



Northern Prospector

EL24992

MAMADAWERRE PROJECT

NORTHERN TERRITORY

ANNUAL REPORT

CONFIDENTIAL

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Tenement operator:	Northern Prospector Pty Ltd
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ABSTRACT

Mamadawerre Project is a uranium exploration project consisting of Exploration Licence 24992 (EL24992) which was granted on the 2nd September 2008 for initial period of 6 years, to Cameco Australia Pty Ltd (Cameco). The tenement consists of 105 blocks with a total area of 306.3 km².

On the 27th June 2011, Alligator Energy (Alligator), through its wholly owned subsidiary Northern Prospector entered into a JV agreement with Cameco Australia. Under the Agreement, Northern Prospector was appointed as the operator.

Renewal of the tenure by 2 years until 1 September 2016 was granted by the DME on 4th December 2014

This report documents exploration work conducted during the seventh year of tenure.

Exploration for unconformity style uranium mineralisation consisted of a 533 line km heli-borne VTEM survey, helicopter-supported reconnaissance work including outcrop sampling comprising a total of 81 rock samples and 31 soils.

Engaged an independent geological review of the Alligator Rivers and Pine Creek mineral provinces. (HINMAN GeoSOLUTIONS).

The total reportable expenditure for this period is \$ 336,364 for EL 24992.

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INTRODUCTION

Mamadawerre is a uranium exploration project in Western Arnhem Land, Northern Territory consisting of EL24992. The project is in joint venture between Cameco Australia Pty Ltd and Northern Prospector, a wholly owned subsidiary of Alligator Energy Ltd.

2nd September 2015 will mark seven years of tenure. The exploration licence is located on Aboriginal Land and work program was carried out under the terms of consent documentation agreed with the Northern Land Council (NLC) pursuant to the Aboriginal Land Rights (Northern Territory) Act 1976. The program was presented at the liaison Committee meeting held at Oenpelli in conjunction with neighbouring tenement EL27251, and approved by the NLC on behalf of the Traditional Owners.

Exploration activities during the seventh year of tenure consisted of::

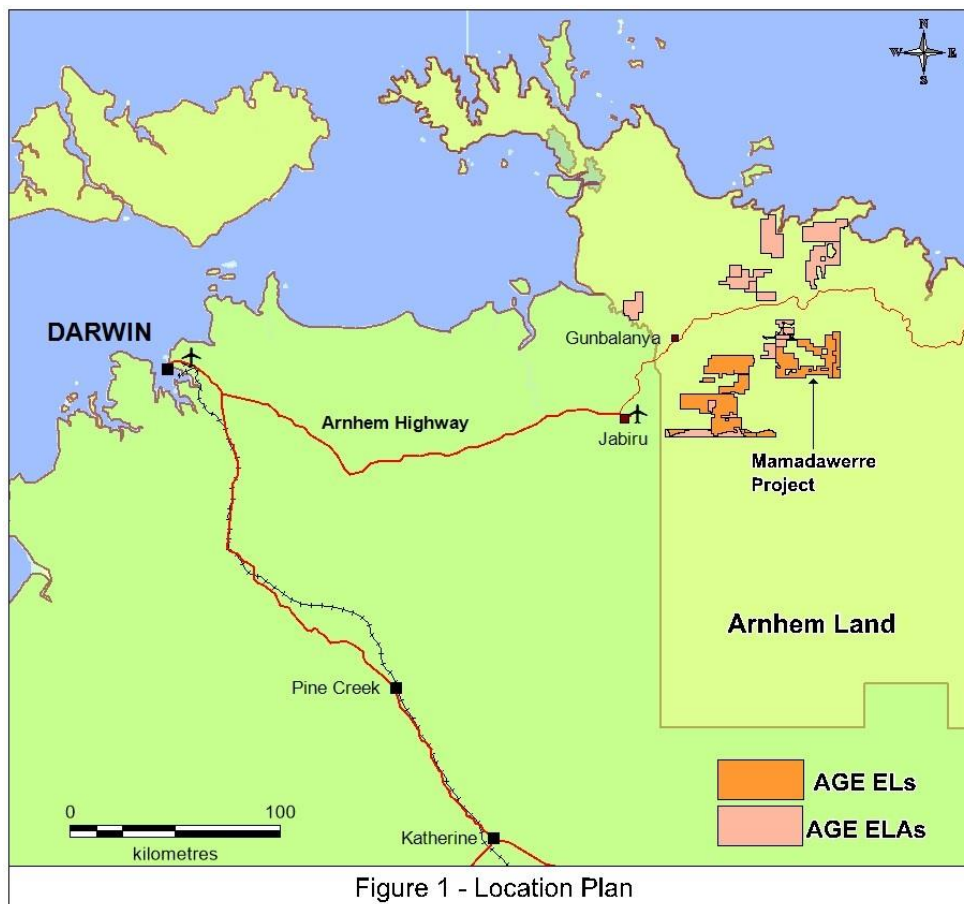
- A 533 line km heli-borne VTEM survey over 3 target areas.
- Re-sampling historical drill core with a focus on radiogenic pathfinder chemistry in sandstone cover sequences.
- Infill soil sampling building on 2014-2105 survey.
- Heli-assisted target reconnaissance, including rock chip and soil geochemistry and ground based scintillometer survey.
- Engaged an independent geological review of the Alligator Rivers and Pine Creek mineral provinces. (HINMAN GeoSOLUTIONs).

Location and Access

The tenement is located in western Arnhem Land, Northern Territory on the Millingimbi (SD-5302) 1:250 000 scale topographic map sheet and the Goomadeer (5673) 1:100 000 scale topographic map sheet. The tenement is centred approximately 90 km northeast of Jabiru and 40 km southeast of the Narbalek Mine.

Field reconnaissance and sampling programs for the 2015 program have been principally conducted via helicopter support from Alligator Energy's Myra Camp, located approximately 50km due west of the target areas.

Access within the tenement has been a limiting factor for cost effective exploration in previous seasons. Following discussions facilitated through the NLC with local owners, a suitable track was constructed in 2014 to allow vehicle access into the north eastern area of the tenement. Alligator believes this significantly changes the dynamics of exploration in the project area for the future.



Tenure

EL24992 was granted to Cameco on 2nd September 2008 for an initial period of six years and covers an area of 105 blocks for 306.3 km². On the 27th June 2011, Alligator Energy (Alligator), through its wholly owned subsidiary Northern Prospector entered into a JV agreement with Cameco Australia. Under the Agreement, Northern Prospector was appointed as the operator. Renewal of the tenure by 2 years until 1 September 2016 was granted by the DME on 4th December 2014.

The Mamadawerre project is located within an Arnhem Land Aboriginal Reserve and is subject to Exploration Consent Deed with the Northern Land Council (NLC) on behalf of the Traditional Owners. The licence contains areas that are sensitive or have cultural and/or social significance to the Traditional Owners, 'No Go Areas', and are excluded from exploration access.

REGIONAL GEOLOGICAL SETTING

The Mamadawerre project area is located within the eastern margin of the Neoproterozoic and Palaeoproterozoic Pine Creek Orogeny, and is in a region that has been subdivided into the Nimbuwah Domain of the Alligator Rivers region.

The following regional geological overview is largely based on the work by Needham et al. (1988), Needham (1998, 1990), and Needham and Stuart-Smith (1980). Information that is not based on these references is indicated below.

The Bureau of Mineral Resources (now Geoscience Australia) completed 1:250 000-scale geological maps of the Pine Creek Orogeny between the 1940s and 1960s following the discovery of uranium at Rum Jungle. The Alligator Rivers region was systematically mapped by the Bureau of Mineral Resources and the Northern Territory Geological Survey between 1972 and 1983. This later work produced 1:100 000-scale geological maps and reports for the region from Darwin to Katherine to the Alligator Rivers region.

The oldest exposed rocks in the Alligator Rivers region are within the Neo-Archaeal (ca. 2500 Ma) Nanambu Complex. The complex consists of paragneiss, orthogneiss, migmatite, and schist forming domical structures that are unconformably overlain by Palaeoproterozoic metasedimentary and metavolcanic rocks, which were formerly included in the Pine Creek Geosyncline. Recent collaborative research work by the Northern Territory Geological Survey (NTGS) and Geoscience Australia (GA) indicates that SHRIMP U-Pb age dating of areas of previously mapped Myra Falls Metamorphics outcropping within the Myra Inlier and to the northwest of the Nabarlek minesite are Neo-Archaeal in age with two age groups 2.53-2.51 Ga and 2.67-2.64 Ga (Hollis et al., 2009a). These quartzo-feldspathic gneiss are now referred to as the 'Kukulak Gneiss' and 'Arrarra Gneiss' respectively (Hollis et al., 2009b). Palaeoproterozoic rocks in the Alligator Rivers region are amphibolite facies psammites assigned in the Mount Howship Gneiss and the Kudjumarndi Quartzite. These formations are included in the Kakadu Group and are probably correlatives of the Mount Basedow Gneiss and Munmarlary Quartzite, respectively (Ferenczi et al., 2005). The group appears to onlap Neoproterozoic basement highs, with gneissic variants thought to pass transitionally into paragneiss of the Nanambu Complex.

The Cahill Formation of the Namoon Group conformably overlies the Kudjumarndi Quartzite. The lower part of the Cahill Formation (informally referred to as the Lower Cahill Formation) hosts the Nabarlek, Ranger and Jabiluka uranium deposits. The Lower Cahill Formation consists of a structurally lower calcareous marble and calc-silicate gneiss, which is overlain by pyritic, garnetiferous and carbonaceous schist, quartz-feldspar-mica gneiss, and minor proportions of amphibolite.

The informally named Upper Cahill Formation is psammitic and consists of feldspar-quartz schist, quartzite, lesser proportions of mica-feldspar-quartz-magnetite schist, and minor proportions of metaconglomerate and amphibolite. The Upper Cahill Formation is magnetic and significantly so at the base of psammitic unit in what is informally known as 'hanging wall sequence'. The magnetic characteristic of this unit is due to the presence of mafic sills or magnetite and it is a useful characteristic used to distinguishing the Cahill Formation from surrounding less magnetic rocks (Kendall, 1990). Mafic sills and dykes assigned to the Goodparla and Zamu Dolerites intruded the Cahill Formation prior to metamorphism.

The Nourlangie Schist overlies the Cahill Formation and consists of argillaceous to quartzose phyllite and quartz-mica schist that locally contain garnet and staurolite.

The supercrustal rocks of the region are structurally complex, having been affected by at least three deformation events before deposition of the late Palaeo- to Mesoproterozoic Kombolgie Subgroup (Thomas, 2002). The rocks have also been locally migmatized during the ca. 1870 Ma Nimbuwah Event. In addition, there is a broad trend of increasing metamorphic grade from southwest to northeast in the Nimbuwah Domain. This gradient is thought to reflect the synchronous emplacement of ca. 1865 Ma granites in the Nimbuwah Complex.

The Kombolgie Subgroup is the basal unit of the late Palaeo- to Mesoproterozoic Katherine River Group of the McArthur Basin (Sweet et al., 1999a; Sweet et al., 1999b). The subgroup consists of sandstone units called the Mamadawerre Sandstone, Gumarrinbang Sandstone, and Marlgowa Sandstone, which are divided by thin basaltic units called the Nungbalgarri Volcanics, and Gilruth Volcanics. The Mamadawerre Sandstone has a minimum age of ca. 1700 Ma, which is the minimum age of the intrusive Oenpelli Dolerite. Detrital zircon SHRIMP data from the GA OZCRON database constrain the maximum age of the sandstone at ca. 1810 Ma.

The Oenpelli Dolerite is the most pervasive mafic intrusive suite to affect the Alligator Rivers region and is the youngest Proterozoic rock unit exposed. It intrudes various Neo-Archaean, Palaeoproterozoic, and the Kombolgie Subgroup units, forming magnetic sills, dykes, lopoliths, and laccoliths. The Oenpelli Dolerite has a SHRIMP U-Pb baddeleyite date of 1723 ± 6 Ma (Ferenzi et al., 2005) or by approximately 1690 Ma by concordant Rb-Sr whole-rock and mineral age (Page, et. al. 1980). Geochemical and geophysical data suggests several phases of intrusion throughout the region. These intrusive events had a pronounced thermal effect within the Kombolgie Subgroup, with the promotion of fluid flow and aquifer or aquitard modification. Localised effects in the sandstone include silicification, desilicification, chloritisation, sericitisation, and pyrophyllite alteration. A characteristic mineral assemblage of prehnite-pumpellyite-epidote has formed in the quartzofeldspathic basement rocks adjacent to the intrusions.

Deformation since deposition of the Katherine River Group includes transpressional movement along steep regional-scale strike-slip faults and possibly some shallow thrusting.

These regional faults follow a pattern of predominantly north, northwest, and northeast strikes, giving rise to the characteristic linearly dissected landform pattern of the Kombolgie Plateau. Another significant structural trend strikes east – west which includes both the Ranger and Beatrice Faults.

The Bulman Fault Zone is a principal regional feature and is considered to represent a long-lived deep crustal structure. However, it appears that post-Kombolgie displacements along this and other faults have not been great, because the Arnhem Land Plateau is essentially coherent and offsets along lineaments are generally minor. Field investigations of many interpreted ‘faults’, including those with a marked geomorphic expression, show no displacement, and are best described as joints or lineaments (Thomas, 2002).

Erosional remnants of flat-lying Palaeozoic Arafura Basin and Cretaceous Carpentaria Basin are present as a veneer throughout the coastal zone of the Top End. Various regolith components are ubiquitous as cover throughout much of the region.

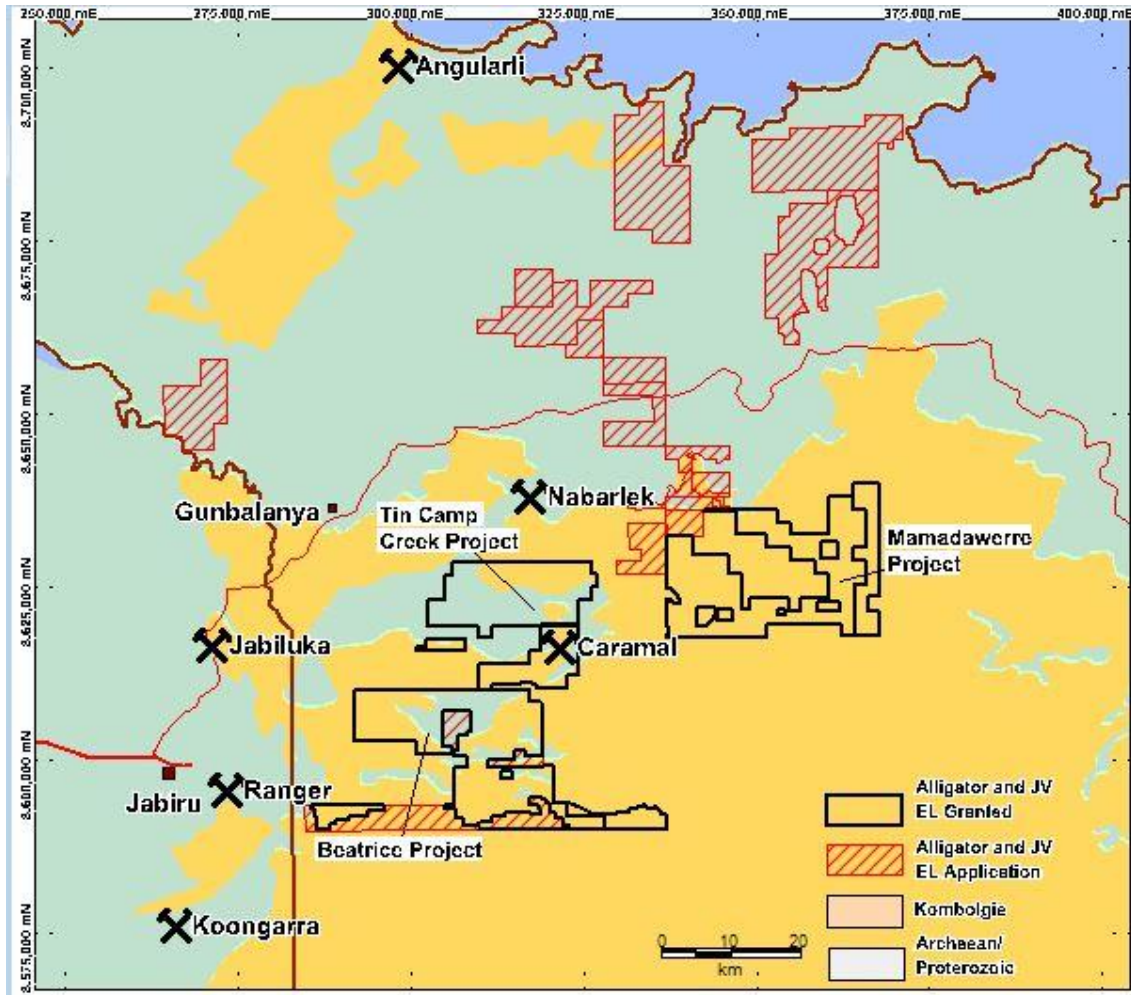


Figure 2: Simplified Regional Geology and Alligator Tenure

LOCAL GEOLOGY

Sedimentary rocks of the Lower Kombolgie Subgroup (Sweet et al., 1999a) unconformably overlie (and obscure) basement in the central, southern and western parts of the tenement. The basal formation, the 100-250 m thick Mamadawerre Sandstone forms a deeply dissected plateau surface. This area is composed largely of bare rock with sparse areas of shallow sandy soil supporting spinifex and scrub. Sandstone is quartzose to lithic and fine- to very coarse-grained with a variety of fluvial to shallow high-energy marine bedforms, including trough and planar cross-beds (Ojakangas, 1979).

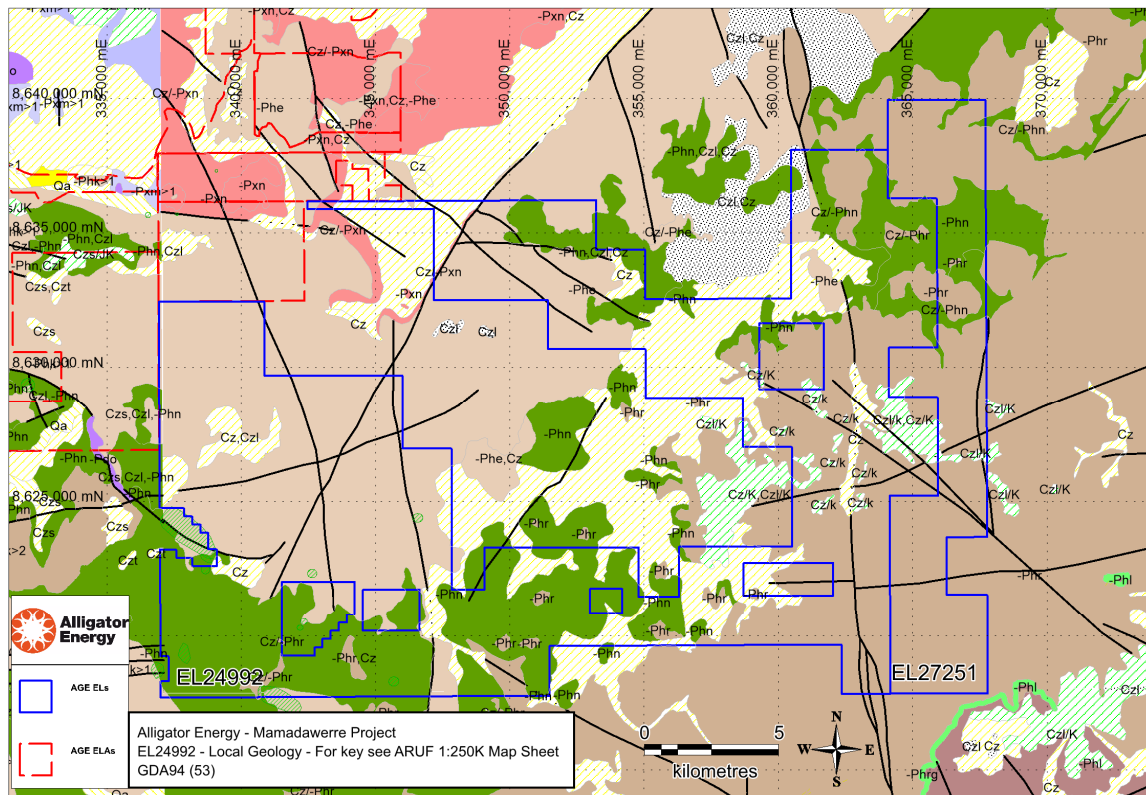


Figure 3: Local Geology of Mamadawerre Project
For key see ARUF 1:250,000 Map Sheet

Mamadawerre Sandstone is unconformably overlain by the Nungbalgarri Volcanics. The contact is expressed locally as 100-500 m diameter sub circular depressions ('dome and basins'), with the upper sandstone surface interpreted to represent the palaeotopographic surface of giant lunate current ripples or aeolian sand dunes with the volcanic draped over the top (Nott and Ryan, 1996). It may also represent large dewatering structures formed as a result of hot volcanic rocks draped over water-saturated sediments, which were deposited in estuarine conditions (Needham, 1978). The Nungbalgarri Volcanics consist of multiple vesicular and amygdaloidal basaltic flows. The regional stratigraphic thickness of the volcanic unit is variable between 50 m and 130 m, however, it may also be locally absent (Carson et al., 1999).

The Gumarrinbang Sandstone, which occupies approximately one quarter of the tenement, unconformably overlies the volcanics, comprising fine- to coarse-grained quartz sandstone with scattered pebbly units. Sedimentary structures include planar and trough cross-stratification, ripples and horizontal planar stratification, suggesting a proximal to distal fluvial braided stream and estuarine depositional environment (Sweet et al., 1999b)

Sills and dykes of Oenpelli Dolerite occur in the Mamadawerre project area. In outcrop, the dolerite ranges from fresh magnetic coarse-grained subophitic dolerite to pervasively altered chlorite-hematite rock. The most visibly obvious structures in the tenement are deeply incised linear features of various orientation and significance, including fractures, joints and small faults.

PREVIOUS EXPLORATION

Exploration 1997-2005 EL3347

EL3347 was granted to the Kunbohwinjgu Joint Venture on the 28th July 1997 with AFMEX as the operator. Exploration activities included a helicopter-borne magnetic-radiometric geophysical survey (8,500 km), followed up by ground reconnaissance over 67 selected radiometric anomalies (Alonso and Kastellorizos, 1998) and (Fabray et al., 2000). During 1998 and 1999 heli-supported diamond drilling (10 holes) took place by AFMEX. The best results were: KBW004 there is up to 174ppm U in clay altered sandstone below the Nungbalgarri Volcanics and 60 m above the u/c; KBW002 in the SW part of the tenement contains an interval of 180ppm U immediately above the u/c, proximal to the NNW Ponting fault. NanoTEM ground electromagnetic geophysical surveys were conducted across the Daniel Fault. These lines show a number of offsets related to the fault. A helicopter supported regional stream sediment survey and limited radiometric anomaly follow up was also carried out. Results were low-order and no further follow-up was conducted (Ewington, 2001). The eastern portion of the licence was relinquished in 2001.

The Kunbohwinjgu joint venture was dissolved in 2003 and Cameco acquired 98% of EL3347. The remaining 2% remained with the Kunbohwinjgu Land Council Pty Ltd. Cameco was granted a two year extension in July 2003. Exploration conducted by Cameco included re-logging and sampling of several of the historical drill holes, and an airborne hyperspectral survey over the entire EL 3347 using the Hymap Mark 1 system.

The licence expired in July 2005 and Cameco retained 6 blocks which now forms ERL 25896, and relinquished EL3347. The area covering EL3347 was re-applied for by Cameco in 2005.

Exploration 2008 – 2012 EL24922

EL24922 was granted to Cameco Australia on the 2nd September 2008.

A helicopter supported outcrop sampling program was conducted on the project in late 2008. Sampling was concentrated along structural trends and following up weak hyperspectral clay anomalies identified from the Hymap survey to determine if weak geochemical or alteration patterns could identify the uranium mineralisation potential of the major lineaments. 52 samples were collected from across the project.

Sample MM080407 returned the best result of 0.074 % U₃O₈. The sample was from a hematite altered Gumarrinbang Sandstone stream transported cobble which was discovered in a creek bed in the southeast of the project area. The area has been named Steptoe and a northwest trending fault through it is called the Steptoe fault.

During 2009, helicopter-supported outcrop sampling, mapping and reconnaissance was conducted to follow up on the anomalous sample collected during the 2008 program. Work was focussed in the Steptoe area to determine the background geochemical signatures, alteration patterns, extent and controls to the mineralisation. A total of 10 stations were

mapped and 19 rock samples were collected during the course of the program. This program identified uranium mineralisation stretching over 1,000 m within the Gumarrinbang

Sandstone along the northwest trending Steptoe fault. The best results along the Steptoe fault included 0.34 %; 961 and 723 ppm U₃O₈ in hematite altered Gumarrinbang Sandstone. The mineralisation is located within a discrete structural zone of the Steptoe fault. Anomalous uranium results have been returned from sampling along the Pigeon fault with best results of 0.115 % U₃O₈ in what is interpreted to be Cretaceous sediment and 509 ppm U₃O₈ in ferruginous Gumarrinbang Sandstone, however in case of the Pigeon fault, mineralization was not able to be directly associated with Pigeon fault structure. Anomalous Pb^{206/204} isotope ratios of up to 1889.3 indicate that substantial radiogenetic lead (Pb²⁰⁶) is present in the area tested by rock sampling.

The sampling conducted during 2009 has confirmed the presence of uranium mineralisation within the Gumarrinbang Sandstone related to structure and may indicate potential for unconformity related uranium mineralisation or mineralisation associated with the Nungbalgarri Volcanic Member. The 2009 sampling program did not define the extent of the anomalous uranium mineralisation.

During the 2010 exploration programs included an Airborne electromagnetic (TEMPEST) survey, helicopter-supported outcrop sampling, mapping and reconnaissance were conducted. 65 samples were collected with 10 samples returning U₃O₈ values over 100 ppm. These 10 samples were collected in 3 areas, the Pigeon fault area with previously known mineralization, and two areas previously not known to be mineralized; the northwest arm of the Steptoe fault and the south part of the Nepal-Tibet fault where 188 ppm U₃O₈ (sample C007148) was obtained in altered Nungbalgarri volcanics (near the contact with Mamadawerre sandstone).

Short wave infrared reflectance data from 2010 surface sampling revealed the following dominant minerals kaolinite, illite, dickite and halloysite. Muscovite and opal occurred quite frequently with occasional carbonates (ankerite and siderite) and K-alunite.

During the 2011 and 2012 exploration programs tenement wide reconnaissance was conducted, with a focus on the Pidgeon and Steptoe fault sets. In 2011 A total of 25 rock chip samples were submitted for geochemical assay. 7 samples returned U₃O₈ values over 200 ppm, and 3 samples over 500ppm U₃O₈. The best result of 5612 ppm U₃O₈ was returned in MW002. In 2012 the focus was shifted to follow the structural valleys away from the observed mineralisation to establish extent of anomalism. A total of 35 rock chips were taken and submitted for analysis. 2 samples returned U₃O₈ values over 150 ppm U₃O₈. The best result of 3501 ppm U₃O₈ was returned in 18271, hosted in a medium grained silicified sandstone with light green secondary uranium visible.

Sample 18272 returned values of 171 ppm U₃O₈, which is deemed significant. The sample was located over 3 km north of the previously identified anomalous zone within the Steptoe and Pigeon fault, and is hosted within a brecciated chloritic oxidised sandstone within a north trending fault. Modestly anomalous Au, Pd and Pt are (73, 33, 10 ppb respectively) are also observed in these sample.

Additionally, the historic NTGS Millingimbi magnetic survey was re-processed with a focus on establishing the dip and depth of the North East trending dyke system within the tenement. The results of this program resulted in Alligator deeming a systematic broad target identification and field follow up of the eastern portion of the tenement was required as a priority and would be undertaken as part of the 2014 field season.

EXPLORATION 2013 – 2014 EL24992

During the 2013 – 2014 field season a field reconnaissance program was carried out on 16 of the 31 identified targets within the Mamadawerre Project. The targets, which were primarily defined utilising existing airborne radiometric data, magnetic data and historic surface geochemistry results, were difficult to explain in most instances as minimal anomalism was observed on the ground. Typical anomalies were associated with pisolites in alluvial channels or volcanic flats. The presence of fine mafic dyke material was observed in many of the narrower valleys. Where uranium occurrences were observed, it was predominantly associated with small scale fractures in larger valleys such as the Steptoe fault.

In addition to the heli-supported outcrop sampling (71 rock chip samples) and reconnaissance work, Alligator also completed a 30 sample-soil geochemistry survey, acquired high resolution aerial photography over the tenement and established a 28km access track into the tenement area to allow for more cost effective exploration in the future.

EXPLORATION DURING REPORTING PERIOD 2014 – 2015

Exploration activities conducted during 2014 – 2015 reporting period on the Mamadewerre Project comprised the following:

- Geochemical and Lead (Pb) isotope analysis of 81 surface rock chip samples.
- Pb isotope analysis of historical drillhole KBW003R. (18 samples)
- Collection and analysis of 67 soil samples.
- Survey of 37 point scintillometer grid.
- Collection and isotope analysis of water samples.
- Validation of historical data and database amalgamation.
- 533 line km VTEM over 3 grids.
- Independent geological review of the Alligator Rivers and Pine Creek mineral provinces. (HINMAN GeoSOLUTIONs).
- Helicopter access geological reconnaissance.
- Regional literature and data review in context with EL27251.

In addition to this field work there has also been continued work in re-establishing Myra Camp to meet modern standards from which fieldwork is based, preparing various compliance documentation, conducting safety and environmental audits and providing ongoing assistance to regional stakeholders with introduced weed management programs.

Field reconnaissance program

Field work carried out in June 2015 included 10 rock chip samples including 3 samples that were sent for lead isotope analysis.

One soil sample was taken at the area of peak radiometric anomalism.

Ground based radiometrics survey was carried out in the central northern tenement area. The survey targeted a small U₂_Th aerial radiometric anomaly in 1997 survey data and was completed using an RS-125 handy-spec scintillometer. Nominal sample spacing was 25m with 50m line spacing. A subtle north east trend was delineated in the data (Figure 4) however the overall counts did not support the processed airborne data.

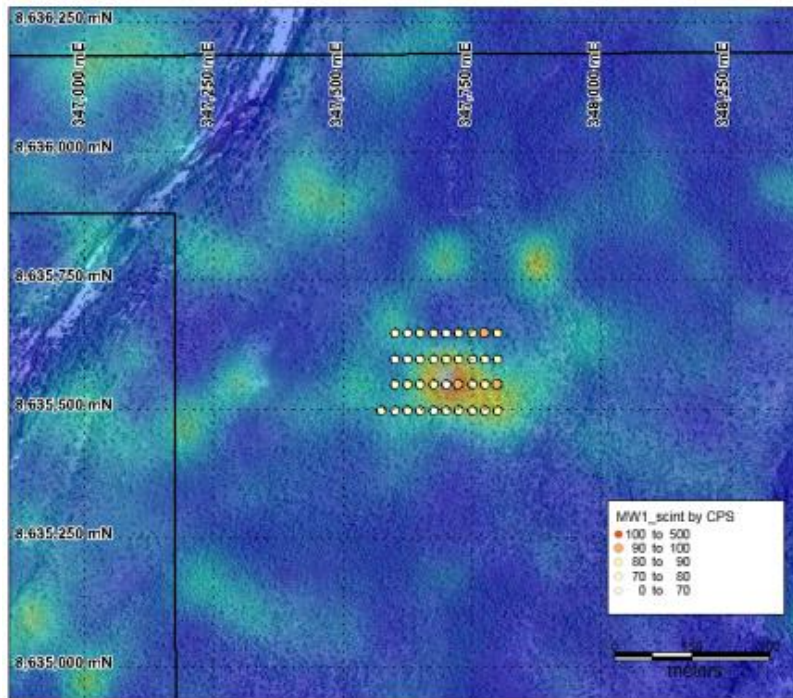


Figure 4: Scint data shown on U2_Th airborne anomaly

Rock Chip Sampling

During the 2014-2015 field season a total of 44 rock chip samples were collected and assay results for a further 37 rock chips returned following collection late in the previous reporting period. Figure 5 shows the distribution of all surface samples for the 2014-2015 field season. All samples were submitted to Bureau Veritas (Amdel) for sample preparation, full suite geochemical and isotope analysis. Samples were prepared using a four acid digest before being presented to ICP-MS for analysis as outlined below.

Procedures for sample preparation at the Berrimah laboratory were as follows:

- Samples sorted and dried to a core temperature of approximately 100°C.
- Dried samples were coarse crushed using a Boyd crusher to a sizing of approximately 5mm.
- The total sample was milled in an LM5 pulveriser to 85% passing 75µm.
- An analytical pulp of 250 g was taken from the bulk and the residue retained.
- The pulp sample was then delivered to AMDEL's laboratory in Adelaide for assay.

The primary uranium assay technique used was ICP-MS following lithium borate fusion of the pulp sample. This method involves taking a 0.1 g subsample of the analytical pulp which is then fused with lithium metaborate followed by dissolution to give a "total solution". The solution is presented to an ICP-MS for the determination of elements of interest. Apart from uranium, a comprehensive suite of other elements were also analysed by ICP-MS. Samples for Pb204, Pb206, Pb207, Pb208 and U238 isotopes were re-presented to ICP-MS to read raw counts for the determination of isotopic ratios. Pb206/Pb204 and U238/Pb206 are preferred ratios used to indicate radiogenic lead derived from a uranium source. In addition, fire assay was used for gold, platinum and palladium and XRF was used as required for uranium where the upper detection limit using of ICP-MS was inadequate. Data for all 81 samples including full geochemical suite can be found in the submitted rock chip dataset.

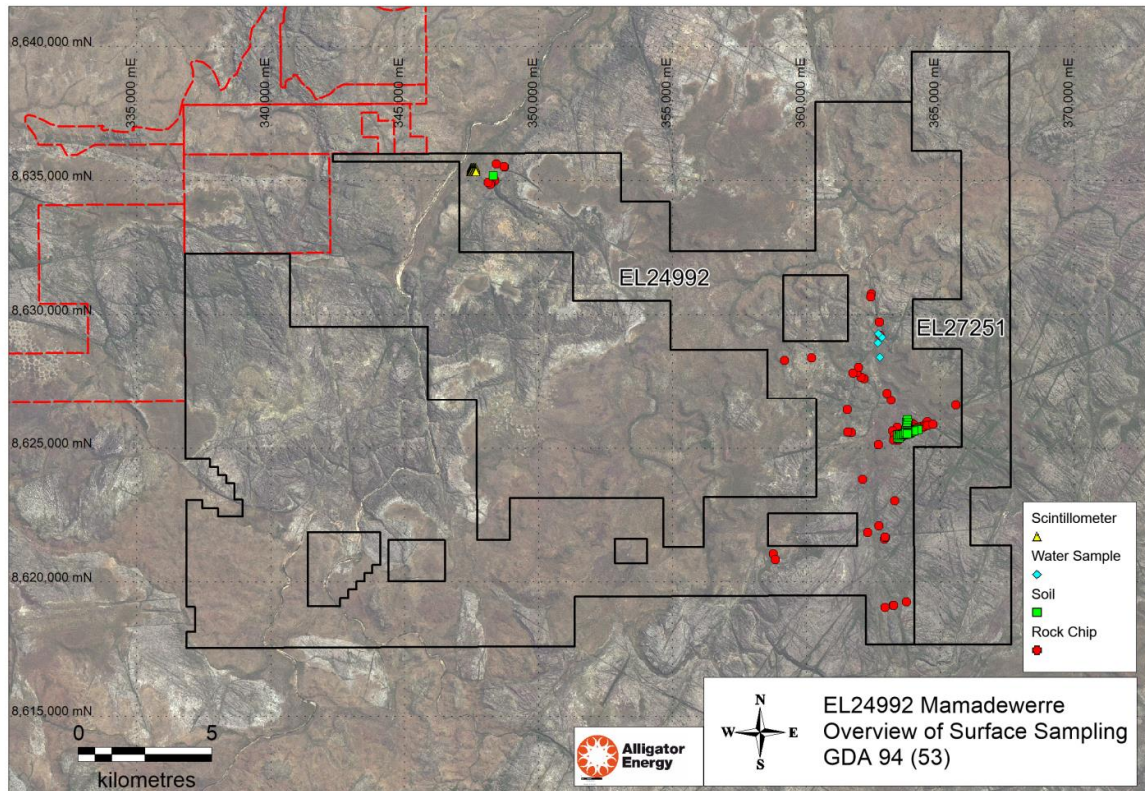


Figure 5: All surface sampling distribution.

Soil Sampling Program

A soil program comprising 30 stations was undertaken in November 2014. The sampling infilled the broad spaced soils undertaken in the 2013-2014 reporting period that had identified anomalous uranium and precious metals (Au, Pt, Pd).

The infill data suggests the U anomalism is isolated and patchy with interpreted trends not supported (Fig 6).

Results for a further 36 samples were returned after the 2013-2014 reporting period and are can also be found in the submitted soils dataset.

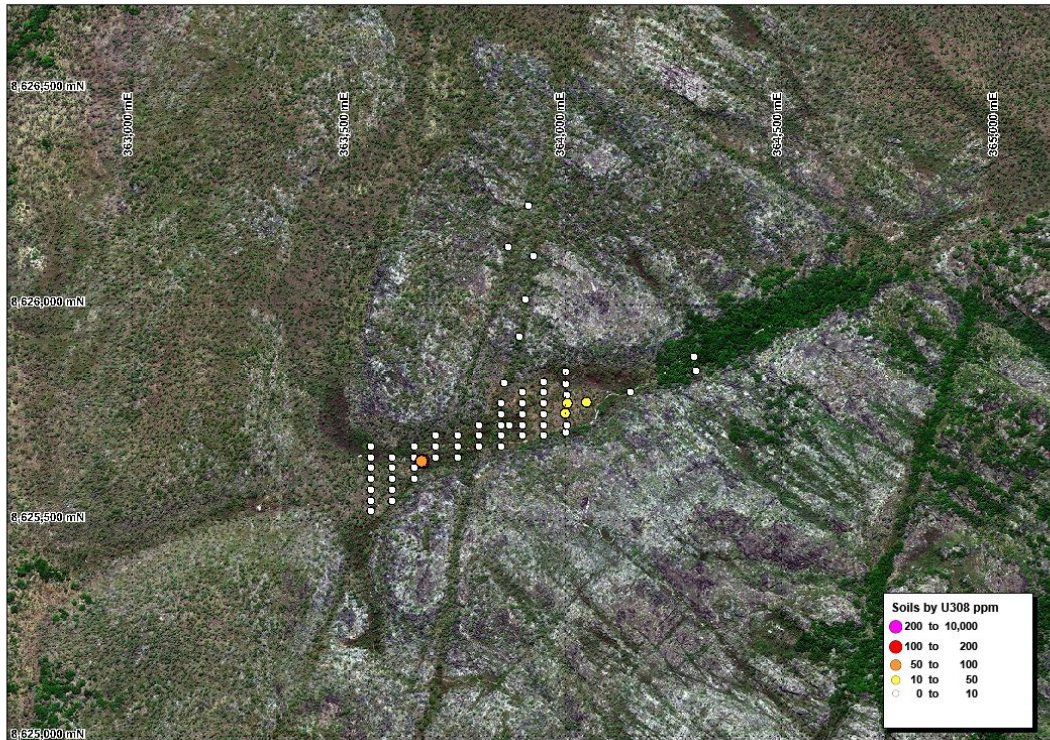


Figure 6: Soil geochemistry (U308 ppm) in Pigeon Fault zone

Water Sampling

Water samples were taken at four locations (Fig 5) , however only one sample was suitable for analysis. The sample was submitted to ANSTO for preparation and analysis summarised below:

Sample preparation:

- V13330 ERMC Radium chemical isolation.
- V12781 Actinide and Strontium separation from soil, sediment, vegetation & water.
- V13338 ERMC Cerium fluoride alpha source preparation.

Sample analysis:

- Ra226, U238, U235 and U234 by V13321 ERMC Operation of Ortec Alpha Spectrometers.
- Th234 (U238), Pb214 (Ra226), Ac228 (Ra228) by VP-2747 Gamma-ray Spectrometry.

The sample sent for radioisotope assay returned elevated Ra226 at 75mBq/kg, all other radioisotopes were below detection.

Full data can be found in the Water Geochemistry dataset.

Geophysical Acquisition

Three VTEM grids were flown over the Mamadawerre Project area in November 2014. Principal geophysical sensors included a versatile time domain electromagnetic (VTEM max) system, and a caesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 533 line-kilometres of geophysical data were acquired during the survey (Figure 7).

In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

Zones of high conductivity are considered to be possible graphite or strong chlorite alteration zones; a important factor in the mineralisation style sought. The survey was designed over key structural zones to highlight high conductivity in basement rocks. Further processing and modelling data by geophysical consultants is required assist interpretation of conductivity responses below the cover sandstone sequences An example of conductivity response (channel 28) is shown in Figure 8.

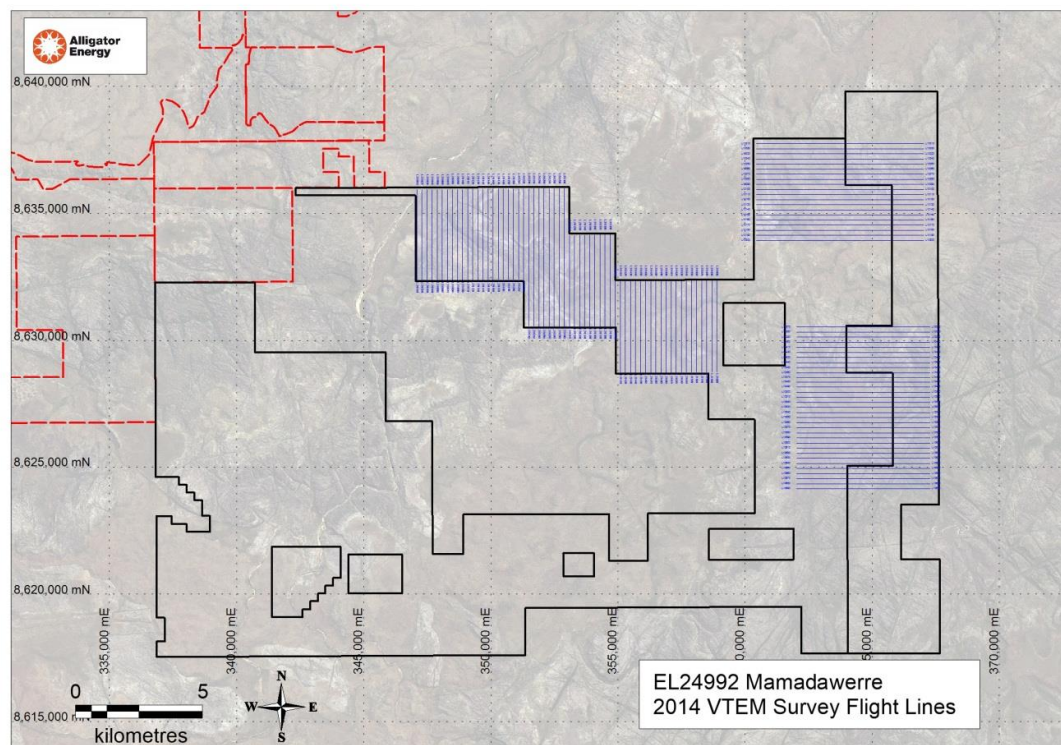


Figure 7. Coverage of VTEM survey

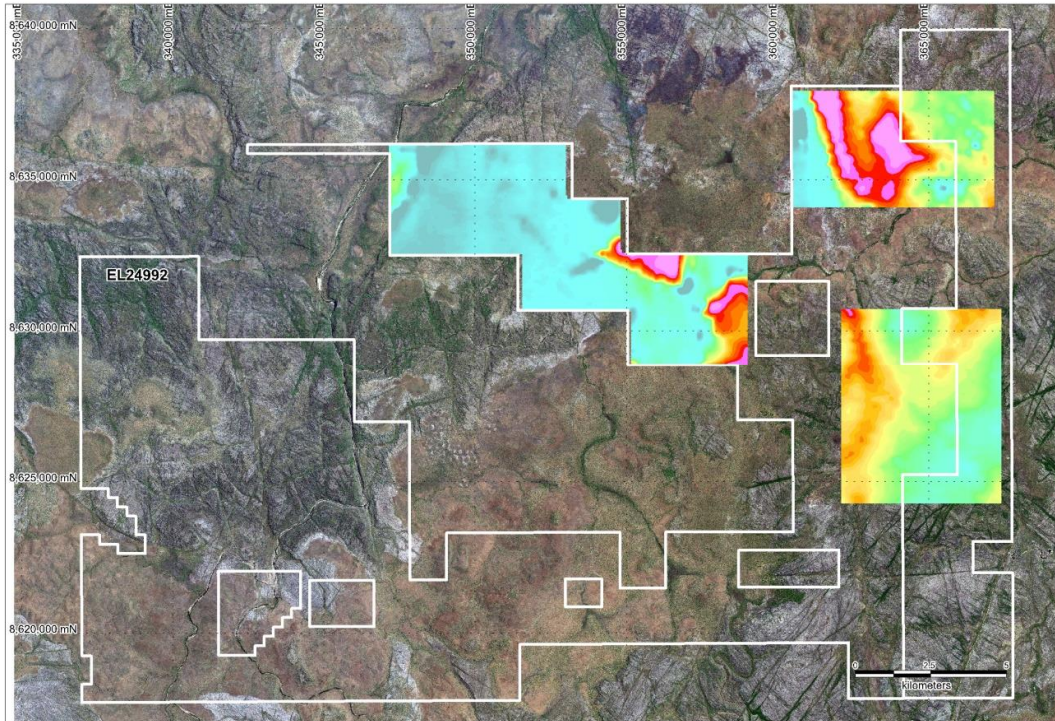


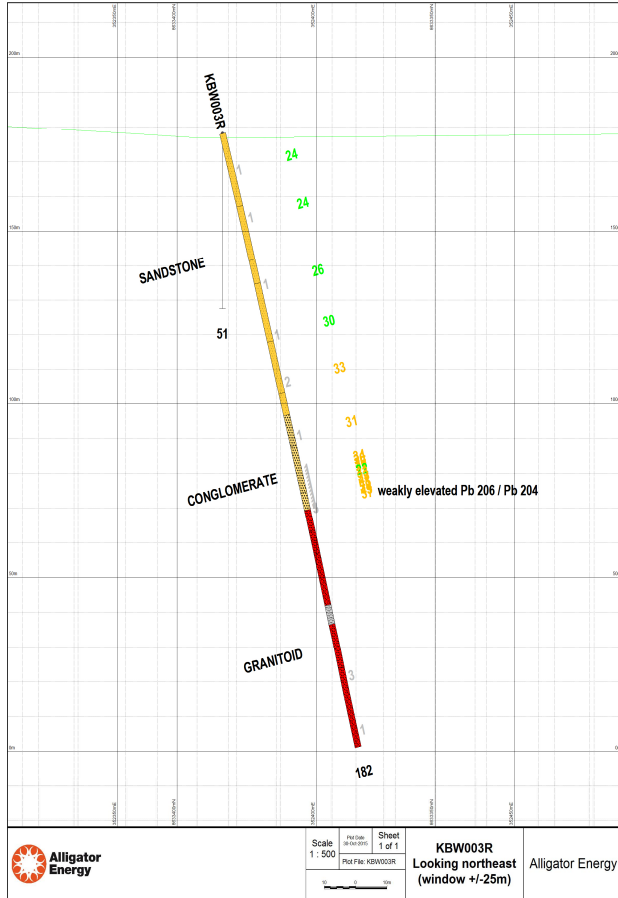
Figure 8 – Channel 28 conductivity from VTEM survey.

Independent Regional Geological Interpretation Review.

In early 2015 an independent geological review was carried out by Mark Hinman (HINMAN GeoSOLUTIONS). The review focused on interpreting regional geological evolution of the Alligator Rivers and Pine Creek mineral provinces, with the aim of highlighting key structural and stratigraphic controls and intersections. This exercise has resulted in a more detailed understanding of stratigraphic and structural relationships and their potential control of uranium mineralisation in the ARUP (including the Mamadawerre Project area). A detailed geological time slice for the Alligator Rivers and Pine Creek mineral provinces was also produced for Proterozoic stratigraphy with relation to North-West Queensland's mineral provinces (see attachment).

Re-assay of historical drill core – KBW003R

18 half core samples from drill hole KBW003R were submitted for multi-elemental and Pb isotope analysis. Samples were specifically selected through the sandstone cover sequence at approximately 20m intervals, the basal 12m of sandstone was sampled every 1m. The basal 12 meters returned a weakly anomalous Pb206/Pb204 signature (Figure 9).



Hole_ID	mFrom	mTo	Pb206_204
KBW003R	11	12	23.573
KBW003R	25	26	23.514
KBW003R	45	46	26.133
KBW003R	60	61	29.871
KBW003R	74	75	33.144
KBW003R	90	91	31.235
KBW003R	100	101	33.77
KBW003R	101	102	30.42
KBW003R	102	103	36.491
KBW003R	103	104	37.139
KBW003R	104	105	21.829
KBW003R	105	106	32.931
KBW003R	106	107	33.247
KBW003R	107	108	40.604
KBW003R	108	109	44.916
KBW003R	109	110	37.508
KBW003R	110	111	45.426
KBW003R	111	112	36.676

Figure 9: KBW003R cross section and table showing Pb206/Pb204 ratios. A ratio greater than 30 is considered weakly anomalous, greater than 100 highly anomalous due to an influx of uranium derived radiogenic Pb 206.

CONCLUSIONS AND RECOMMENDATIONS

Geophysical data acquired over key structural zones requires further processing and interpretation to isolate well supported target areas.

The western portion of the tenement is highlighted in the Hinman regional geological study as a high priority target zone for Unconformity-related Uranium deposits in the context of the regional structural evolution of the ARUP. In this area sedimentary rocks of the Lower Kombolgie Subgroup with a thickness of up to 250m unconformably overlie (and obscure) basement.

Further east the Kombolgie subgroup thickens to >500m, however Alligator Energy still considers that the geological setting in the Eastern part of the tenement has similarities with the Westmoreland Deposits in northwest Queensland (51.9 million pounds at 0.089% U₃O₈) and the Matoush deposit in Quebec, Canada. Both deposits are associated with structures hosted by Mid-Proterozoic sandstones and intruded by dolerites. The significance of dolerites in relation to mineralisation is controversial. Key controls are considered to be proximity to structure, higher permeability coarse grained to pebbly sandstones confined within lower permeability quartzites or volcanics and chlorite alteration of the sandstone matrix. An outer halo of clay alteration has been noted in some parts of the deposits. Various geometries occur which appear to be controlled by structure and the permeability of sandstones. Indications that this style of mineralisation is present will open up a significant area of western Arnhem Land for further exploration for this style of mineralisation.

PROPOSED WORK PROGRAM 2015 – 2016

Alligator proposes further processing and interpretation of the high resolution VTEM data by experienced geophysical consultants. Targets generated from this interpretation will be subject to geological reconnaissance, geochemical sampling (rock chip, soil and water) and ground based scintillometer surveys where suitable

Heli-assisted sandstone geochemistry surveys will also be conducted in line with Alligator's regional targeting/screening method.

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