FIRST

ANNUAL REPORT

EL’s 9801 - 9806, 9836, 22916, 22924

ALCOOTA PROJECT

For Year Ending 22 December 2003

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ALCOOTA_SG2_LAG2003A Lag samples
ALCOOTA_SG2_ROCK2003A Rockchip samples
ALCOOTA_GEOLOGY_CODES Description of geology codes used for drilling
1.0 SUMMARY

Tanami Exploration NL identified the potential for Tanami-style gold mineralisation, iron oxide copper-gold (IOCG) mineralisation and Tennant Creek-style copper-gold mineralisation in the Alcoota region of the northern Arunta Block in 1997 leading to the acquisition of the significant tenement package forming the Alcoota Project.

The Alcoota Project comprises nine Exploration Licences, all granted in the period between 10 July 2002 and 13 August 2003 to Tanami Exploration NL. The tenements cover an area of 8,625 km². This report describes exploration carried out on all tenements since their grant date to 22 December 2003 with the exception of Exploration Licence 22916. The annual report for the first year of exploration on EL 22916 was forwarded to the Department of Business, Industry and Resource Development on 9 September 2003.

Tanami Exploration NL (TENL), an active explorer in the Tanami-Arunta Province, is a wholly owned subsidiary of Tanami Gold NL, a publicly listed company.

The Alcoota Project lies in the Arunta region of the North Australian Craton approximately 150 kilometres north of Alice Springs (Figure 1). Access is provided via the Stuart Highway, Plenty Highway and the Sandover Highway, which crosses the Project area.

Exploration consisted of a regional assessment of the whole project area and a limited Aircore drilling program.

The regional assessment, carried out by Dr. Jim Anderson, included an evaluation of topography, geology, metallogeny, MODAT occurrences, previous exploration and aeromagnetics together with field reconnaissance. Seventy-seven (77) rock chip samples and fourteen (14) lag samples were collected as part of the regional reconnaissance program, returning a number of highly encouraging results.

The Aircore drilling program of 15 holes for 1,327 metres tested two aeromagnetic targets with limited success. The best intersection in bedrock of 5 ppb Au over 4m - resampled to 1m at 18ppb Au - is associated with chloritic felsic gneiss. Weakly anomalous gold-copper in chlorite altered granitoid intrusions confirmed the potential for IOCG mineralisation in the tenement. Comprehensive testing was not possible due to Native Title Exclusion Zones and dense vegetation, which hampered rig access.

2.0 INTRODUCTION

The Alcoota Project is located approximately 150 kilometres north of Alice Springs. It covers an area of 8,625 km² and is underlain by eleven different pastoral leases.

This combined report covers the nine exploration licences encompassing the Alcoota Project and describes exploration carried out by TENL.

Access to the project area is via the Stuart Highway, which passes to the west of the project (Figure 2). After approximately 95 kilometres the Sandover Highway turns off to the northeast, passing through the Alcoota area in a northeasterly direction. The Plenty Highway provides access from the south. Station tracks and fence lines provide further access throughout the project area.

More detailed descriptions of access and topography is discussed by tenement under Section 6.2 Regional Reconnaissance.
3.0 TENURE

The Alcoota Project consists of nine tenements as detailed in Table 1 comprising 2,761 blocks for a total area of 8,625 km². TENL is the registered holder of the tenements.

Table 1: Tenement Details

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Tenement No.</th>
<th>Blocks</th>
<th>Km²</th>
<th>Grant Date</th>
<th>Expiry</th>
<th>Current Covenant</th>
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<tr>
<td>Spinifex Bore</td>
<td>EL 9801</td>
<td>500</td>
<td>1,585</td>
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<td>27-Jul-09</td>
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<td>Alcoota</td>
<td>EL 9803</td>
<td>470</td>
<td>1,474</td>
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<td>Waite River</td>
<td>EL 9804</td>
<td>144</td>
<td>457</td>
<td>28-Oct-02</td>
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<td>Woodgreen</td>
<td>EL 9805</td>
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<td>28-Jul-03</td>
<td>27-Jul-09</td>
<td>$31,000</td>
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<td>Delmore Downs</td>
<td>EL 9806</td>
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<td>600</td>
<td>18-Nov-02</td>
<td>17-Nov-08</td>
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<td>Bangtail Bore</td>
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<td>127</td>
<td>380</td>
<td>13-Aug-03</td>
<td>12-Aug-09</td>
<td>$25,000</td>
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<td>Ongeva</td>
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<td>09-Jul-08</td>
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<td>Delny</td>
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<td>1,040</td>
<td>23-Dec-02</td>
<td>22-Dec-08</td>
<td>$66,500</td>
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</tbody>
</table>

At present there is no formal Indigenous Land Use Agreement (ILUA) over the Alcoota Project, with the exception of EL 22916, which was included by Deed Of Covenant into the ‘Harts Range ILUA’ between TGNL and the Central Land Council (CLC) on 20 May 2003. The associated Exploration Deed between TGNL and the CLC sets out the terms and conditions for conducting exploration in accordance with the wishes of traditional Aboriginal owners.

Work Area Clearance for the Aircore drilling program within EL9803 and EL 22916 was granted by the CLC and traditional Aboriginal owners, within the areas shown on Figure 3, on September 11, 2003.

For the purposes of conducting initial reconnaissance exploration of the remainder of the Alcoota Project, a ‘self clearing’ program was granted by the CLC in October 2003 whereby TENL could conduct a geological appraisal of the tenements and wide-spaced non-systematic (‘grab’) sampling to assess prospectivity. Areas of possible cultural significance recorded within the Aboriginal Areas Protection Authority (AAPA) database were noted and avoided. Following the reconnaissance TGNL are obliged to indicate to the CLC which tenements it regards as warranting systematic exploration. A Deed for Exploration or ILUA will then be negotiated and future work over nominated areas will require Work Area Clearance (WAC).

4.0 PREVIOUS WORK

Previous work and MODAT occurrences are discussed under 6.3 Desktop Review.

Previous exploration by TENL was carried out on EL22916 Ongeva (Smith, 2003). Regional mapping and geophysical interpretation outlined a possible IOGC target for RAB drilling.

5.0 GEOLOGY

The Alcoota Project lies within the Northern Arunta Block of the North Australian Craton. The Arunta basement comprises Palaeoproterozoic – Mesoproterozoic metamorphic rocks and granites.
The project area covers most of 1:250,000 sheet, Alcoota (SF53-10) and part of Huckitta (SF53-11).

The local geology of each tenement is discussed under Section 6.3 Desktop Review.

6.0 FIRST YEAR EXPLORATION PROGRAM

6.1 Aircore Drilling

Aircore Drilling was planned on EL9803 Alcoota to test IOCG targets interpreted from aeromagnetic and residual gravity images. Drilling was designed to blade refusal in widely spaced lines consisting of up to 5 holes.

A brief reconnaissance trip was made in September 2003 to check vehicle access to the targeted drill areas. Thick vegetation was observed over all three main areas, which may preclude cross-country vehicle and rig access in the absence of machine clearing.

In October 2003 a total of 15 holes were completed for 1,327 metres in two areas. Drill locations were restricted to tracks or fence lines, where easy access was provided. An area of thick mulga cover in the eastern tenement area proved to be too difficult. Drillhole locations are shown on Plate 1, drill details in the table below and drill data are listed in the digital Appendices.

Table 2 Summary of Aircore Drilling

<table>
<thead>
<tr>
<th>Hole Prefix</th>
<th>Hole numbers</th>
<th>No. Samples</th>
<th>Sample Type</th>
<th>Analysis (Detection Limits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALA</td>
<td>1-15</td>
<td>217</td>
<td>Interface gravel / composites through residual</td>
<td>Au (1ppb), Cu (1ppm), Pb (1ppm), Zn (1ppm), Ag (0.2ppm)</td>
</tr>
</tbody>
</table>

The majority of the drilling was conducted in areas of thick alluvial cover, with in excess of 100 metres of alluvial material intersected in some holes. Drilling was carried out in two areas:

• In the Western Area a north-south traverse of 5 holes along a fence-line intersected hardpanised dark red silt in excess of 30m in thickness. The silt and interpreted underlying alluvial material (lacustrine clays) deepen to the north. Chloritised lithologies were intersected in the first few holes, but drilling became increasingly difficult to the north and ALA005 could not penetrate a coarse quartz-pebble lag towards the base of the overburden and hence was ineffective. The development of mottles within the overburden suggests an old land-surface and developed regolith profile.

• In the Eastern Area three short lines were drilled in the northeastern portion of the tenement. The lines were greatly restricted due to the thick Mulga and only one line consisting of two holes could be drilled away from existing tracks. The other two lines consisting of four holes each were drilled on existing but unused tracks. As with the drilling in the west there was a significant amount of transported cover. The cover consisted of mainly lake clays with some sandy to gravely horizons. There was sometimes a coarse sandy lag at the base of the transported and two holes failed to penetrate through this horizon. Bedrock comprised mainly felsic intrusives (granite) and sheared/metamorphosed equivalents. Dolerite was intersected in one hole.

Four metre composite samples were assayed for Au, Ag, Cu, Pb and Zn by Amdel Laboratories using 50g Aqua regia digestion – Graphite Furnace AA with a 1ppb detection limit for gold. Samples with elevated Au or Cu value were resampled at 1m intervals, using the same laboratory and method.
The best intersection of 7ppb Au occurs within alluvial clays. Within bedrock the best intersection of 5ppb Au – resampled 1m @ 18ppb - is associated with chloritic felsic gneiss. Chlorite alteration is commonly associated with IOCG mineralisation however it is also a common product of retrograde metamorphism in the region. Elevated copper (in holes ALA 7, 9 and 12) might also be associated with an IOCG-style hydrothermal event.

Table 3: Aircore Assay Results

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<th>Au_ppm</th>
<th>Cu_ppm</th>
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<th>Geology</th>
<th>From</th>
<th>To</th>
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<td>119</td>
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6.2 Regional Reconnaissance

A review of topography, geology, metallogeny and aeromagnetics including field reconnaissance was carried out by Jim Anderson in November – December 2003. The topography and field reconnaissance will be discussed for each tenement in this section of the report including rock chip and lag sampling. Relevant plates are Plate 2 and 3, TENL Interpreted geology and Landsat imagery.
Table 4  Surface Sampling Summary

<table>
<thead>
<tr>
<th>No of Samples</th>
<th>EL9801</th>
<th>EL9803</th>
<th>EL9804</th>
<th>EL9805</th>
<th>EL9806</th>
<th>EL22916</th>
<th>EL22924</th>
<th>TOTAL</th>
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</table>

All samples were analysed for Au, Cu, Pb, Zn, Ag, As and Bi by ALS using multi acid digestion and AA with a 1ppb detection limit for Au. Sample locations are shown on Plate 1 and digital data are included in the Appendix.

First pass reconnaissance was completed over the entire Alcoota project, with the aim of validating and identifying targets for systematic exploration in the 2003 field season. Details on individual tenements are outlined below.

Seventy-seven rock chip samples and 14 lags were collected as part of the regional reconnaissance program, returning a number of highly encouraging results, see below in Table 5. No elevated values were returned from the lag sampling.

Table 5  Rockchip Sampling Results

<table>
<thead>
<tr>
<th>Sample_No</th>
<th>Reg</th>
<th>Lith</th>
<th>Ag_ppm</th>
<th>As_ppm</th>
<th>Au_ppb</th>
<th>Cu_ppm</th>
<th>Pb_ppm</th>
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Vehicular access on EL9801 ‘Spinifex Bore’ is via the Sandover Highway and then by cattle station tracks.

Landsat PAN 321 suggests that the western section is alluvial creek country with dense Mulga stands and isolated outcrop. The central region is open grassland / sand with some NW-SE trending sand ridges and the eastern section is largely covered in thick vegetation. Depositional regimes are interpreted to cover almost all of EL9801.

Field visits in November 2003 confirmed that this interpretation of the Landsat is correct with primarily open Spinifex country and rare larger tree, e.g. bloodwood. Denser vegetation appears to grow on red clay (alluvial) soil and is mulga of variable density.

Ten samples were collected from EL9801. Samples ALK001 - 003 were collected from a massive quartz vein north of Mt Byrne, weakly ferruginous in places with fine crosscutting spider and stockwork veins.
Samples ALK004 - 010 were taken from a zoned, north-south trending quartz vein with specular haematite veins, carbonate vugs and pyrite in unoxidised samples.

Vehicular access on EL9802 'Kuraljin Bore' is provided from the Sandover-Chianina Road and limited access via station tracks.

Landsat PAN 321 suggests that the western two thirds is open grassland/sand with some NW-SE trending sand ridges, and the eastern third is largely covered in scrubby vegetation. Field assessment in November 2003 confirmed that the entire tenement is covered by depositional regolith regimes.

Vehicular access on EL9803 'Alcoota' is provided from the Plenty Highway (sealed section), and the network of established station tracks and roads connecting Engawala and Waite River Aboriginal communities.

Landsat 741 imagery suggests that there is good outcrop in places within this tenement, e.g. Mt Bleechmore, Mendip Hills and in the vicinity of the Engawala community. The rest of the tenement is either covered by deep alluvial cover related to north- to northeast- trending watercourses or scrubby vegetation. Dense thickets of Mulga are associated with some of the watercourses and cause access problems. Field examination suggests that outcrops with purple shadings in Landsat 741 images are retrograde high-grade crystalline basement lithologies, and based upon this criterion, there are a lot of high-grade rocks on this tenement. The distinctive pale blue shades in the Landsat 741 images correspond to the younger Waite Formation.

Three rock chip samples were collected from quartz-filled structures with NE- and WNW- orientations, see Plate 1.

Vehicular access for EL9804 'Waite River' is provided from the Sandover Highway to the Waite River community via Utopia Station from the north, and a good road from the Engawala Community. There are limited station tracks and there is no access to EL9804 from the west, the Woodgreen Station side.

Landsat imagery suggests that a significant amount of outcrop is present, albeit localised. A number of major drainage systems are apparent (e.g. the Waite River) and thick Mulga-covered alluvial sequences can be expected.

Samples ALK027-035 were collected from various structures and shear zones within the Ledan Schist. Samples ALK036-038 were taken from a major NW-SE trending ferruginous, siliceous structure and ALK039-041 from quartz blows from within the Narwietooma Metamorphics.

The Sandover Highway cuts across EL9805 'Woodgreen', plus numerous station tracks.

Landsat imagery suggests that the eastern third of the tenement appears to have substantial outcrop, e.g. around Arno Peak, from which drains a complex series of easterly trending watercourses into the Waite River valley. The western two thirds appears to be covered in scrubby vegetation.

A limited number of samples (ALK011-014) were collected from outcrops within high-grade metasediments. More systematic sampling (ALK015-026) was conducted across a major NW-SE trending, quartz-filled structure that outcrops in the vicinity of 419000mE / 7531000mN. This sampling is designed to test the prospectivity of the 'Tanami'-orientated structures.

Vehicular access on EL9806 'Delmore Downs' is provided by the network of established station tracks.
On Landsat imagery, the north-easterly flowing Bundey River divides EL9806 into northern and southern sections. Deep alluvial deposits and thick Mulga cover occur along the watercourses. The watercourses and tributaries thereof influence the southern region to greater extent than the northern region. Extensive patches of outcrop can be discerned in the images north of the Bundey River, surrounded in places by scrubby vegetation.

Samples ALK047 - 051 were taken mainly from outcropping structures from the eastern part of the tenement and samples ALK070-087 from various structures, silicification zones, and gossaniferous material from within the Ledan schist and environs.

Nominally there is vehicular access from the Sandover Highway to EL9836 ‘Bangtail Bore’, and roads to the 3 Bores Medical Centre, Utopia and Waite River Aboriginal Community.

Landsat imagery suggests that much of EL9836 is covered by scrubby vegetation with isolated ridges of outcrop in the north, with reasonably extensive patches of rock exposed in the southern quarter. Easterly draining watercourses flowing towards the Waite River are a prominent feature and associated with dense Mulga thickets.

Vehicular access to EL22916 ‘Ongeva’ is provided from the Plenty Highway, and the network of established station tracks.

Landsat imagery suggests that much of this tenement is covered by thick scrubby vegetation or thick alluvial deposits related to north- or northeast- trending watercourses. The Mulga is very thick north of the Plenty Highway. Outcrop is evident in the northwest corner (Mt Bleechmore) and the extreme southeast and southwest corners of the tenement. However, younger sediments obscure bedrock virtually over the entire tenement.

The NTGS open-file database outlines a circular base metal and Cu anomaly in the southwestern tenement area with an -80# stream sediment sample of 4.8 ppb Au, 64 ppm Cu, 19 ppm Pb and 83 ppm Zn. The actual location of this sample could not be determined due to positional error (+/- 200m). In the general vicinity of the anomalous stream sediment sample locality there is much quartz scree, which seemed to be spreading to the southeast from outcrops of high-grade metasediments (migmatitic gneiss) with quartz veins. Much haphazard scraping and many shallow prospecting pits are evident in this area. The cover is all transported but is generally interpreted to be fairly thin. Two traverse lines of lag were sampled to test the area, see Plate 1. No elevated gold values were returned.

Vehicular access on EL22924 ‘Delny’ is provided by the extensive network of established roads and station tracks.

On the Huckitta PAN 321 TM images the region has an unusual photo-texture. Numerous ephemeral creeks and watercourses are apparent, mainly draining to the north or northeast. Although some of the watercourses are tree-lined, much of the region appears to be largely devoid of major vegetation.

A total of 20 rock chip samples were collected on this tenement. Samples ALK052-ALK060 are from the Perenti area, ALK061-069 from various outcropping structures and silicification zones in granite and low-grade Ledan Schist, ALK088-089 from the Delny Gneiss.

6.3 Desktop Review

In 2002 the Alcoota tenements were included in an Arunta-wide geophysical interpretation conducted by TGNL consultant geologists Dr Jayson Myers and Dr Nathan Jombwe (Jombwe, 2003). Coincident magnetic and gravity highs were identified as possible iron oxide copper gold (IOCG) targets.
In November – December 2003 a review of topography, geology, metallogeny and aeromagnetics together with field reconnaissance was carried out by Dr Jim Anderson.

This section of the report includes for each tenement a discussion of the geology related to field examination, magnetics, MODAT occurrences and NTGS previous exploration, based on the above reviews. Relevant maps are Plates 2 to 4, showing TENL interpreted geology, Landsat imagery and aeromagnetics with residual gravity.

Likely commodities for all tenements are Tanami style shear zone related gold and IOCG.

6.3.1 **EL9801 ‘Spinifex Bore’**

TENL’s interpretative Tanami-Arunta mapping (Plate 2) suggests that the westernmost area, where outcrop is present, is either granitic or sediments of the Ngalia Basin. The rest of EL9801 is interpreted as Lander Rock Bed equivalents of low metamorphic grade under cover. This geology probably represents the southeastern extension of the Tanami tectonic zone.

The NTGS Alcoota 1: 250 000 fact map suggests that high-grade metasediments and granites occur in the southwestern portion that TENL has interpreted differently. Aeolian sand or red clay soils are attributed to the remainder of the tenement.

Field examination suggests that the NTGS mapping is correct; outcrop in the southwestern part of the tenement is invariably granitic or relatively high-grade metasedimentary lithologies. This is at odds with the magnetic signature, which is subdued in this area. Thin bands of biotite-muscovite schist are present locally, interpreted as possible retrograde zones.

No MODAT occurrences are located on EL9801. NTGS open-file data records ten spot geochemical samples.

6.3.2 **EL9802 ‘Kuraljin Bore’**

TENL’s interpretative Tanami-Arunta mapping suggests that equivalents of the Lander Rock beds are probably present under cover. Both high- and low-grade metamorphic facies can be interpreted from the magnetic images. This geology probably represents the southeastern extension of the Tanami tectonic zone.

The NTGS Alcoota 1: 250 000 fact map suggests that the entire tenement is obscured by younger cover, the majority being Quaternary cover with lesser Tertiary sediments of the Waite Formation. Basement outcrop is not evident in the mapping.

No MODAT occurrences or NTGS open-file data are recorded.

6.3.3 **EL9803 ‘Alcoota’**

TENL’s interpretative Tanami-Arunta mapping ascribes the bulk of the tenement as the Narwietooma Metamorphics, with the younger Irindina Metamorphics interpreted in the southeast corner of the
tenement. The northeast corner is interpreted as predominantly granite. A north-south strip of Waite Formation is present in the central part of EL9803. This was confirmed by field examination.

The NTGS Alcoota 1: 250 000 fact mapping largely concurs with TENL’s interpretative mapping. High-grade metamorphic lithologies, including granulites, are mapped at Mt Bleechmore. Greater than 60% of EL9803 is covered by deep alluvial deposits that preclude effective exploration.

Field examination confirms the above geological mapping. A modest amount of basement outcrop is exposed along the northern part of the tenement and is invariably of high metamorphic grade. The grade may increase from north to south, as the rocks were observed to grade from upper amphibolite to sub-granulite towards Mt Bleechmore. The younger Waite Formation obscures a substantial north-south strip of EL9803 and was seen capping the basement lithologies in a number of places. The base of the Waite Formation is very ferruginous, and this has been reworked and the polished Fe-gravels have been scattered over the tenement.

No MODAT occurrences are recorded. The NTGS open-file database shows that the Mt Bleechmore area is shedding a circular base metal and Cu anomaly.

Two major geophysical targets for IOCG, based on magnetic and coincident gravity highs, occur on EL9803. Recent Aircore drilling by TENL on Alcoota (ALA001-015), see Section 6.1 Aircore Drilling, indicated that chlorite-haematite altered intrusive lithologies are present in the vicinity of the IOCG targets.

6.3.4 EL9804 ‘Waite River’

TENL’s interpretative Tanami-Arunta mapping suggests that the Narwietooma Metamorphics occur in the northern and southern parts of EL9804, with the central region covered by younger sediments of the Georgina Basin. A prominent strip of the Tertiary Waite Formation is also evident.

The NTGS Alcoota 1: 250 000 fact mapping shows the Ledan Schist mapped in the NE corner of EL9804, and this is regarded elsewhere as prospective.

Field examination revealed that the NTGS mapping is accurate. Low-grade schist (the Ledan Schists) is present in the northeast part of the tenement, as well as substantial exposures of the Georgina Basin. The Waite Formation obscures the central third of the tenement. High-grade metasedimentary lithologies and granites are exposed in the southeast part of EL9804.

No MODAT occurrences are present, and little NTGS open-file data is recorded (<15 data points of a non-systematic nature).

6.3.5 EL9805 ‘Woodgreen’

TENL’s interpretative Tanami-Arunta mapping suggests extensive areas of relatively low-grade metasediments (the Lander Rock Beds or equivalents), with the northeastern part dominated by granite. Younger cover is present in the northern (Georgina Basin) and southeastern (Waite River Formation) parts.

The NTGS Alcoota 1: 250 000 fact mapping concurs with TENL’s interpretative mapping.
Field examination indicates that the NE part of the tenement is either the Central Mt Stuart Beds or granite. The north-south strip from Woodgreen Homestead to the southern boundary of EL9805 is Waite Formation and basement outcrops are restricted to the southeastern corner and edge of the tenement. Where examined the basement appears to be either high-grade, largely gneissic metasediments or granite and no lower grade lithologies were seen.

An un-named MODAT tungsten occurrence is present in the extreme SE corner of EL9805. These are typically associated with higher-grade metasediments and granites. The NTGS open-file database records that CRA drilled 32 auger holes to 13m targeting calcrete-hosted uranium in the 1970's.

6.3.6 EL9806 ‘Delmore Downs’

TENL’s interpretative Tanami-Arunta mapping suggests extensive areas of metasediment (the Narwietooma Metamorphics) and batholithic granite intrusions with a strong northwest-southeast structural influence.

The NTGS Alcoota 1: 250 000 fact mapping largely concurs with TENL’s interpretative mapping, with regions of metasedimentary schist and granite. The northern strip of schist is ascribed as belonging to the Ledan Schist, a unit that is relatively low in grade and elsewhere is regarded as prospective. The more southerly strip of northwest-southeast trending schist appears to be of substantially higher metamorphic grade (Langford Gneiss).

Field examination determined that extensive patches of younger alluvial sequences cover the southern and eastern sections of EL9806. Unprospective granite occurs in the southeast. NW-SE trending structures are exposed in the east. However, a zone of low-grade Ledan Schist outcrops extensively north and west of Delmore Downs homestead. The Ledan Schist is low to moderate in metamorphic grade and locally unusual lithological variants (quartzites, tuffs and basaltic volcaniclastics) are present. The basal section of the Georgina Basin outcrops locally along the extreme northeastern boundary of the tenement.

Two MODAT occurrences are present; ‘Spotted Wonder’ - a tantalum occurrence (on a notable east-west feature in the magnetic images) and ‘Poloni’s’ – an abandoned muscovite mine. Poloni’s is situated on a major northwest-southeast trending fault separating granite from the Ledan Schist.

The NTGS open-file database records that a number of companies, including CRA, prospected EL9806 using soil and stream sediment geochemistry in the early 1980’s. The southern part of the tenement was the main focus, although the targeted watercourses largely appear to drain from granite country. Little systematic work has been performed over the northern zone of outcropping schist. A significant number of shallow auger holes were drilled east-northeast of Poloni’s targeting placer Sn-Ta-Tb deposits. Notably, a sample of ‘ironstone’ from within the schists returned 62 ppm Cu, 18 ppm Pb, 100 ppb Zn and 150 ppm As. The limited data suggest that the Ledan schists are anomalous for Cu.

6.3.7 EL9836 ‘Bangtail Bore’

TENL’s interpretative Tanami-Arunta mapping suggests that the bulk of the tenement is covered by Georgina Basin sediment. The southern quarter of the tenement is occupied by metasediments (the Narwietooma Metamorphics), with a patch of granite in the southwest. The NTGS Alcoota 1: 250 000 fact mapping largely concurs with TENL’s interpretative mapping.
Limited field examination suggests that the mapping outlined above is correct, although the amount of Georgina Basin material is questionable, with only restricted exposures in the north. Relatively extensive exposures of granite and high-grade metamorphic lithologies occur in the southern part of the tenement. The northern section of the tenement is covered in thick mulga, interpreted to grow over substantial deposits of younger sequences.

No MODAT occurrences are recorded. The NTGS open-file database records that shallow auger drilling was performed at the northern extremity of the tenement targeting placer Sn / Ta adjacent to the Utopia workings.

### 6.3.8 EL22916 ‘Ongeva’

TENL’s interpretative Tanami-Arunta mapping ascribes the bulk of the tenement as the Narwietooma Metamorphics, with a wedge in the central part believed to be the Irindina Metamorphics Shear Zone. High-grade metamorphic lithologies, including granulites, are mapped at Mt Bleechmore. The outcrop in the extreme southern corners of the tenement is part of the Hart’s Range Group (Irindina Metamorphics). EL22916 is almost entirely obscured, either by alluvium, red clay soil or aeolian sand.

Field examination determined that the exposed metasedimentary lithologies are all high-grade metamorphics.

No MODAT occurrences are recorded. The NTGS open-file database shows that the Mt Bleechmore area is shedding a circular base metal and Cu anomaly. In the south an -80# stream sediment sample returned 4.8 ppb Au, 64 ppm Cu, 19 ppm Pb and 83 ppm Zn.

### 6.3.9 EL22924 ‘Delny’

TENL’s interpretative Tanami-Arunta mapping suggests somewhat variable geology. The north central area is interpreted to be batholithic granites, surrounded by extensive areas of metasediment (the Narwietooma Metamorphics). The younger Irindina Metamorphics occur in the southern part of the tenement. Extensive regions of younger cover, either the Waite Formation or quaternary sediments obscure large portions of EL22924 in the south and west.

The NTGS Alcoota and Huckitta 1: 250 000 fact mapping largely concurs with TENL’s interpretative mapping, and confirms that a substantial amount of outcrop is present. Unfortunately, most of the exposure appears to be of granitic lithologies or the Waite Formation.

Field examination indicates that granite (e.g. around Tower Rock) and the younger Waite Formation (especially around Mount Swan station) obscures much of the tenement, particularly in the central and eastern parts. Extensive outcrops of Georgina Basin sediments are also present in the east. Isolated patches of the Ledan Schist are present northeast of Mount Swan. The Ledan Schist is considered to be prospective, as it appears to be low in metamorphic grade, and is situated in close proximity to outcropping NW-SE trending structures. The Waite Formation covers a significant percentage of the western half of EL22924, but substantial patches of metasedimentary basement occur in the northwestern corner (adjacent to Waite River) and in the southeastern corner (close to the Plenty Highway). The basement outcropping between Waite River and Delny homestead has been mapped as the high-grade Delny Gneiss (and much appears to be of moderate- to high- metamorphic grade), but sections of this are low in grade and may represent retrograde zones. Samples collected from this region include pyritic chlorite schists (oxide pseudomorphs after sulphides).
The prospective lithologies mapped as the Ledan Schist are located in a northwest-southeast trending zone in the northeast corner of the tenement. The Perenti Cu prospect and associated northwest-southeast trending structures also occur within the Ledan Schist (see below).

A number of MODAT occurrences are present:

- ‘Perenti’ is described in the Alcoota Explanatory notes (Shaw & Warren, 1975) as ‘disseminated copper minerals in one of a series of quartz-breccia reefs in a large northwesterly shear zone, which cuts across the contact of the Mount Swan Granite. The Perenti reef is 850 m long and about 450 m wide. Drilling has proved copper values to be very low’. The Au tenor is not reported.

A major outcropping quartz ridge (quartz-filled shear zone) with a NW-SE orientation was located approximately 400m from the recorded location of the ‘Perentie” workings, which were not located. The structure is ferruginous and a substantial number of samples were collected, see above Section 6.2 Field Reconnaissance.

- ‘Undippa’; muscovite workings in the Irindina Metamorphics.
- Delny 1 and 2; tungsten workings in granitic host.

According to the NTGS openfile data, EL22924 has been extensively prospected by soil and stream sediment geochemistry. However, the northeastern portion of the tenement attributed to the Ledan Schist has received very little work. No Au anomalous results are apparent, but Au has been rarely assayed. Cu values up to 300 ppm are locally evident.

### 7.0 EXPENDITURE AND EXPLORATION BUDGET

The annual expenditure and exploration programs and budgets have been and will be reported separately for each tenement at its individual anniversary date.

### 8.0 REFERENCES


