement modeling over all areas prospective for base metals.
- Based on these results propose further geophysical programs to better define/model the depth to basement or potentially directly target mineralisation (IP /EM techniques).
- Field reconnaissance, mapping and sampling of all elevated uranium anomalies to determine their source and concentration, taking spectrometer readings as a precursor to potential drilling programs.
- Systematic geochemical sampling of target areas and known outcrops of Wonarah Formation, in conjunction with field mapping and drilling where appropriate.

This information should be used as an adjunct to any other information from the area that may be available to Australis Exploration to provide further indications of the mineral potential.

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