

# EL 23070 Bynoe Final Relinquishment Report for the Period to 6th January 2010

# Volume 1 of 1

Tenure Holder and Operator:

**Uranex N.L.** 

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### **SUMMARY**

This final relinquishment report details all exploration work undertaken on EL 23070, granted 16<sup>th</sup> January 2003, being part of the Bynoe Project, up to 6th January 2010 when it was relinquished in total.

The licence is located on the south side of Bynoe Harbour, approximately 60km southwest of Darwin in the Northern Territory

Uranex was targeting East Alligator River Uranium Field (EARUF) and/or Rum Jungle Uranium Field (RJUF) style uranium deposits. This is based on the recognition by earlier explorers that the Lower Proterozoic stratigraphy has similarities and may equate with stratigraphically in the EARUF or the RJUF.

The Bynoe Project, which includes EL 23070, is located within the Litchfield Province on the western side of the Pine Creek Geosyncline. Geological elements within the Province include Palaeoproterozoic gneisses (Well Tree Metamorphics), syn-orogenic Palaeoproterozoic granitoids and post-orogenic Mesoproterozoic granitoids. Welltree Metamorphics is the dominant unit and is predominantly comprised of quartzo-feldspathic schist and gneiss with the basal Sweets Member represented by marble, calc-silicate rock, para-amphibolite and quartzo-feldspathic gneiss. It may equate with the important Cahill Formation of the East Alligator Uranium Field (EARUF) which hosts the mineralisation there. The north east striking regional Tom Turner Fault which transgresses the project area has down-faulted blocks of the Mesoproterozoic Depot Creek Sandstone preserved in it. The area is overlain by variable thicknesses of sandy conglomerates and laterite.

Exploration by Uranex began in 2005 with the acquisition of all available historical and published data and a compilation of a data base. In late 2006, Uranex contracted UTS Geophysics to complete a detailed aeromagnetic and radiometric survey. The geophysics was further processed by Southern Geo Sciences (SGS).

Using the processed aeromagnetic data, an interpretation of the magnetic stratigraphy and the distribution of the various Cahill Formation equivalents at Bynoe was completed. Target areas were then defined in locations where Uranium anomalous zones occur within this stratigraphy. The results of the earlier RAB drilling by previous explorers were also taken in to account.

Uranex NL then completed a Phase 1 RAB and Aircore drill program in October 2007 over the selected targets. Line spacing varied between 200 and 400 metres with holes generally 100 metres apart or 50 metres apart over the centres of best radiometric anomalies. A total of 10 holes were drilled for 126 metres. All 1 metre samples were logged geologically and tested for gamma counts with a hand held scintillometer. Samples were normally taken from the bottom metre and where elevated gamma counts were located. No holes intersected >20ppm U.

The Phase 2 RAB & Aircore program, completed in October 2008, was planned to test areas not previously tested by the Phase 1 drilling within suspected favourable stratigraphy and lithologies. Twelve (12) holes were drilled on EL 23070 for 217 metres. A total of 20 only samples were taken. Six (6) of these out of twelve (12) all taken on Section N8586800 had uranium value above 20 ppm. Three (3) consecutive samples in hole BR232 had values > 50ppm with a maximum of 66.1 ppm U all in saprolite above arkosic gneiss.

An AEM survey was completed in April 2009 by Fugro Geophysical services, flown in conjunction with Geoscience Australia as part of its Rum Jungle Survey. The line were flown east west with a spacing of 1.66 kilometres. No zones of bedrock conductors were located within EL 23070.

The exploration concept and defined targets for uranium in EL 23070 have adequately been tested. The tenement was relinquished on 6<sup>th</sup> January 2010.

Rehabilitation was completed on all drill programs including that of the older Continental Nickel.

The final expenditure on EL 23070 from the last anniversary to the date of surrender of the EL was \$37,628.00.

## **KEY WORDS**

Darwin (SD52-04), Bynoe (5072) 1:100,000 map sheets, Litchfield, Pine Creek Geosyncline, East Alligator Uranium Field, Rum Jungle Uranium Field, Archean, Proterozoic, Lower Proterozoic, Laterite, Uranium, Cahill Formation, AC Drilling, RC Drilling, Electromagnetics, Carbonates, Dolomites, Graphitic, Calcsilicate, Para-amphibolite, Unconformity, Uranium Australia Exploration Ltd (IUAE), Urangesellschaft Australia Pty Ltd (UG), UTS Geophysics, Airborne Electromagnetic Survey (AEM), Fugro Geophysical Services.

# **TABLE OF CONTENTS**

1.0 2.0 3.0 3.1 3.2 4.0 5.0 5.1 5.2 5.3 5.4 5.5 6.0 7.0 8.0	INTRODUCTION TENURE REGIONAL GEOLOGY TARGETING EXPLORATION MODEL PREVIOUS EXPLORATION BY OTHER COMPANIES EXPLORATION BY URANEX AIRBORNE GEOPHYSICS GEOLOGICAL COMPILATION RAB AND AIRCORE DRILLING PHASE 1 RAB AND AIRCORE DRILLING PHASE 2 AIRBORNE ELECTROMAGNETIC SURVEY CONCLUSIONS AND RECOMMENDATIONS FINAL EXPENDITURE REFERENCES	PAGE 1 1 2 2 3 4 5 5 7 8 12 15 16 16 17
LIS	T OF TABLES	
Table	e 1: Airborne Survey – Data Acquisition Specifications e 2: Bynoe Phase 2 Drill Sample Analyses Summary e 3: Final Expenditure January 16 <sup>th</sup> 2009 to January 6 <sup>th</sup> 2010	5 14 16
<u>LIS</u>	T OF FIGURES	
Figur Figur Figur Figur Figur Figur Figur Figur	re 1: Bynoe Project Location re 2: Bynoe RTP 1VD (showing Host Stratigraphy) re 3: Bynoe North U: Th Image (showing Host Stratigraphy) re 4: Bynoe North Solid Interpretive Geology re 5: EL 23070 TMI – 1 <sup>st</sup> VD (Shows Drill Phases) re 6: EL 23070 – U:Th (Shows Drill Phases) re 7: EL 23070 – UxU:Th (Shows Drill Phases) re 8: EL 23070 – Drill Traverses Phases 1 & 2 on UxU:Th re 9: EL 23070 Scout Drilling Phase 2 on UxU:Th re 10: EL 23070 Phase 2 – Drill Traverses on UxU:Th re 11: EL 23070 Phase 2 Scout Drilling on UxU:Th re 12: EL 23070 AEM Results 60 to 100 Metres Depth Slice	2 6 7 8 9 10 11 11 13 13

## **LIST OF APPENDICES**

APPENDIX 1 PHASE 1 DRILL HOLE PLANS AND RESULTS - ALL

Shows: Location & ID, Geology, Maximum Gamma, Maximum U, Maximum

Cu, Maximum Ni, Maximum Pb, Maximum Th.

EL 23070 PHASE 1 DRILL SECTIONS Stacked Section C shows traverse 8586600

APPENDIX 2 EL 23070 PHASE 1 DRILL LOGS AND ANALYSES

Shows: Mineralogy, Lithology, Colour, Profile, Structure, Weathering and

Analyses of all samples for Phase 1 EL 23070

APPENDIX 3 PHASE 1 ANALYSES = ALL

APPENDIX 4 PHASE 2 DRILL SECTIONS & PLANS - ALL

Phase 2 stacked sections.N8582800, N8583000, N8583200 &

N8586800

Plans show: Location ID, Geology, Maximum Gamma & Maximum U,

Maximum Ni & Maximum Pb, Maximum Th & Maximum Cu

APPENDIX 5 EL 23070 PHASE 2 DRILL LOGS AND ANALYSES

Phase 2 analytical results of drill samples taken on EL 23070,

Phase 2 Drill collars,

Phase 2 Lithological logs showing sample locations and numbers. .

## 1.0 INTRODUCTION

This final relinquishment report details all exploration work undertaken on EL 23070, granted 16th January 2003, being part of the Bynoe Project, up to 6th January 2010 when it was relinquished in total.

The licence is located on the south side of Bynoe Harbour, approximately 60km southwest of Darwin in the Northern Territory (Figure 1). Access to the project area is via the sealed Stuart Highway and Fog Bay Road. A north-south unsealed track from the Fog Bay Road to the Bynoe Harbour provides access to the licence and forms the base line for the grid. It becomes impassable during the wet season. The tenement is situated on the Darwin (SD52-04), 1:250,000 map sheet and the Bynoe (5072) 1:100,000 map sheet.

The terrain in the area is generally flat and cut by creeks which lead to mangrove swamp areas and ultimately the coastline. Vegetation cover in the area is moderate to thick with 15m tall trees covering the area that is best described as open Eucalypt forest.

Uranex was targeting East Alligator River Uranium Field (EARUF) and/or Rum Jungle Uranium Field (RJUF) style uranium deposits. This is based on the recognition by earlier explorers that the Lower Proterozoic stratigraphy has similarities and may equate with stratigraphically in the EARUF or the RJUF. Targets based on this model had been previously drilled to a limited extent by an Idemitsu Uranium Australia Exploration Ltd (IUAE) and Urangesellschaft Australia Pty Ltd (UGA).

### **2.0 TENURE**

EL 23070 was originally granted on 16<sup>th</sup> January 2003. The EL formed part of Bynoe Project which originally comprised eight (8) granted exploration licences. The initial applications for EL's 23070 and 23071 was by Barrett Exploration Pty Ltd (Barrett) in February 2001 and later licences by Anglo American Exploration (Australia) Pty Ltd (AAEA) in May 2003. On grant of EL 23070 and EL 23071, Barrett sold its interest in the licences to AAEA in a royalty deal. These licences were transferred to AAEA on January 12<sup>th</sup> 2004.

On April 19<sup>th</sup> 2004, AAEA signed a deal to sell the project licences to Continental Nickel which became the registered holder of the licences on September 7<sup>th</sup> 2004. The application for EL 24684 was granted to Continental on 10<sup>th</sup> February 2006.

On the 1<sup>st</sup> December 2005, Continental sold its interest in the Bynoe project licences to Uranex. Exploration licences 23070, 23071, 23915, 23917, 24019, 24020 and 24021 were transferred from Continental to Uranex on 15<sup>th</sup> February 2006. Later, EL 24684 which was granted on 10<sup>th</sup> February 2006 was also transferred to Uranex on 17 February 2006.

Combined reporting status was granted for EL's 23070, 23071, 23915, 23917, 24019, 24020 and 24021 on 10<sup>th</sup> August 2005. Later in 2006, EL 24684 was included in the combined reporting group.

The Bynoe tenements are located on a combination of leasehold and freehold land.

EL's 23915 and 23917 were relinquished on 13 June 2008. EL's 24020 and 24021 were relinquished on 26<sup>th</sup> May 2009. The remaining EL's 23070, 23071, 24019 and 24684 were all later relinquished on 6<sup>th</sup> January 2010.

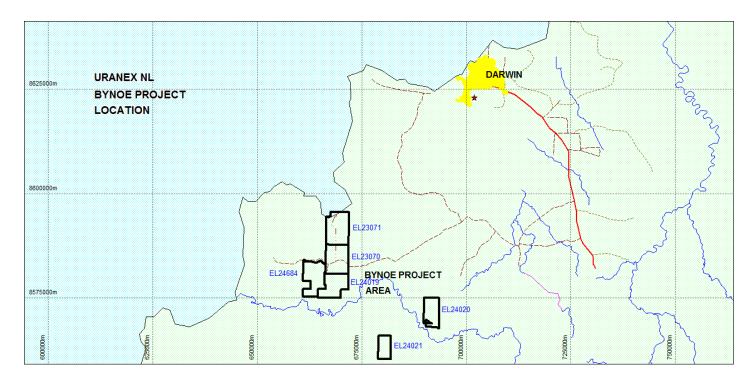


Figure 1: Bynoe Project Location

### 3.0 REGIONAL GEOLOGY

The Bynoe Project, which includes EL 23070 is located within the Litchfield Province on the western side of the Pine Creek Geosyncline, west of Darwin. The Province extends for several hundred kilometres in a north-south orientation with a width exceeding 60 kilometres. Geological elements within the Province include Palaeoproterozoic gneisses (Well Tree Metamorphics), synorogenic Palaeoproterozoic granitoids and post-orogenic Mesoproterozoic granitoids.

The early Proterozoic Welltree Metamorphics is the dominant unit within the project and is predominantly comprised of quartzo-feldspathic schist and gneiss with the basal Sweets Member represented by marble, calc-silicate rock, para-amphibolite and quartzo-feldspathic gneiss. It may equate with the important Cahill Formation of the East Alligator Uranium Field (EARUF) which hosts the mineralisation there. The north east striking regional Tom Turner Fault which transgresses the project area has down-faulted blocks of the Mesoproterozoic Depot Creek Sandstone preserved in it. This suggests the Mesoproterozoic unconformity may be close to the present day land surface.

The tenement areas are overlain by variable thicknesses of sandy conglomerates and laterite which are generally exposed in creeks and at change of slope positions. In elevated areas, the laterites are covered with sand and soil up to 5m deep. Although quite variable the weathering profile averages between 40 to 60m depth.

#### 3.1 TARGETING

Uranex are targeting East Alligator River Uranium Field (EARUF) and/or Rum Jungle Uranium Field (RJUF) style uranium deposits. This is based on the recognition by earlier explorers that the Lower Proterozoic stratigraphy of the area has similarities that may equate with stratigraphy in the EARUF or the RJUF.

In the EARUF, the Lower Cahill Formation host lithologies consist of interbedded pyritic carbonaceous mica schists, chloritic calc-silicates, dolomites and chloritised felspathic quartzites. At the RJUF this sequence correlates to the Whites Formation. These sequences were metamorphosed during the 1870–1800ma orogeny and potentially have equivalents in the Bynoe Project area. This has been demonstrated by previous uranium explorers such as Idemitsu and Urangesellschaft who targeted and drilled potential Cahill Formation stratigraphy and lithofacies.

The three main criteria for forming these deposits in the Pine Creek Basin are:

- 1) Proximity to Archaean–Lower Proterozoic crystalline basement highs (>1800ma). These are the Nanambu Complex at EARUF, the Rum Jungle and Waterhouse Complexes of the RJUF and parts of the Litchfield Complex.
- 2) Favourable Lower Proterozoic host rock stratigraphy and lithofacies. At the EARUF, this is the Lower Cahill Formation. This starts at the base with massive dolomites and minor gneisses and schists. These underlie the major uranium deposits. The apparent equivalents at RJUF would be the Manton's Group Celia Dolomite and the Mount Partridge Group's Crater Formation and Coomalie Dolomite.
- 3) Proximity of the current land surface profile to the base of existing or previously overlying Middle Proterozoic sedimentary cover rocks. This is the Kombolgie Formation at EARUF and the Depot Creek Sandstone at the RJUF and the Litchfield Complex. Critical to the exploration equation for the Bynoe area is how far the current land surface is below the pre-Depot Creek Sandstone regolith and whether there was a pre-sedimentary felsic volcanic episode equivalent to the Edith River Volcanics.

#### 3.2 EXPLORATION MODEL

The basic uranium exploration model used by Idemitsu and Urangesellschaft is being applied by Uranex. It assumes that the basal Sweets Member of the Welltree Metamorphics is equivalent to the Cahill Formation of the East Alligator, and overlies Archaean / Proterozoic gneissic and granitic basement.

This sequence is divided into three stratigraphic units: Plc1, 2, and 3. Plc1 is equivalent to the Lower Cahill and is comprised of calc-silicates and thick dolomitic intervals. Graphitic and phlogopitic zones also occur. In the EARUF model, the mine sequence is at the top of this and sits above the massive dolomites.

Plc2 consists of para-amphibolites and calc-silicate microgneisses and is distinctly magnetic. This is conveniently equated with the Upper Cahill Formation, which at East Alligator, is also distinctly magnetic and provides an important magnetic stratigraphic marker above the mine sequence of the Lower Cahill. Similarly, the host lithologies are expected to directly underlie the Plc2 unit.

Plc3 consists of quartz-feldspar-biotite gneisses and quartzites which could be part of either the Upper Cahill, or the overlying Nourlangie Schists / Mt Partridge Formation.

A technical success was claimed at Target Area A1 where 5 holes in a radius of 100 metres intersected anomalous uranium (>100 ppm). Best results included 2100 ppm uranium within a 1.5 metre interval averaging 0.48 kg/tonne. The mineralisation was uraninite, associated with hematite—chlorite—feldspar—sericite—prehnite—epidote alteration. Stratigraphically and lithologically, it could compare with the Lower Cahill Formation as it is at, or near a dome interpreted from a detailed ground gravity survey to have been formed by intersecting fold axes.

### 4.0 PREVIOUS EXPLORATION BY OTHER COMPANIES

Initial exploration in the northern areas was conducted by Arafura Sand and Aggregate Pty Ltd on EL1753. The licence was then transferred to Australian Coal and Gold Holdings Limited (ACGH) in 1981. All exploration completed prior to 1982 has been previously reported by Brown (1982).

Between 1981 and 1985, ACGH conducted exploration targeting uranium and base metals in the tenement area. Exploration included a regional aeromagnetic survey, a ground magnetic survey and a RAB drill program consisting of 740 holes averaging 10m depth. Holes were drilled on an 800m by 100m grid and then infilled to 100m by 40m around anomalous areas. Downhole radiometrics and RAB geochemistry were used to target uranium and base metals. Four diamond holes were drilled. Hole MHD2 intersected metamorphosed mafic to ultramafic rocks with minor disseminated sulphide and a thin horizon of remobilised massive sulphide assaying 1.2% Ni (Porter, 1986). These nickel sulphides were not the target of the programme and were not followed up.

Subsequent exploration in the region, by a Joint Venture between Idemitsu Uranium Exploration Australia (IUEA) and Urangesellschaft Australia Pty Ltd (UGA), resulted in 39 diamond drill holes being drilled with encouraging uranium results in the north of the current EL 24684.

Between 1991 and 1994, Eupene Exploration Enterprises Pty Ltd explored the project area for base and precious metal mineralisation. Exploration activities consisted of surface geochemical surveys to determine the effectiveness of pisolitic laterite sampling. A total of 43 pisolitic laterite samples were collected on 50-150m centres at 200m line spacings. The Cu/Zn and Cr/Ni ratios of the samples showed some correlation to the bedrock ratios intersected in ACGH RAB holes. This suggests that laterite sampling is an effective sampling medium for base metals. Surficial distribution of Co proved irrelevant due to its absorption into MgO. A number of anomalous gold results (greater than 5ppb) were identified, however 10 follow up samples failed to confirm the initial results (Berthelsen, 1994). The licence was relinquished in March 1994.

In 2001, Barrett recognised the nickel potential of the area for magmatic nickel sulphide mineralisation, pegged the licence and brought the area to the attention of AAEA. During the 2004 to 2005 reporting period, exploration conducted by AAEA included a comprehensive review of previous exploration in the region, and reprocessing of Northern Territory Geological Survey aeromagnetic data. A 48 line-km ground TEM survey and 70 line-km ground magnetic survey were conducted over EL 23070 and EL 23071 (Manzi et al., 2004).

The TEM program was designed to target Ni mineralisation associated with discrete aeromagnetic features within a larger intrusive belt. Two main EM targets were identified. These targets correlate with the trend of anomalous Ni geochemistry identified by previous explorers. The targets are located along a NE/SW trending structure and also show correlation to magnetic features.

The ground magnetics improved resolution, and highlighted folds and structural trends that were not visible in the pre-existing aeromagnetic data. A strong magnetic anomaly delineated on the southern boundary of the tenement is significantly stronger than any of the other magnetic features in the project area. The ground magnetic data shows a patchy irregular response in the northern part of the tenement area. It is possible that this area has been subject to magnetite destructive phases of alteration (Stacey, 2003).

For full details of previous exploration activities conducted on Exploration Licences 23915, 23917, 24019, 24020 and 24021 refer to Manzi et al (2005).

Exploration by Continental Nickel over the project licences between 2003 and 2004 comprised compilation and validation of historical data to generate new targets, and the completion of initial RC drilling programmes. RC drilling by Continental successfully intersected both ultramafic and mafic lithologies in most holes. Disseminated sulphides were intersected in BRC006 and returned a best assay of 1.0m @ 0.48% Ni, 0.10% Cu, and 0.21g/t PGE from 48m.

In addition uranium mineralisation has been encountered during the drilling with a best result of 1m @ 177.57 ppm U and 247.62 ppm Th from 97m in BRC004. Hole BRC007 also intersected weakly elevated uranium including 5m @ 63.57ppm U and 81.81ppm Th from 53m. Further investigations into the uranium potential of the project were required.

## **5.0 EXPLORATION BY URANEX**

Exploration by Uranex began in 2005 with the acquisition of all available historical and published data and a compilation of a data base in preparation for the following exploration programs.

#### 5.1 AIRBORNE GEOPHYSICS

In Late 2006, a detailed airborne geophysical survey was completed. The processing and interpretation of the results and defining targets followed. There was a combination of 200 and 100 metre spaced lines as shown below in Table 1.

**Table 1: Airborne Survey - Data Acquisition Specifications** 

NAME			LINE TIE LINE SPACING		SENSOR HEIGHT	TOTAL LINE KM
Bynoe area 1	200m	090-270	2000m	000-180	40m	2,064
Bynoe Area 2 (Infill to area 1)	200m(offset by 100m)	090-270	2,000m(offset by1000m)	000-180	40m	838
Bynoe Area 3	200m	090-270	2000m	000-180	40m	247
Bynoe Area 4	200m	090-270	2000m	000-180	40m	264
TOTAL						3,413

UTS Geophysics was contracted to complete a detailed aeromagnetic and radiometric survey comprising 3,413 line kilometres over the whole project area.

The geophysics was further processed by Southern Geo Sciences (SGS). They produced an array of images that allowed a far better interpretation of the results.

Magnetic images included – RTP 1VD, RTP 2VD, RTP Gradient, TMI 1VD, and TMI AnSig images all with various shade directions.

Radiometric images included K, U, TH, U:Th, UxU:Th, & Ternary images, all with various shade directions. The U: Th ratio image was very useful in reducing the effect of uranium and thorium rich laterites and granites and emphasising uranium dominant sources. The Uranium Indicator that uses U x U:Th image emphasises the uranium component even further.

Selected images are given for the Bynoe Project area below.

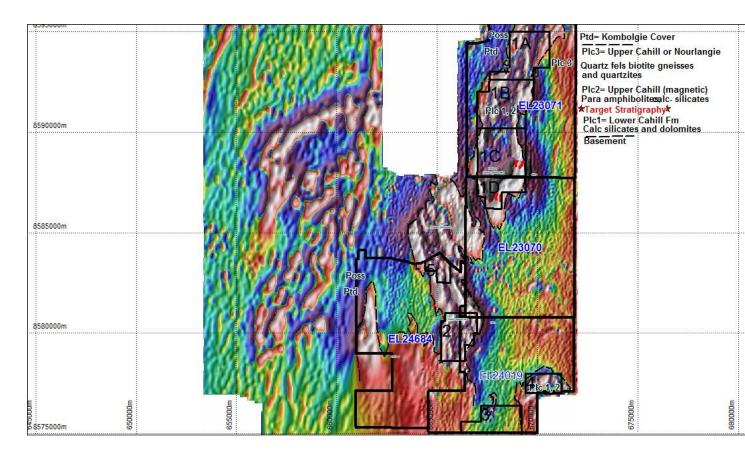


Figure 2: Bynoe North RTP 1VD (Shows Host Stratigraphy)

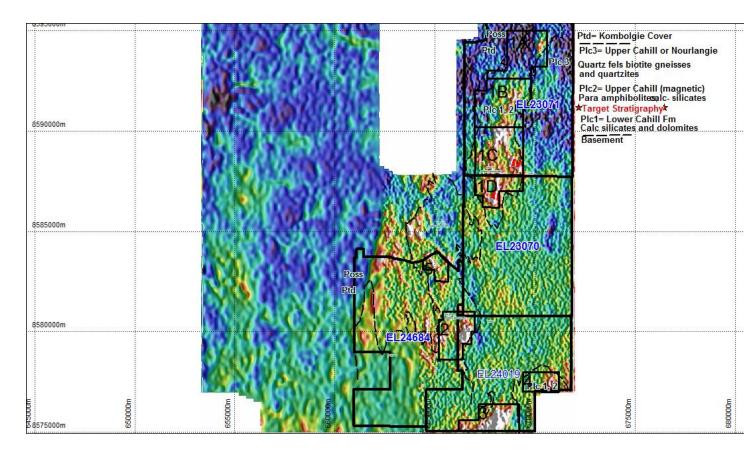


Figure 3: Bynoe U:Th Image (Shows Host Stratigraphy)

#### **5.2 GEOLOGY COMPILATION**

As part of the historical data compilation, geological interpretations by Idemitsu were located and digitised in order to assist with a first pass evaluation of the Bynoe Project geology (Figure 4). This geology covers the northern Bynoe area where the Early Proterozoic Welltree Metamorphics is the dominant unit. It is predominantly comprised of quarto-felspathic schist and gneiss with the basal Sweets Member represented by marble, calcsilicate rock, para-amphibolite and quarto-felspathic gneiss.

Middle Proterozoic sediments of the Depot Creek Sandstone are preserved in down faulted linear blocks across and to the west of the project area. These may be equated with the Kombolgie Formation in the EARUF, which unconformably overly the uranium host sequence and are proximal to known deposits.

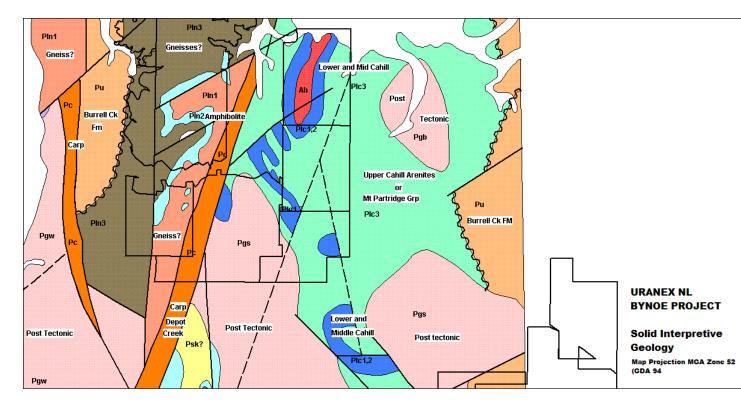


Figure 4: Bynoe Solid Interpretive Geology

Following the interpretation of the processed aeromagnetic data as shown in Figure 2, an interpretation of the location of the various Cahill Formation equivalents at North Bynoe was attempted.

The processed magnetics enabled an interpretation based mostly on the magnetic marker lithologies (Pcl 2) that may equate with the Upper Cahill Formation. A fold pattern was interpreted allowing the potential distribution of the potential mine sequence equivalent (top of Pcl 1) immediately below the Pcl 2 to be postulated. Folding is apparently tight for much of the target area meaning the host sequence could be exposed or be stratigraphically shallow in the tight anticlines. For this reason the whole of the suggested Pcl 1 and Pcl 2 envelope has been targeted as a potential host.

Once the potential host stratigraphy was defined then target areas were defined in locations where U:Th anomalous zones occur within this stratigraphy. The results of the earlier RAB drilling by previous explorers were also taken in to account.

#### 5.3 RAB AND AIRCORE DRILLING PHASE 1

Uranex NL completed a Phase 1 RAB and Aircore drill program in October 2007 over targets selected from the airborne survey and the results of previous explorationists.

The interpreted aeromagnetics were used to locate what may be the most suitable host lithologies possibly equivalent to the Lower Cahill Formation of the EARUF as shown in Figure 4.

The magnetic stratigraphy within EL 23070 is shown below in Figure 5 with all drill holes marked.

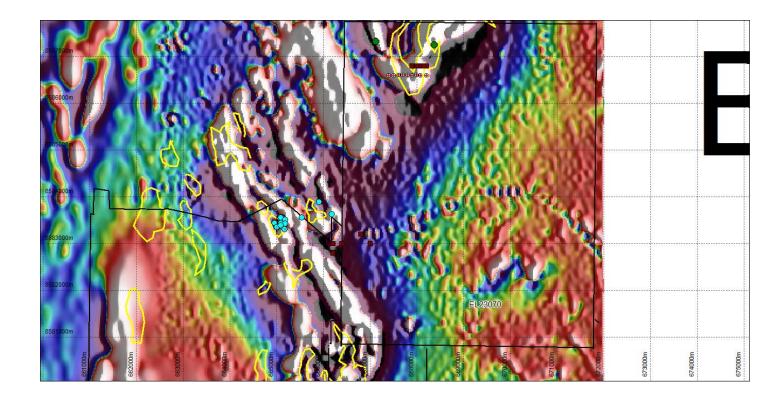


Figure 5: EL 23070 TMI - 1st VD

Most consideration was given to where the best radiometric anomalous areas were located. These were selected by using the U:Th ratio and the UxU:Th images as shown in Figures 6 & 7.

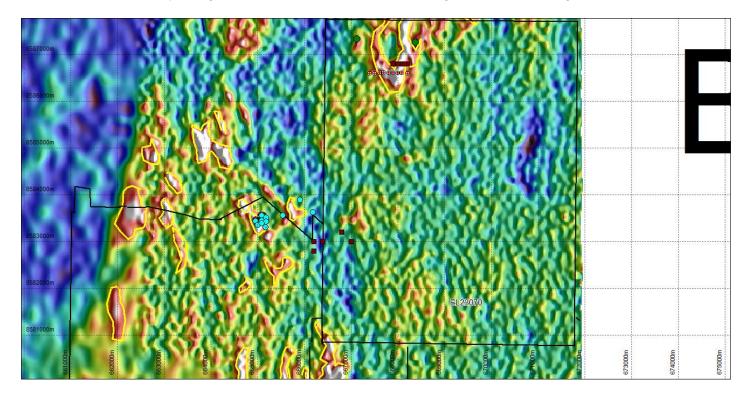
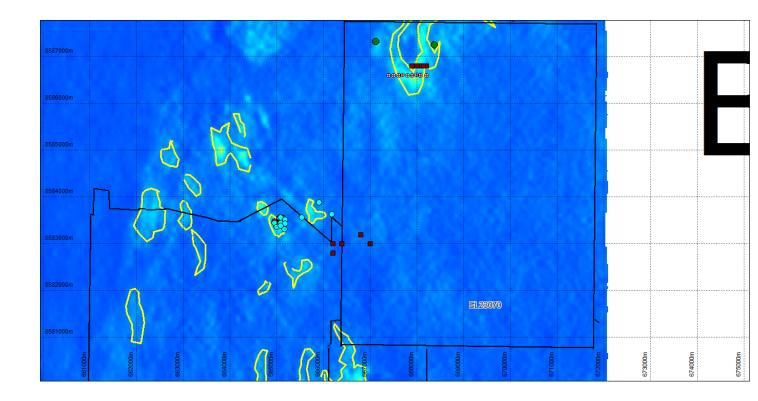


Figure 6: EL 23070 U:Th

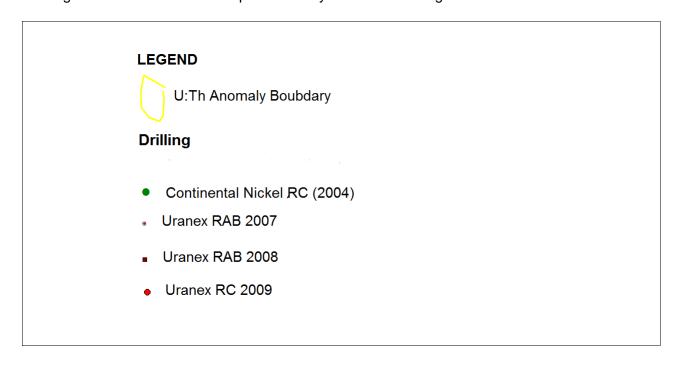


# Figure 7 EL 23070 UxU:Th

Line spacing varied between 200 and 400 metres with holes generally 100 metres apart or 50 metres apart over the centres of best radiometric anomalies. These were all vertical.

Detailed drill traverses within EL 23070 are shown on the 3 images on the UxU:Th background is shown on Figures 8 & 9 below.

The legend below shows the drill phases and years drilled on Figures 5 to 9.



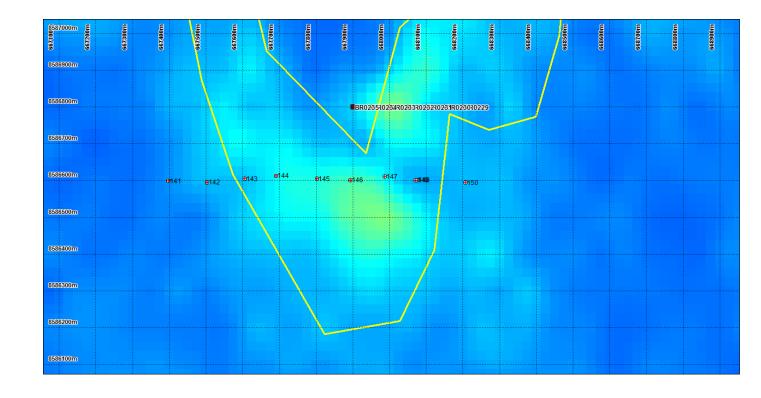


Figure 8 EL 23070 Drill Traverses Phases 1 and 2 on UxU:Th

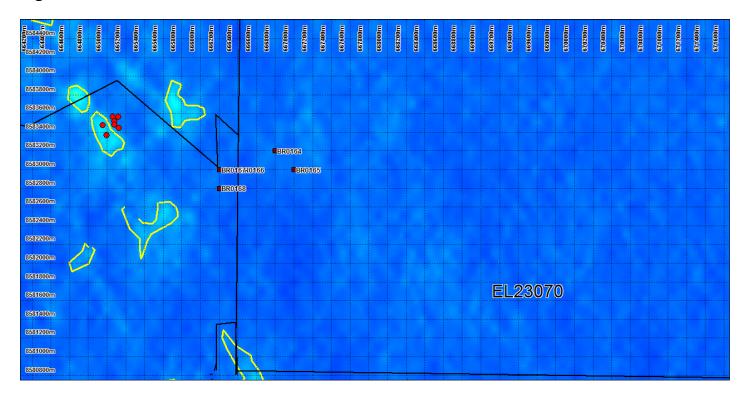


Figure 9 EL 23070 Scout - Drilling Phase 2 on UxU:Th

A total of 10 holes were drilled for 126 metres. All 1 metre samples were logged geologically and tested for gamma counts with a hand held scintillometer. Samples were normally taken from the bottom metre and where elevated gamma counts were located.

The results are given and discussed in the Combined Annual Report to 20th July 2008 (Robinson P., 2008).

Many holes finished in the Cretaceous sedimentary cover lithologies. No holes intersected >20ppm U. The best uranium assay was 11.7 ppm from the bottom metre of hole NOR 145.

Appendix 1 to this report contains PDF location plans showing:

- Location & ID,
- Geology,
- Maximum Gamma,
- Maximum U,
- Maximum Cu,
- Maximum Ni,
- Maximum Pb,
- Maximum Th

Appendix 1 also shows PDF C which shows all the Phase 1 cross section N8586600 drilled on EL 23070.

Each hole shows – Hole ID, Total depth, Colour coded lithologies, Bottom hole lithology, Down hole gamma histogram, Bottom hole gamma and U, Th. Cu, Ni & Pb values where sampled.

Appendix 2 contains all the individual drill logs showing: Mineralogy, Lithology, Colour, Profile, Structure Weathering and Analyses of all samples for Phase 1 EL 23070.

Appendix 3 shows the analyses of sample numbers 509516 to 509535 from EL 23070

#### **5.4 RAB AND AIRCORE DRILLING PHASE 2**

The Phase 2 RAB & Aircore program, completed in October 2008, was planned to test areas of interest not tested in Phase1 drilling within possibly favourable stratigraphy and lithologies.

Twelve (12) holes were drilled on EL 23070 for 217 metres. Holes were drilled to and into bedrock lithologies below the laterite and sedimentary cover or to drill refusal.

The locations of completed holes BR229 to BR235 are shown on Figure 10 below and as stacked section 8586800N in Appendix 4.

Locations of scout holes BR164 to BR168 are shown on Figure 11 and plotted on the as stacked sections 8582800N, 8583000N and 8583200N in Appendix 4.

All 1 metre samples were logged geologically and tested for gamma counts with a hand held scintillometer. Samples were normally taken from the bottom metre and where elevated gamma counts were located.

The results are given and discussed in the Combined Annual Report to 20th July 2009 (Robinson P., 2009).

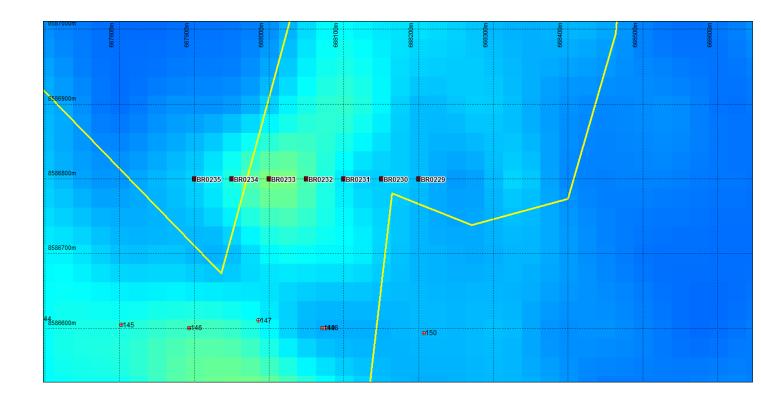


Figure 10 EL 23070 Phase 2 Drill Traverse on UxU:Th

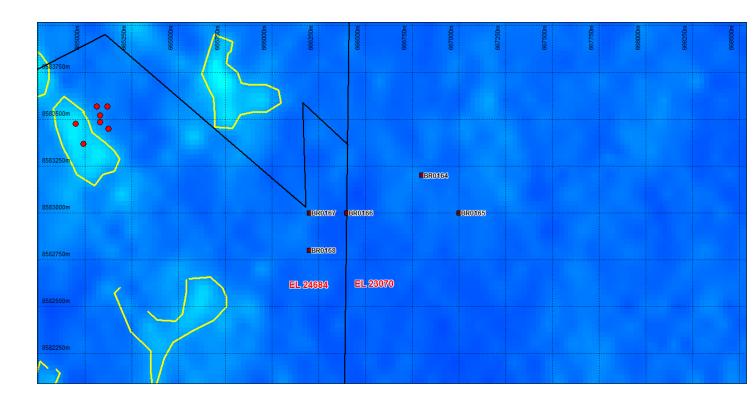


Figure 11 EL 23070 Phase 2 Scout Drilling on UxU:Th

A total of 20 only samples were taken. All samples were analysed by ALS Chemex by ICP Mass Emission Spectroscopy (ME-MS62s) using a four acid digest of the pulverised sample. Six (6) of these out of twelve (12) all taken on Section N8586800 had uranium value above 20 ppm. Three (3) consecutive samples in hole BR232 had values > 50ppm with a maximum of 66.1 ppm U all in saprolite above arkosic gneiss.

The analytical results are summarised in Table 2 below.

**Table 2: Bynoe Phase 2 Drill Sample Analyses Summary** 

	SAMPLE				ALL I	ME - MS	62S						
HOLE ID	NUMBER	FROM	то	Ag	As	Cu	Мо	Ni	Pb	Sn	Ta	Th	U
BR0234	509516	24.00	25.00	0.44	4.5	75.5	1.22	33.7	>500	3.5	0.9	16.5	25.4
BR0233	509517	20.00	21.00	0.65	1.6	20.1	1.48	9.6	148	2.3	0.51	21.3	9.5
BR0233	509518	13.00	14.00	0.55	1.4	49.8	0.65	30.5	273	12	5.64	26.5	20.8
BR0233	509519	15.00	16.00	1.05	1.9	91.4	1.06	44.7	>500	6.7	1.78	21.3	30.7
BR0235	509520	29.00	30.00	0.21	<0.2	5.5	0.37	4.5	89	1.4	0.39	30.1	1.8
BR0232	509521	23.00	24.00	0.27	1.2	23.4	1.03	12.3	41	3.6	1.07	32.7	6.4
BR0232	509522	2.00	3.00	0.17	6.8	72.5	2.77	23.6	89.7	3.2	0.77	16.2	59.2
BR0232	509523	3.00	4.00	0.24	6.8	103.5	2.94	28.3	117	4.9	0.83	11	66.1
BR0232	509524	4.00	5.00	0.35	5.5	128	2.03	32.9	93.1	7.2	1.15	11.4	55.1
BR0231	509525	21.00	22.00	0.24	6	47.7	0.96	89.2	9	4.7	0.49	3.3	9.5
BR0230	509526	18.00	19.00	0.76	3	83.4	6.6	17.7	21.8	3.1	0.78	11	13.8
BR0229	509527	23.00	24.00	0.63	6	199	4.31	163.5	19.3	2.3	0.78	10.5	11.7
BR0168	509528	20.00	21.00	0.26	<0.2	5.8	0.6	17.5	36.4	2.2	1.2	20.9	4.3
BR0167	509529	17.00	18.00	1.11	1.8	65	1.82	29.5	42.9	2.9	1.99	91.2	14.4
BR0166	509530	20.00	21.00	0.27	1.7	8.1	0.62	1.9	49.3	1.9	0.49	36.9	2.6
BR0166	509531	17.00	18.00	0.32	1.2	9.7	1.57	2.4	64.5	2.4	0.7	248	6.1
BR0166	509532	18.00	19.00	0.17	<0.2	6.1	0.54	<0.2	56.6	1.8	0.35	78	2.9
BR0165	509533	23.00	24.00	0.25	1	36.9	2.03	12.1	77.8	1.6	0.67	50.9	4.3
BR0164	509534	17.00	18.00	0.24	0.3	14.8	0.55	0.7	50.2	1.9	0.24	56.2	2.9
BR0164	509535	14.00	15.00	0.38	0.6	12.9	1.7	3.8	82.2	1.8	0.41	140.5	8.4

Appendix 4 to this report contains the Phase 2 PDF location plans showing:

- Location & ID,
- Geology,
- Maximum Gamma & Maximum U,
- Maximum Ni &Maximum Pb,
- Maximum Th & Maximum Cu

It also shows all the Phase 2 stacked cross sections. N8582800, N8583000, N8583200 & N8586800 drilled on EL 23070.

The stacked sections for the drill traverses show: Lithology, Profile, Colour, Gamma Count (histogram) and analytical results for U, Ni, Pb, Th and Cu.

#### Appendix 5 contains:

- Phase 2 analytical results of drill samples taken on EL 23070.
- Phase 2 Drill collars
- Phase 2 Lithological logs showing sample locations and numbers.

#### 5.5 AIRBORNE ELECTROMAGNETIC SURVEY (AEM)

An AEM survey was completed in April 2009 after lengthy delays. It was completed by Fugro Geophysical services and flown in conjunction with Geoscience Australia as part of its Rum Jungle Survey. The lines were flown east west with a spacing of 1.66 kilometres for a total of 105 line kilometres in the whole Bynoe Project area. The preliminary results were received and processed by Encom in May 2009.

The results are given and discussed in the Combined Annual Report to 20th July 2009 (Robinson P., 2009).

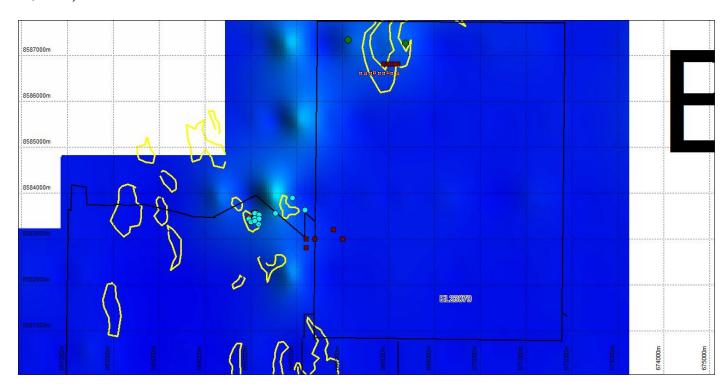


Figure 12: EL 23070 AEM Results 60 to 100 metre Depth Slice

The 60 to 100 metres depth section in Figure 12 shows bedrock conductors. There are no strong bedrock conductors within EL 23070.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

The concept and defined targets for uranium in EL23070 have adequately been tested. The tenement was relinquished on 6<sup>th</sup> January 2010.

Rehabilitation was completed on all drill programs including that of the older Continental Nickel drilling.

## 7.0 FINAL EXPENDITURE

Table 3 below lists the expenditure on EL23070 from the last anniversary to the date of surrender of the EL.

Table 3: FINAL Expenditure January 16th 2009

to January 6th (Surrender) 2010

TOTAL	\$37,628
Administrative Overheads (15%)	\$4,908
Data Entry	\$138
Salaries	\$40
Tenement Administration	\$886
Vehicle Hire	\$434
Freight	\$848
Geophysical Data Acquisition	\$3,344
Geological Consultants	\$27,030
Item	\$

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