Annual Report for

MCC968

for the year ended 26 June 2009

Kurundi Project,
Northern Territory

26 September, 2009

Held by: Cairns Territory Pty Limited
Operated by: Northern Uranium Limited

Author: Robin Wilson
Date: 2 October 2009
NTU Report No: 2009/06

SUMMARY:

Location: MCC968 is located approximately 400kms NNE of Alice Springs and 100km SE of Tennant Creek. The eastern part lies on the western edge of Kurundi Station, and the western part lies on Aboriginal freehold land of the Warumungu Aboriginal Land Trust.

Geology: The mineral claim is a small area of approximately15 Ha that covers the contact between Warramunga Group volcanics and sediments to the west of the ridge, and sheared and silicified felsic porphyry, which forms the ridge.

Work Done: Work completed in the reporting period includes topographic surveying, petrological studies, historical data compilation and digital capture, drill hole rehabilitation and Aboriginal traditional owner liaison and negotiation.

Results: Lack of access for the purposes of diamond drilling have hampered exploration progress. Petrological studies and historical data interpretation have highlighted the potential of immediate Munadgee mine workings area and the fact that the uranium mineralization remains open at depth.

Conclusions: More work is required in the immediate area of the historical Munadgee uranium mine workings to ascertain the nature and extent of the mineralization. Deeper diamond drilling under the workings is recommended to test for depth extensions of the mineralisation.

Table of Contents

Page

TABLES

FIGURES

APPENDICES

PLATES

1.0 Introduction

This report details exploration activities conducted on MCC968 between 27 June 2008 and 26 June 2009

2.0 Location

MCC968 lies approximately 400kms NNE of Alice Springs and 100kms SE of Tennant Creek (see Plate 1). It is located on the western boundary of Kurundi Station.

3.0 Geomorphology

Topographically, MCC968 covers part of a low ridge that lies several kilometers north and east of the Murchison Range in an area of low hills. A partial Landsat image of bands 731 in which the varying geomorphological units are relatively easily identified is shown in Figure 1 below. Relatively open grasslands are indicated in fluoro green and bound the major drainage channels which form deeply incised ghost gum lined streams. Darker green/brown colours in drainage areas are fairly thick regions of wattle and mulga and are to be avoided. More open wattle and spinifex covered plains are shown in brown tones. Outcrops of silica rich lithologies such as quartz veins, granites, cherts and sandstones have blue/purple hues. Saprolitic or clay rich areas are shown in white.

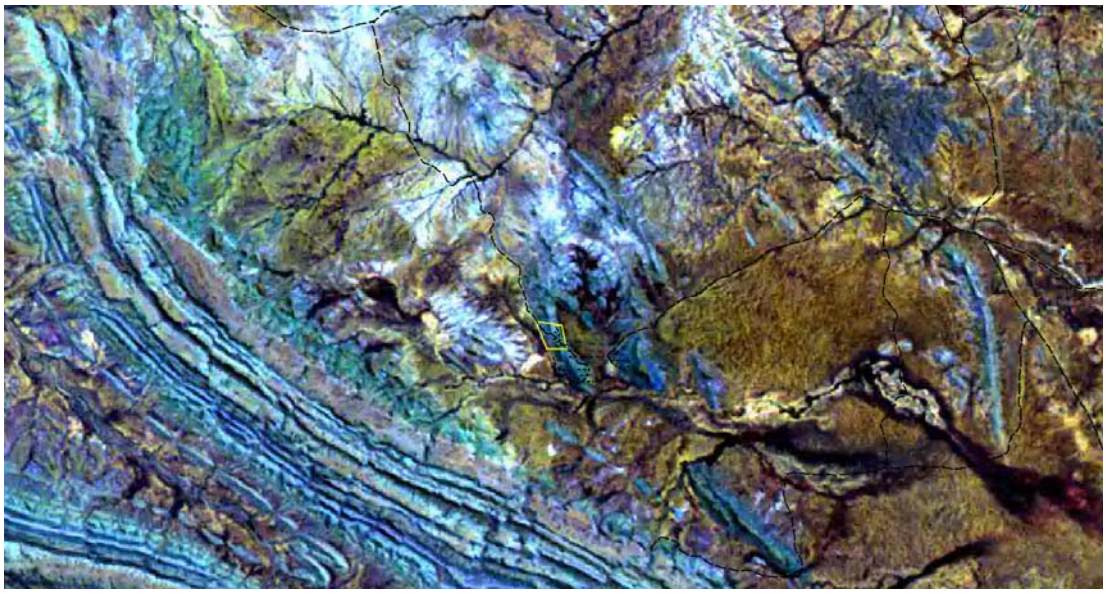


Figure 1. Landsat TM, false colour image of bands 731showing MCC968 in yellow (centre).

Skeletal soils and scree form the dominant regolith type over many of the more elevated ridges and ridge slopes. Ridge caps are often outcrop exposures while hill sides generally consist of uphill sourced colluvial material.

All streams flow intermittently during the ‘wet’ season which ranges from October to March. Numerous waterholes are located along the individual streams although only few are permanent. Annual rainfall is in the region of 300mm.

4.0 Access

Access can be gained via the unsealed Wauchope-Epenarra road past the Kurundi Homestead and then by station tracks east of Kurundi Creek going northwest to the mineral claim as shown below.

5.0 Tenure

MCC968 is held by Cairns Territory Pty Limited. Northern Uranium Limited is the current operator pursuant to an option agreement entered into with Cairns Territory on 20th June 2007. Prior to July, 2008, MCC968 was incorrectly mapped to the east of the Munadgee mine, and wholly contained within tenement EL23937. This has been corrected by the NT DRDPIFM and is now correctly plotted lying along the western edge of EL23937 and EL24995, tenements both held by Washington Resources, from whom Northern Uranium acquired the uranium rights to these tenements in 2006.

The mineral claim was due to expire on 26th June 2009, however an extension was applied for by Cairns Territory, which was granted by the NT DRDPIFM so that the expiry date is now 26th June 2019.

Table 1 – Tenement Summary

Tenement ID	Tenement type	Holder	Operator	Status	Grant Date	Expiry Date	Area (km^2)
MCC968	Mineral Claim	Cairns Territory Pty Ltd	Northern Uranium Ltd	Granted	27/06/1989	26/06/2019	2.77

6.0 Regional Geology

MCC968 lies within the Davenport Province at the southern part of the Tennant Creek Inlier. The regional basement rocks are Proterozoic (1870Ma) deepwater marine interbedded greywacke, siltstone and minor porphyritic felsic volcanics of the Warramunga Group which were moderately to tightly-folded about 1810Ma. The Warramunga Group is intruded by members of the Tennant Creek Supersuite. This includes the Hill of Leaders Granite (Pgb) which outcrops extensively to the northwest of mineral claim. It is a multi-phase, fractionated granite and characterized by large orthoclase phenocrysts up to +5cm in diameter. A coarse-grained biotite granite has also been recorded but may simply represent another phase of the Hill of Leaders Granite. The easterly flowing Munadgee Creek and the NW flowing Kurundi Creek mark the southern boundary of the granite which is otherwise enclosed within Warramunga Group.

The Kurundi Anticline lies to the south west of the mineral claim and the nose of the McLaren Syncline which wraps around its northern side marks the northern boundary of the Wauchope Fold Belt. This area is composed of the Hatches Creek Group which is shallow water sedimentary rocks (arenites, felsic and mafic volcanic, siltstone, mudstone, shale, carbonates and possible evaporates) deposited sometime between 1810Ma and 1640Ma. Quartz arenites usually occur as ridges and lithic or feldspathic arenites often have a clay or micaceous matrix and are recessive. The three subgroups of the Hatches Creek Group (Hanlon Subgroup, Wauchope Subgroup and Orradidgee Subgroup) are present in the surrounding areas.

The Orradidgee Block contains MCC968 (Plate 2) and is fault bounded against the Wauchope Fold Belt, Pingelly Block and Edmirringee Block. It is composed of sediments deposited in a shallow marine to fluvial environment, including deltaic sequences. Bimodal volcanism is recorded in formations of the Epenarra Volcanics and Edmirringee Volcanics belonging to this subgroup. This includes felsic volcanic, volcanic breccias, agglomerates and minor sediments in the former while the latter is characterized by basalts, mafic

schists and minor felsic volcanism. Plate 2 displays a stratigraphic column for the region. Within it the Warramunga group units have been intruded by a series of granites, all of which may predate the Hatches Creek Group.

Middle Cambrian shallow marine and sub-aerial sediments including siltstones, micaceous arenites and minor grit and conglomerate phases overlie the earlier lithologies in the northeast.

The region has undergone poly-phase deformation (NTGS) and been moderately- tightly folded (especially obvious in the ranges to the south). Regional northwest – southeast trending shear zones inferred by the NTGS transect to the south west of the mineral claim. The more intense deformation appears to have affected the Ooradigee group with several intense zones of shearing evident on the ground and backed by linear features on the aeromagnetics. Some of the contacts with the Hatches Creek Group may in fact be structural.

A large structure is evident on the recently flown aeromagnetics with a southeast – northwest trend crossing the Hill of Leaders granite in the vicinity of the old tungsten mines. It is expressed as a linear magnetic low trending over several kilometres.

Warping of lithologies associated with late granite intrusions may have occurred locally and affected orientations of the regional structures. The strength of these signatures is relative to the size and distance from the intrusive bodies. Late brittle faults with a roughly north-northwest to north orientation offset lithologies by tens of meters. This is particularly evident in the HCG sediments where drainage channels often exploit these fault zones.

7.0 Local Geology

The mineral claim covers 15.69 Ha over part of a low ridge. The ridge is a sheared felsic porphyry with silicic and potassic alteration zones. The western side of the ridge is interpreted to be a sheared contact with Warramunga Group volcanic and sediment.

7.1 Lithology

Four distinct rock packages have been recognized in the surrounding area of the mineral claim, the Warramunga Group, volcanics of unspecified origin, the Hill of Leaders granite suite and the overlying Hatches Creek Group.

The Hill of Leaders granite forms an elongate body trending sub parallel to the regional NW –SE strike. It appears to be of relative uniform composition and is traversed by several late dykes and structures.

Warramunga Group sediments are situated in an anastomosing belt, wedged between the Hill of Leaders granite to the NE and the younger Hatches Creek Group sediments to the southwest. HCG sediments dominate the southwestern corner of the area investigated. Several conglomerate outliers have been mapped although the main contact between the former and Warramunga sediments appears to be faulted. Volcaniclastics with an unspecified grouping dominate the southeastern extension of the Warramunga sedimentary package. The NTGS has placed the volcanics into a suite younger than the Hill of Leaders granite however aeromagnetic and structural data indicates that they are heavily deformed and folded and precede the granitoid. Minor volcanic units are present elsewhere in the Warramunga Group and it is likely that the lithologies belong to this rock suite.

In the immediate area of MCC968, volcanic and sedimentary lithologies dominate. A northwest – north-northwest trending quartzite or silicified zone delineates the southwestern contact of volcanic units with sedimentary rocks. The volcanics have been identified as feldspar porphyry intrusives, however locally there is

some evidence to suggest that the rocks may be of volcaniclastic origin, mainly in the form of textural evidence near the Munadgee mine.

Hatches Creek Group conglomerate and sandstone overlie the older lithologies 400m southeast of the mineral claim area. These sediments form part of an unconformity surface in this area.

On second vertical derivative aeromagnetic imagery a circular zone of diffuse magnetic anomalism is apparent, centered approximately 1km east of the Munadgee historical mine workings within MCC968. This has been inferred to be an unexposed granitoid with dimensions of approximately 3 x 2km with a NW- SE long axis. The depth of the intrusion below the current surface is unknown. A relatively shallow depth of emplacement (3-4km depth) is suggested by the large amount of cataclastic brecciation found in peripheral quartz veining.

To the east of the mineral claim large quartz veins and breccias have intruded major inferred structures which form the eastern contact of the volcanic units. Quartz veins fall into three main categories in the immediate Munadgee mine workings area:

(i) sheeted vein systems, generally discontinuous but strike extensive and in zones up to 10m wide;
(ii) tension veins, not as extensive, millimetre– to decimetre-scale, cross-cutting the rock package and often containing peripheral breccia clasts;
(iii) large (metre-scale) quartz veins, possibly very early and following original lithological contacts. In the quartzite these veins take on the shape of centimetre- to metre-scale sheeted vein system almost exclusively hosted in the latter.

A late hematite (or potassic) altered quartz porphyry has intruded one of the early large metrescale quartz veins ~700m SSE of the Munadgee mine workings. This rock has a cherty appearance with weakly developed quartz (or altered feldspar) porphyroblasts. It contains a millimetre-scale, grey–clear quartz vein stockwork that is the main host of the known uranium mineralization on the prospect. The dyke has been mapped discontinuously over approximately 200m and forms the main target-style for uranium mineralization in the project area at this stage.

7.2 Structures

Three major structures transect the surrounding area of MCC968 (Figure 2 overleaf). A sinistral strike – slip fault forms the contact between the Hatches Creek Group and Warramunga Group sediments south of the mineral claim area. Due to the presence of an unconformity between these two units the attitude of the fault is unknown. In the project area the unconformity surface does not appear faulted with the main structural contact referenced above possibly forming part of an original extensional fault system.

A second major structure is located along the contact of the Hill of Leaders granite and the Warramunga Group. This is marked by an extensive quartz breccia ridge and appears to have offset the volcanic units dextrally by approximately 2km. The structure also bounds the northern contact of the inferred small intrusive east of Munadgee.

The third and most important feature is an anatomising fault network that links the structures in a NW – SE direction. The network forms an approximately 500m wide corridor and transects the southern half and contact of the inferred intrusive as well as the overlying volcano-sedimentary package. Major movement on these structures appears to have been dextral as evidenced by tension vein arrays and folding. All significant uranium mineralization found to date lies within this fault system. All units are steeply (southwest?) dipping in the immediate Munadgee vicinity. The pre – HCG volcano-sedimentary rock package is tightly folded with a steep northerly plunge displayed in some areas. A dominant sinistral movement can be inferred from mapped evidence as well as magnetic lineaments.

A large scale synformal fold closure has been mapped 1km east of Munadgee, where sandstone and volcanic are folded about a NW trending fold axial surface. North of Munadgee the western limb of the synform displays dextral (S-shaped) symmetry. A number of parasitic fold closures have been mapped in this region.

In many cases lithologies and early structures are heavily overprinted by a late, steeply-dipping northwest striking regional penetrative foliation. This hinders recognition of early contacts, structures and bedding planes on the ground especially in the volcanic units. Note that the tension veins in particular often display some degree of folding as well as the late penetrative foliation overprint. At least a 10% compression of the rock-package is inferred from the evidence related to the formation of the penetrative foliation event.

Late faults displaying offsets over several metres are evident in the quartzite and larger quartz veins. These appear to be of little economic importance although they should be kept in mind due to their offsetting characteristics in any drilling operations. A flat fabric is also often locally developed in the volcaniclastic unit. This may be an effect of top loading of the now eroded younger Hatches Creek Group.

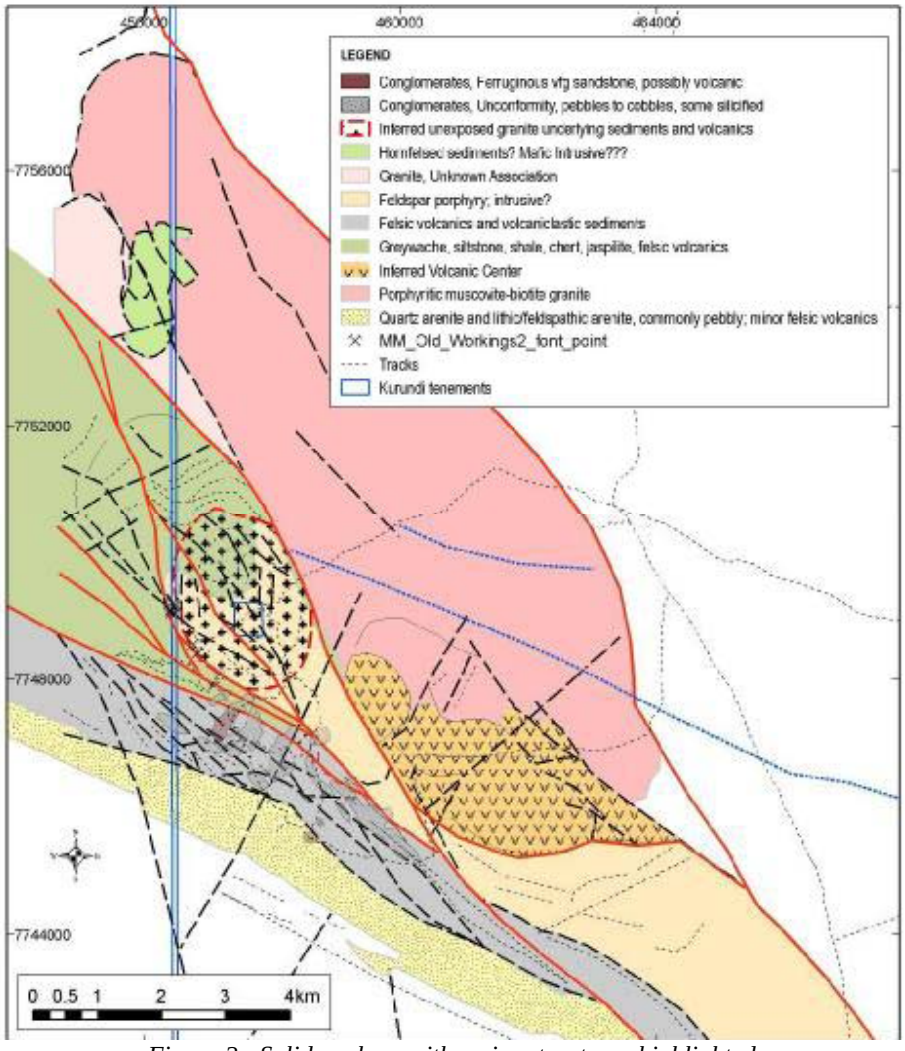


Figure 2 - Solid geology with major structures highlighted

8.0 Work Completed

8.1 Aboriginal Heritage Survey

In October 2008 a meeting was held at Tennant Creek between representatives of Northern Uranium, the Central Land Council (CLC) and Aboriginal traditional owners from the Munadgee/Kurundi area affected by the mineral claim MCC968. The meeting was held in response to Northern Uranium's proposal to carry out diamond drilling in the area of the historical Munadgee uranium mine. At the meeting Northern Uranium presented information to the traditional owners on the company background, the work completed on the area to date by Northern Uranium and details of the planned drilling program in the immediate Munadgee mine area.

After the meeting Northern Uranium received written notification from the CLC that the traditional owners request that Northern Uranium **does not** carry out any further work on MCC968. They have instructed the CLC that permission is not to be given for the company to work on the Aboriginal land portion of the Mineral Claim. The letter also stated that "in the event that Northern Uranium were to seek to rely on rights granted pursuant to the MCC against the express views of the traditional Aboriginal owners a further meeting with TOs and the company would need to be convened on the MCC to ensure protection for sacred sites.

Northern Uranium intends to follow-up this issue with the CLC prior to commencing any further drilling on MCC968.

An application was lodged by Northern Uranium to the Aboriginal Areas Protection Authority to reduce the size of the 50m exclusion zone around a heritage site centred at the Munadgee mine workings, in order to allow the company to drill test the immediate Munadgee mine workings area. This application was refused and the 50m exclusion zone remains in place.

8.2 Surveying

A detailed topographic survey of the Munadgee mine area was undertaken by surveying contractors, Brian Blakeman Surveyors of Alice Springs. The results of the survey are attached as Appendix 1. All drill hole locations within the Mineral Claim were also accurately surveyed and recorded.

8.3 Petrology

Petrological descriptions were obtained for 5 rock samples taken in the Munadgee mine area – three from the 2007 RC drilling program and two from the mine dump material (see Table 2 below). Thin sections and descriptions were completed by consulting mineralogist, Roger Townend & Associates.

The drill samples were all described as altered (silicified, sericitised, chloritic) & sheared porphyry, while the two dump samples were described as uranium mineralized sheared and silicified possible lithic tuff and uraniferous veined and silicified phyllite. Uraninite and a uranium phosphate mineral were recognized in these samples.

Table2 – Petrological Sample details

Sample ID	Hole ID	From (m)	To(m)	Description
TS27	NUKUAC004	12	13	Sheared feldspar porphyry
TS28	NUKUAC005	29	30	Silicified volcanic- trachyte
TS29	NUKURC004	74	75	Silicified & sericitised feldspar porphyry
TS31	Dump sample	n/a	n/a	Sheared porphyry
TS32	Dump sample	n/a	n/a	Breccia (sediments and porphyry)

The full petrological report is attached as Appendix 2.

8.4 Data compilation and interpretation

Historical downhole gamma logging and ground radiometric survey data around the Munadgee mine area from data collected by previous explorers in the 1970's were digitized and captured to the company's GIS database.

8.5 Drill hole rehabilitation

All RC and AC drill holes completed in the November 2007 drilling program have been plugged, and any PVC casing has been removed. Excess sample and unwanted samples have been returned back down the drill hole were possible. The remaining samples have all been bag farmed to a central location located south of the mineral claim with Northern Uranium's adjoining tenement. As further drilling is proposed in the immediate Munadgee mine area no ripping/scarifying or closing off of access tracks has yet been undertaken.

9.0 Proposed Work

Further work is proposed on the Mineral Claim in the form of diamond drilling underneath the historical Munadgee mine workings to test for depth extensions of the known uranium mineralization. Prior to commencing drilling a new authority certificate will be applied for from AAPA with respect to aboriginal heritage sites. The existing 50m exclusion zone around the Munadgee mine workings means that testing immediately below the Munadgee workings will not be possible and the drill holes will most likely need to be located along strike to the south. In addition a meeting will be sought with the CLC and Aboriginal traditional owners of the area prior to the commencement of drilling.

References

Wyche, S. And Simons, B., 1987. 1:250 000 Geological Maps Series Explanatory Notes, Bonney Well SF 53-2.

Walley, A.M., 1987., 1:250 000 Geological Maps Series Explanatory Notes, Frew River SF 53-3.

Stewart, A.J. and Blake, D.H., 1986, 1:100 000 Geological Maps Commentary, Kurundi Region, Northern Territory

Morewa, M., 2007, Northern Uranium limited, Report on Prospecting Activities, Kurundi Region, Warranunga and Davenport Provinces.

APPENDIX 1

Topographic Survey

Drill Hole Positions
Coordinate System MGA94 per NUL01
Level Datum AHD per NUL01

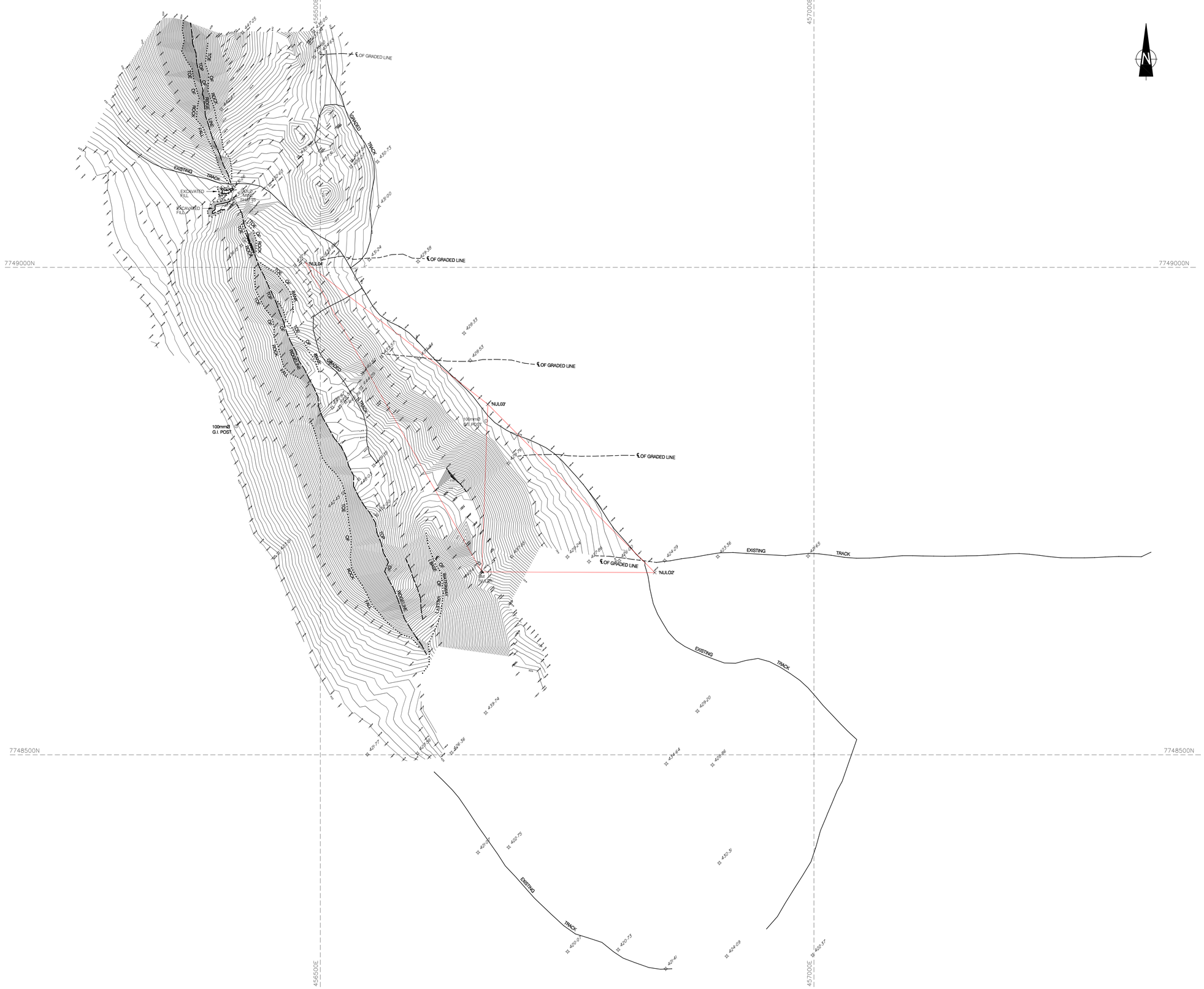
Easting	Northing	Height
456488.286	7749221.421	437.242
456448.762	7749077.167	432.635
456512.296	7748851.511	445.873
456519.868	7748852.606	446.584
456525.757	7748857.133	446.360
456541.559	7748871.503	444.290
456542.843	7748886.047	442.517
456411.318	7749063.082	431.190
456411.311	7749063.077	431.171
456802.770	7748696.483	425.999
456750.322	7748700.376	429.242
456661.284	7748693.493	443.673
456693.832	7748700.607	437.847
456772.123	7748695.629	427.864
456651.896	7748899.372	428.530
456600.280	7748901.278	430.838
456562.199	7748903.208	433.573
456599.006	7748999.488	429.382
456549.656	7749001.392	431.240
456501.989	7749002.621	433.885
456559.256	7749055.319	430.998
456557.919	7749100.467	430.727
456500.376	7749096.809	437.311
456478.084	7749105.298	435.904
456531.112	7749095.388	435.274
456532.104	7749101.519	434.543
456499.783	7749210.541	434.654
456493.794	7749206.467	435.803
456488.327	7749221.454	437.239
456493.508	7749232.157	435.047
456421.344	7749231.347	447.248
456399.826	7749153.630	442.467
456848.791	7748696.664	424.287
456902.575	7748700.673	423.357
456993.977	7748701.236	421.654
456904.235	7748390.457	430.314
456897.249	7748489.727	428.857
456850.390	7748490.911	434.645
456998.703	7748297.149	422.370
456911.653	7748296.041	424.086
456849.906	7748283.272	421.408
456801.695	7748302.551	420.729
456750.475	7748300.684	420.071
456690.789	7748406.410	422.748
456659.716	7748401.066	421.074
456667.602	7748542.505	439.738

LAYER NAMES

"0"
"1 SURVEY BENCHMARK"
"1_HT"
"10 SURVEY PEG"
"10_HT"
"13 SURVEY SPIKE"
"13_HT"
"257 TRACK CENTRELINE"
"257_HT"
"321 CONCRETE"
"321_HT"
"405 UNFORMED TRACK"
"405_HT"
"407 TRACK"
"407_HT"
"500" DRILL HOLE
"500_HT"
"501" NATURAL SURFACE
"501_HT"
"502 TOP OF BANK"
"502_HT"
"503 BOTTOM OF BANK"
"503_HT"
"GEOCOMP_ENTITY_1043Index"
"GEOCOMP_ENTITY_1043INDEX_LABEL"

439.74 = DRILL HOLE

32 0 32 64
SCALE in metres



NOTES:

ALL POINTS SHOWN ARE MGA94 COORDINATES BASED ON AUSPOS CALCULATED COORDINATES OF 'NUL01'.
ALL HEIGHTS ARE AHD PER 'NUL01'.
CONTOUR INTERVAL IS 0.5 METRE.
CONTROL POINTS:

'NUL01'	456663.530E	7748685.223N	R	L. 442.7540	BM
'NUL02'	456838.746E	7748684.457N	R	L. 424.9950	SPIKE
'NUL03'	456669.661E	7748854.931N	R	L. 428.9820	SPIKE
'NUL04'	456484.626E	7748998.920N	R	L. 436.2320	SPIKE

CONTROL POINT NUL01 HAS BEEN POSITIONED USING STATIC GPS OBSERVATIONS AND POST PROCESSING USING GEOSCIENCE AUSTRALIA'S AUSPOS SERVICE.
ALL OTHER CONTROL POINTS ARE IN RELATION TO NUL01.

ALL LEVELS SHOWN ON THIS PLAN ARE NATURAL SURFACE LEVELS.

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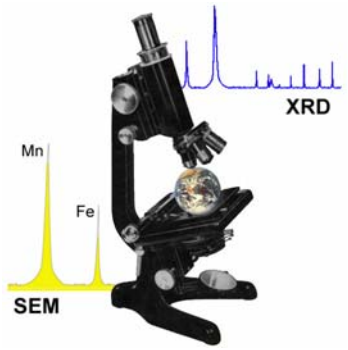
CLIENT NORTHERN URANIUM LIMITED
SUBJECT CONTOUR AND DETAIL SURVEY
KURUNDI LOCALITY

DRAWN CADRAFTING BBS08133 18.08.2008
SCALE 1:1600 AT B1
DRAWING NUMBER NORTHERN URANIUM 1

APPENDIX 2

Petrology Report



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KEITH TREES ` 28-7-2008

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Our Reference 22328

Preparation of five thin sections of three drill chip and two rock samples and petrographic descriptions.

Roger Townend

SAMPLE TS 27 12-13

DRILL CORE "breccia with clasts of TS 28"

THIN SECTION

ALTERED PHENOCRYSTS	ACCESSORY
SERICITE /GOETHITE	DOMINANT
TITANIUM OXIDES	MINOR
AMYGDALE	ACCESSORY
QUARTZ	
GROUNDMASS	DOMINANT
QUARTZ	DOMINANT
SERICITE	ACCESSORY
MONAZITE	TRACE
QUARTZ VEIN	

CLASSIFIED AS A SILICIFIED AND SHEARED PORPHYRY WITH QUARTZ VEIN

The 4X2.5 cm slide area appears to be one rock type. It is completely altered but retains a distinct porphyritic texture. These are a series of euhedral crystal shapes that are most typically are an elongate rhomb. They are now composed of sericite and disseminated subordinate goethite. These may exceed 2 mm long dimensions and show a distinct alignment. There is a second generation of rather smaller lesser euhedral? equivalents that are only sericite. Also present as single crystals are networks of secondary titanium oxide, possibly former ilmenites these rarely exceed a millimetre and their habit is subrounded to sub anhedral with some alignment. The porphyry also contains a few well rounded 100-200 micron amygdale like structures composed of quartz with an occasional coarse example having a sericite core.

The matrix to the above consists of a rather coarsely textured grey polarising mass with marked undulose extinction and penetrated by a very thin sericite network. This is identified as quartz (SEM)

The porphyry in the slide is crossed by an irregular quartz vein ,that shows some tendency to deformation in the direction of the host preferred fabric based on the phenocrystal alignment .

SAMPLE TS 28

DRILL CORE " silicified volcanic, trachyte?'

PHENOCRYSTS	ACCESSORY
CHLORITE	
GROUNDMASS	DOMINANT
FELDSPAR/SERICITE	MAJOR
CHLORITE	MAJOR
ORES	ACCESSORY
AMYGDALES	ACCESSORY
QUARTZ	
VEIN	
QUARTZ	

CLASSIFIED AS A COMPLETELY ALTERED AMYGDULAR PORPHYRY.

The rock is completely altered ,yet retains well its primary igneous texture. Former phenocrysts are now replaced by chlorite. These reach a millimetre and show subhedralism and alignment, that is not reflected in the coarse groundmass.

Probable amygdales are represented by coarse anhedral non aligned patches of vein like quartz, some with chlorite margins.

The dominant texture consists of former plagioclases? relic also than half millimetre long dimensions randomly arranged and cemented by a slightly subordinate chlorite. There is a heavy sprinkling of fine semi isometric shaped ores. Rarely these are more concentrated notably around an amygdale.

There is a small narrow quartz vein.

SAMPLE TS 29

DRILL CHIPS " sericitised silicified feldspar porphyry"

THIN SECTION

ALTERED PHENOCRYSTS	ACCESSORY
SERICITISED FELDSPAR	DOMINANT
CHLORITE	MINOR
TITANIUM OXIDES	MINOR
GROUNDMASS	DOMINANT
QUARTZ	DOMINANT
CHLORITE	ACCESSORY
SERICITE	ACCESSORY
APATITE	ACCESSORY
MONAZITE	TRACE

CLASSIFIED AS A SILICIFIED AND SHEARED FELDSPAR PORPHYRY

This largely altered porphyry is quite similar to sample TS 27. It contains numerous former phenocryst like structures ,now composed of sericite but lacking the intense goethite impregnation.

There is a much stronger evidence of shearing rather than flow., with the former phenocrysts often showing extreme elongation and parallelism. This is reflected also in the grey polarising quartz matrix with strong deformation extinction. Other chips have more euhedral phenocrysts shapes without apparent deformation in the coarse matrix and containing rare rounded quartz amygdales. This is not a result of the chip alignment in the slide.

There are translucent probable titanium oxide-rich crystals of phenocrystal dimensions with alignment. There are also uncommon chlorite phenocrysts.

The groundmass has a coarse-grained grey polarising texture and is essentially composed of quartz (SEM) with accessory sericite and chlorite. The chlorite has iron > magnesium.

Several chips contain small prismatic crystals of apatite and traces of monazite with chlorite.

SAMPLE TS 31

ROCK SPECIMEN " highly sheared porphyry"

THIN SECTION

1. SERICITE FRAGMENTS	MAJOR
URANINITE	TRACE
2. QUARTZ	DOMINANT
LEUCOXENE	ACCESSORY
SERICITE/TITANIUM OXIDE	ACCESSORY
VEIN	
QUARTZ	DOMINANT
ORES	TRACE

CLASSIFIED AS A URANIUM MINERALISED SHEARED AND SILICIFIED POSSIBLE LITHIC TUFF

The rock has a similar composition to sample TS 29 with elongate bodies of sericite showing alignmen, set in a coarse secondary quartzite matrix.

The sericite bodies with a composition similar to phengite, frequently exceed 3 mm long dimensions with shapes suggestive of lithic material rather than single feldspar crystals. Cf sample TS 32 . Macroscopically as shown in one optical image, the texture is similar to eutaxitic fabric of tuffs..

The very substantial metasomatic alteration in particularly in terms of silicification result in a rock which resembles the former probably unequivocal silicified porphyry is. The sericite fragments however are interpreted as sedimentary phyllite in the absence of other information. The siliceous groundmass may have volcanic origin , in which case the rock may be classified as unaltered lithic tuff.

The rock contains uranium mineralization in the form of uraninite. This occurs as disseminated crystals with examples from 40-200 microns. These occur predominantly but not exclusively within the sericite. See SEM example showing two larger uraninites of 150 and 200 microns.

SAMPLE TS 32

ROCK SPECIMEN " breccia (sediments and sheared porphyry)

THIN SECTION

1. PHYLLITE	MAJOR
2. VEIN BRECCIA	
SERICITE	DOMINANT
TITANIUM OXIDES	ACCESSORY
APATITE	ACCESSORY
VEINS	
QUARTZ	DOMINANT
URANIUM PHOSPHATE	ACCESSORY
GORCEIXITE	ACCESSORY

CLASSIFIED AS A URANIFEROUS SILICIFIED AND VEINED PHYLLITE.

The various fragments or clasts that are dominant are essentially composed of fine sericite. The largest examples are monomineralic uniformly finely textured phyllite like? sediments. This occurs in two semi continuous wide "bands" on the slide margins, that are penetrated by quartz veins. There are also discrete fragments of quartz vein material in one of these bands.

The central zone of the slide features a combination of quartz vein material, interlocked with irregular sericite patches that are often replete with fine columnar titanium oxide masses. This separates them from the marginal monomineralic phyllite.

Within the central zone, there are locally concentrations of finely acicular apatite, showing no distortion or fragmentation.

The rock contains uranium mineralisation, in the form of an unnamed uranium phosphate. This occurs in veins and fractures extending to over 2 mm with widths under 50 microns. There are also discrete grains around 150 microns. See two SEM images (uranium phosphate white). The uranium phosphate is also showing replacement of a barium aluminium phosphate probably gorceixite. This is shown as rectilinear crystals in SEM image T 32/2.

SAMPLE

PLATE 1

Regional Location Map

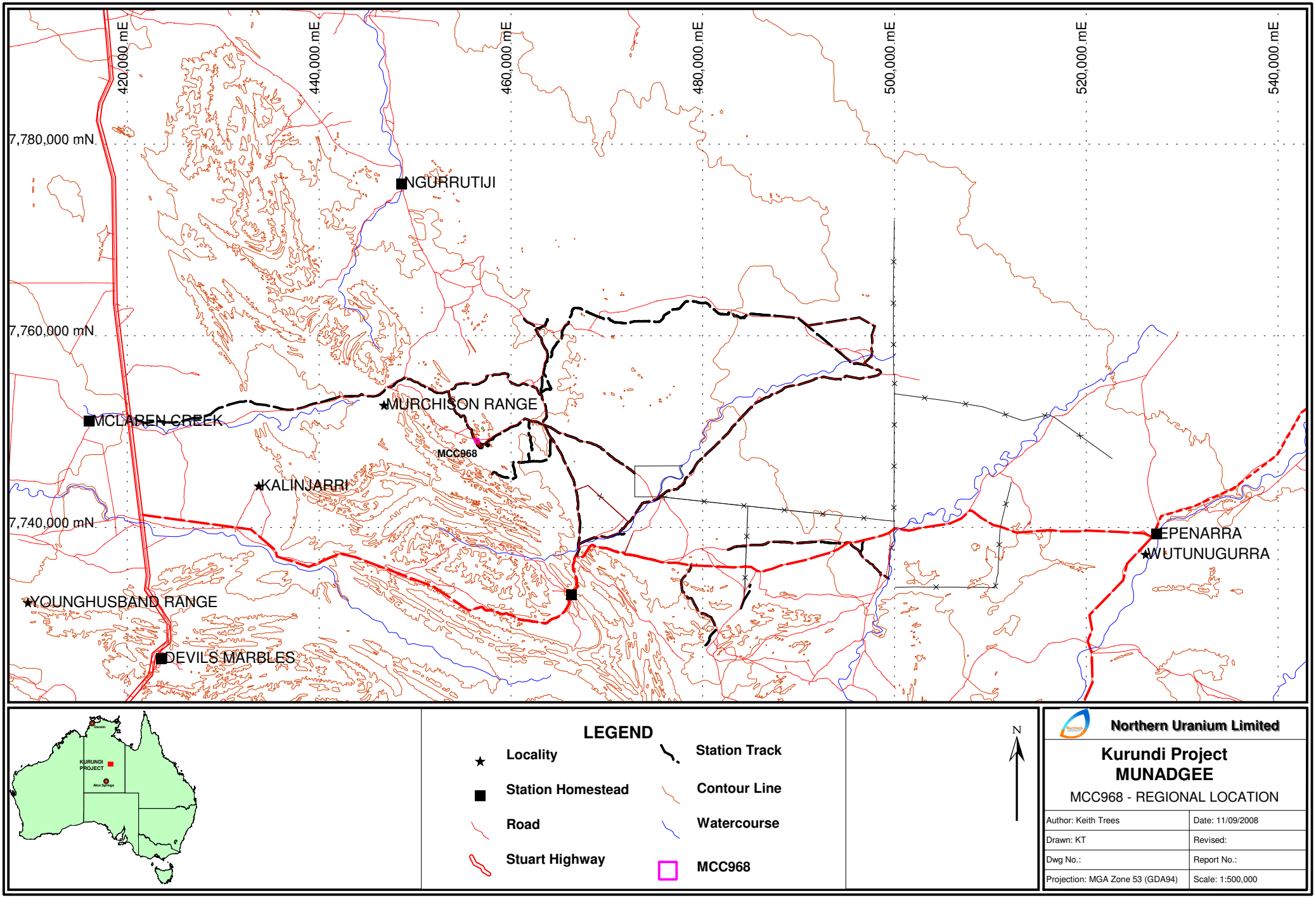
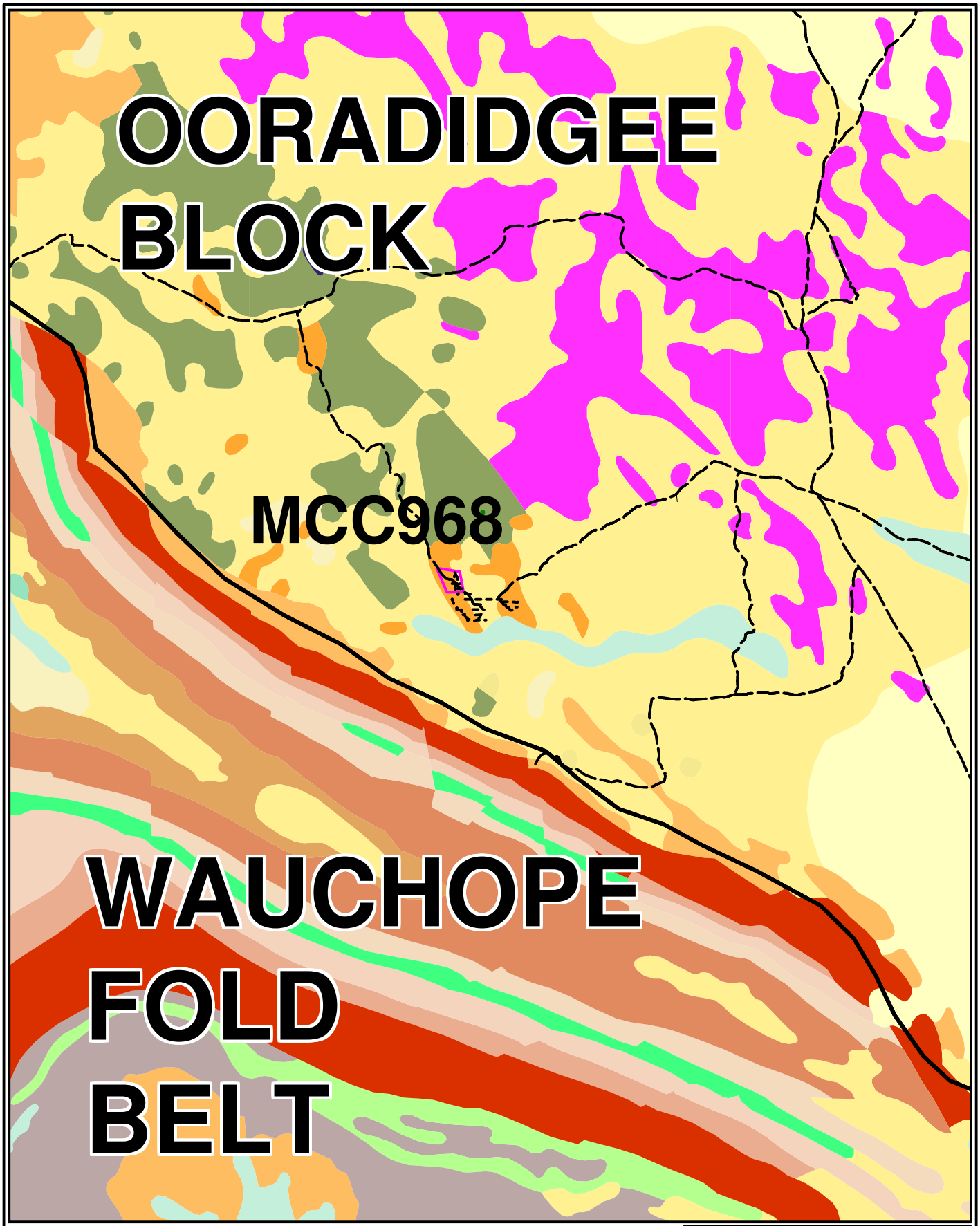
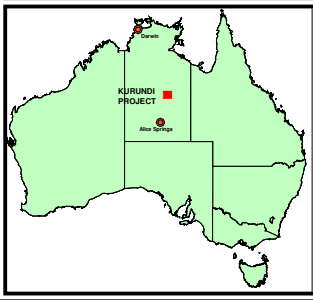

420,000 mE
440,000 mE
460,000 mE
480,000 mE
500,000 mE
520,000 mE
540,000 mE
7,780,000 mN
7,760,000 mN
7,740,000 mN
NGURRUTIJI
MURCHISON RANGE
MCLAREN CREEK
MCC968
KALINJARRI
EPENARRA
WUTUNUGURRA
YOUNGHUSBAND RANGE
DEVILS MARBLES
KURUNDI PROJECT
Alice Springs
LEGEND
Locality
Station Homestead
Road
Stuart Highway
Station Track
Contour Line
Watercourse
MCC968
N
Northern Uranium Limited
Kurundi Project
MUNADGEE
MCC968 - REGIONAL LOCATION
Author: Keith Trees
Date: 11/09/2008
Drawn: KT
Revised:
Dwg No.:
Report No.:
Projection: MGA Zone 53 (GDA94)
Scale: 1:500,000

PLATE 2

Regional Geology Map





LEGEND

- Qa
- Qc
- Qs
- Czc
- Tf
- M Conglomerate, sandstone,mudstone
- -Phl Lennee Creek Formation
- -Phi Alinjabon Sandstone
- Station Track
- -Phe Errolola Sandstone
- -Phb Kudinga Basalt
- -Phc Coulters Sandstone
- -Phd Yeeradgi Sandstone
- -Phs Unimbra Sandstone
- -Phr Epenarra Volcanics
- -Pgh Hill of Leaders Granite
- -Po Feldspathic Porphyry
- -Pw Warramunga Group
- MCC968

N

Northern Uranium Limited

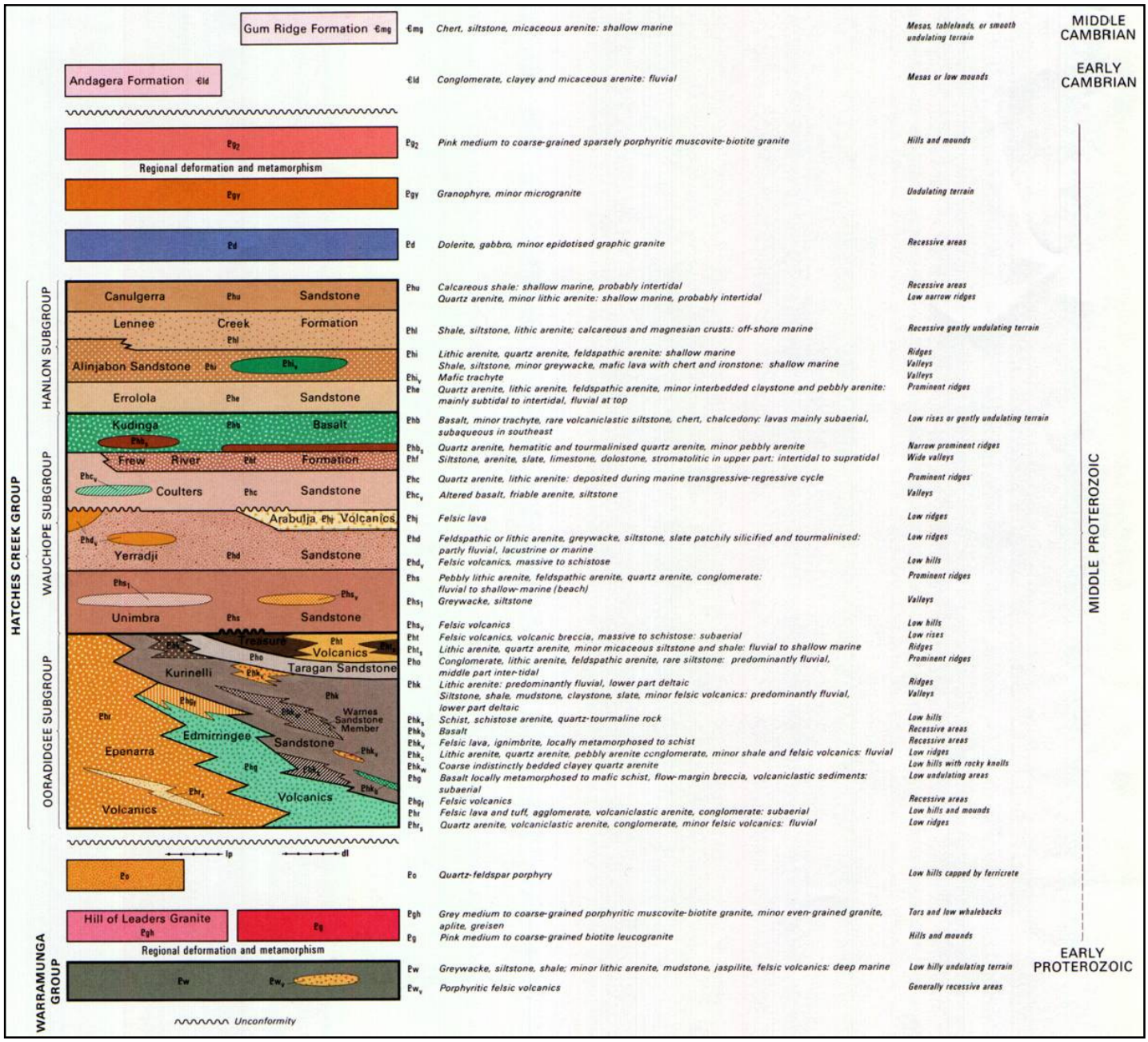
Kurundi Project
MUNADGEE
Regional Geology

Author:Keith Trees	Date:11/09/2008
Drawn: KT	Revised:
Dwg No.:	Report No.:
Projection: MGA Zone 53 (GDA94)	Scale: 1:100,000

PLATE 3

Detailed Geology Legend

PLATE 2 –GEOLOGY LEGEND



Stratigraphic column displaying the various units (Stewart, A.J. and Blake, D.H., 1986, 1:100,000 Geological Maps Commentary, Kurundi Region, Northern Territory)