ALLIGATOR ENERGY LTD

ACN 140 575 604

ELs 24921, 24922 & 25002
TIN CAMP CREEK PROJECT

NORTHERN TERRITORY
ANNUAL REPORT
CONFIDENTIAL

Project Operator:	Alligator Energy Ltd
Tenement Holder:	TCC Project Pty Ltd
Date:	8 July 2013
Period:	30 May 2012 to 29 May 2013
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Target commodity:	Uranium
Authors:	Pete Moorhouse, Alligator Energy Ltd
Contact Details:	PO Box 338 Spring Hill, QLD 4004 Ph. 07 3852 4712
Email for further technical details:	apm@alligatorenergy.com.au
Email for expenditure:	mm@alligatorenergy.com.au
Datum/Zone:	GDA94 (Zone 53)
Map Sheets:	1: 250,000: Alligator River (SD-5301) 1:100,000: Howship (SD-5572) & 1:100,000 Oenpelli (SD-5573)
Tenement manager:	AMETS
Copies:	DME (1) Northern Land Council (1) Alligator Energy Ltd (1)

ABSTRACT

The Tin Camp Creek project comprises three Exploration Licences (ELs), EL 24921, EL 24922 and EL 25002 which are held by TCC Project Pty Ltd, a wholly owned subsidiary of Alligator Energy Ltd. In May 2012, an application for amalgamated reporting of the Tin Camp Creek Project was approved by DME. This Annual Report is in respect of ELs 24921, 24922 and 25002. EL's 24921 and 24922 were granted on 30 May 2007 for a period of 4 years. Renewal applications for additional 2 year periods were subsequently lodged in 2011 and 2013. El 25002 was granted on 2 September 2008 for a period of 6 years. The tenements are located in western Arnhem Land approximately 250 km east of Darwin and 50 km northeast of Jabiru. The tenements are considered prospective for unconformity-style uranium deposits similar to Ranger, Jabiluka, Koongarra and Nabarlek. Geology within the tenements is broadly equivalent to known deposits in the Alligator Rivers Uranium Field and consists in part of equivalents of Lower Cahill Formation of the Pine Creek Orogen (PCO) overlain in places by the lower Kombolgie Sub-group sandstone. The Tin Camp Creek Project area has been explored intermittently since 1970 resulting in the discovery of the Caramal deposit, South Horn prospect and the Two Rocks prospect. These prospects have been the focus of considerable drilling and exploration. As a result of recent exploration, Mintaka and Orion East have been named as additional prospects. Exploration work commenced on the tenements by Alligator Energy towards the end of the 2010, with Alligator Energy's second full season being documented in this report. Work undertaken during the 2012/2013 tenure year included 69 drill holes for 10,990 metres comprising of 4517 metres of diamond drilling and 6473 metres of reverse circulation drilling, from which 2311 samples were sent for analysis. A total of 76 rock chip samples were assayed. Ground radiometric surveys of 6429 stations and 4221 gravity survey stations were recorded in the Caramal to South Horn area. The outcome of the field activities produced a greater understanding of the geology, and the structural controls of mineralisation.

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1. INTRODUCTION

1.1 Exploration Activities

Details of field activities for the 2012 exploration campaign for the Tin Camp Creek Uranium Project is included in this report. This includes ELs 24921, 24922 and 25002.

The project is located within the Arnhem Land Aboriginal Reserve and is subject to a Consent Deed with the Northern Land Council (NLC) and the Traditional Owners. Clearance for work was given by the NLC, on behalf of the Traditional Owners, following the Exploration and Liaison Committee Meeting held in May 2012 at Gunbalanya.

Work on the Tin Camp Creek Project for this reporting period consisted of:

- Acquisition of 533 sq. km 0.5-m GeoEye-1 Archive satellite imagery over the Tin Camp Creek Project, captured 15 May, 31 May and 14 June 2010.
- Acquisition of historic aerial photography prints over the Caramal deposit.
- Establishment of new tracks and post wet re-establishment of existing tracks to facilitate exploration activities project wide.
- Drilling of 10,990 metres focussed on the Caramal – South Horn regional area, cumulating in the identification of resource extension potential of Caramal, and the identification of mineralisation at Mintaka. This consisted of 4517 metres of diamond drilling, and 6473 metres of Reverse circulation. 7348 metres were drilled within 2 km of the Caramal deposit, 1931 metres were drilled around the Mintaka prospect and 1711 metres in proximity to the South Horn prospect.
- Geochemical analysis of 2311 drill samples from the 2012 program by either Bureau Veritas or Australian Laboratory Service in Darwin along with 233 re-assays from historic core taken from the South Horn Prospect.
- Ground based radiometric survey of 6429 sites.
- Atlas Geophysics extended a gravity survey which was commenced during 2011 program. A further 4221 stations were recorded along Orion's Trend.
- 104 rock chip samples, of which 76 were sent for geochemical assay.
- Data review of the Gorrunghar prospect was initiated by Alligator geologist, and as a result is deemed drill test worthy for the 2013 program.
- Helicopter supported geological and logistical reconnaissance for 2013 drilling activities of NE Myra prospect and East Orion prospects was completed.
- Reconnaissance geological mapping was conducted over EL24922 internally by Alligator geologists, and by Andrew Browne, consultant to Alligator Energy.
- Continuation of validation and standardisation of historic data set, including re assessment of historic core.

In addition to this field work there has also been continued work in re-establishing the

Myra Camp to meet modern standards, preparing various compliance documentation, conducting safety and environmental audits and providing ongoing assistance to regional stakeholders with introduced weed management programs.

1.2 Location and Access

The Tin Camp Creek project is located in western Arnhem Land approximately 250 km east of Darwin in the Northern Territory, Australia (refer **Figure 1- Location Map for ELs 24921, 24922 & 25002**).

Access is by road via the Arnhem Highway to Jabiru and then via Cahill's Crossing and unsealed roads to the Myra Base Camp located on Tin Camp Creek. The rugged terrain of the Myra Falls Inlier and flanking sandstone escarpment country is only accessible by helicopter or by foot. There are disused tracks throughout the tenements, some which have not been upgraded since the withdrawal of AFMEX in 2002. Portions of tracks in the northeast have provided access to the NE Myra area since 2005.

1.3 Tenure

The Tin Camp Creek project comprises Exploration Licenses (ELs) 24921, 24922 & 25002. These ELs originally comprised a group of exploration licenses (ELs 2505, 2506, 2516, 2517, 7029, and 9354) that were part of a Joint Venture between Afmeco Mining and Exploration Pty Ltd (AFMEX, the operator), Cameco Australia Pty Ltd (Cameco) and SAE Australia Pty Ltd (SAE) up to 2002, and EL23461 (Myra project) which was operated by Cameco. The joint venture with AFMEX was dissolved in March 2003 and Cameco Australia assumed control and operator of the project until the expiry of the licences in 2005.

Applications were lodged on 8 September 2005 for Substitution Exploration Licenses (SEL) 24920, 24921 and 24922 to cover the same areas as former ELs 2505, 2506, 2516, 2517, 7029, 9354 and 23461. SELs 24921 and 24922 were granted to Cameco Australia Pty Ltd on 1 June 2007 for a period of four years

SELs 24921 and 24922 and EL 25002 were purchased from Cameco by TCC Project Pty Ltd (wholly owned subsidiary of Alligator Energy Ltd) in November 2010. An application for renewal of SELs 24921 and 24922 for an additional 2 years was lodged with DME on 2 February 2011. These were re-defined as ELs to conform with the recent Minerals Titles Act (2012). Additional applications for renewal of ELs 24921 and 24922 are current with DME for the two year period 30th May 2013 to 29th May 2015.

ELs 24921, 24922 & 25002 comprise 25, 63 and 4 blocks respectively.

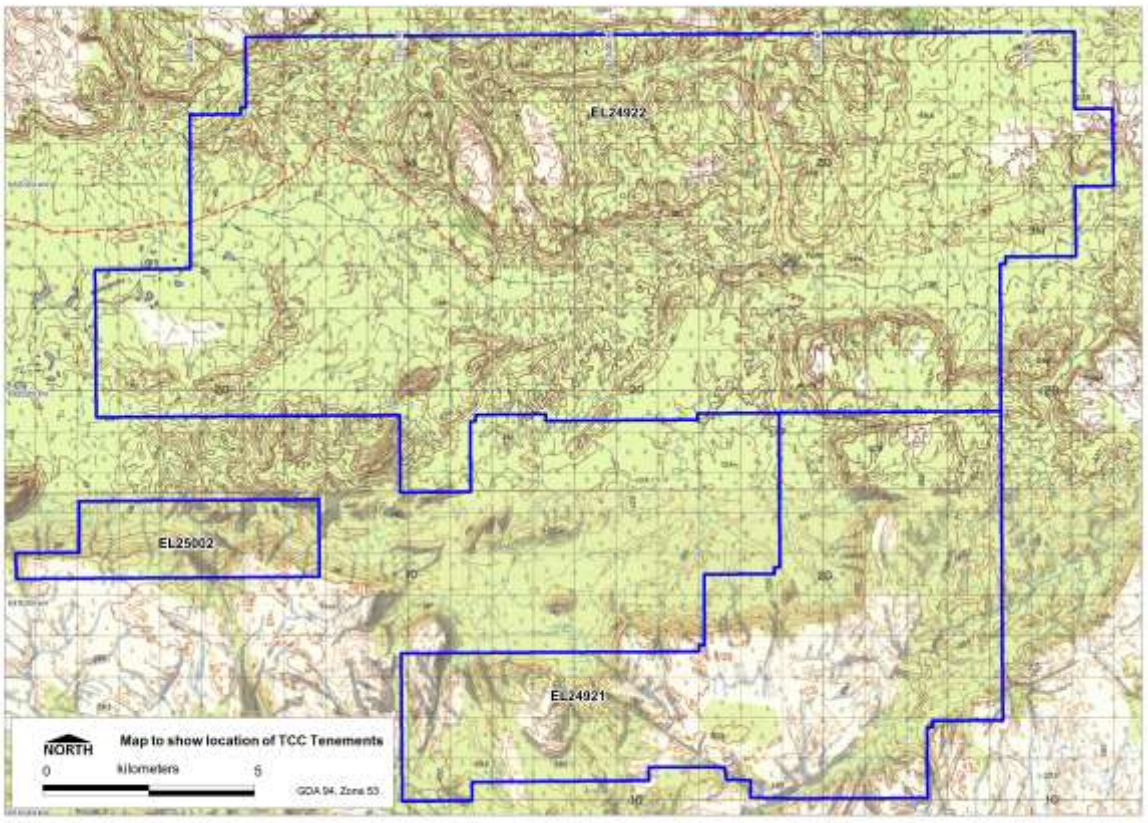

Figure 1: Location Map for ELs 24921, 24922 and 25002

2. REGIONAL and PROJECT GEOLOGY

2.1 Regional Geology

The Tin Camp Creek project area is located within the eastern margin of the Pine Creek Orogen (PCO) and lies on the eastern boundary of the Nimbuwah structural domain (Needham 1988).

This following description of the regional geology is largely based on the work by (Needham, Crick et al. 1980; Needham, Smart et al. 1983 and Needham and De Ross 1990). 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 Orogen 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 included in the Neoarchaean (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 NTGS and Geoscience Australia indicates that SHRIMP U-Pb age dating of an area of previously mapped Myra Falls Metamorphics outcropping within the Myra Inlier is Neoarchean in age (Hollis, Carson et al. 2009a) and these quartzofeldspathic gneisses are named the 'Kukalak Gneiss' (Hollis, Carson 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, Sweet et al. 2005). The group appears to on-lap Neoarchaean basement highs, but gneissic variants are also thought to pass transitional into paragneiss of the Nanambu Complex.

The Cahill Formation of the Namoona 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 for 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 event before deposition of the late Palaeo- to Mesoproterozoic Kombolgie Subgroup (Thomas 2002). The rocks have also been locally migmatised during the ca.1847-30 Ma Nimbuwah Event. A broad trend of increasing metamorphic grade is evident 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, Brakel et al. 1999; Sweet, Brakel et al. 1999). The subgroup consists of sandstone units called the Mamadawerre Sandstone, Gumarrirnbang 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 Neoarchaean and Palaeoproterozoic units, and the Kombolgie Subgroup, forming magnetic sills, dykes, lopoliths, and laccoliths. The Oenpelli Dolerite has a SHRIMP U-Pb baddeleyite date of 1723 ± 6 Ma (Ferenczi, Sweet et al. 2005), however, geochemical and geophysical data suggest 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, north – northwest and northeast strikes, giving rise to the characteristic linearly dissected landform pattern of the Kombolgie Plateau. Another significant set trends east – west and 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, with a large lateral component in rocks of the PCS. 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.

2.2 Project Geology

The tenements are centrally located over the Myra Falls Inlier and cover the Early Proterozoic metasediments of the Cahill Formation. Ridges of Kudjumarndi Quartzite occur extensively in EL 24922. Metamorphic grade increases to the east and southeast while lithologies in the west and north are predominantly amphibolitic. Carbonaceous and psammitic schists of the Lower Cahill Formation underlie some of the prospects in the north and west of EL 24922 (i.e. Mordijimuk, Gorrunghar and Gurrigarri), and also in the northeastern part of the tenement where they are characterised by approximately 5% sulphides in calc-silicate gneisses and carbonaceous schists.

Drilling at South Horn on EL 24921, approximately 8 km south of Caramal, confirmed the presence of Nimbuwah Complex rocks as shown in mapping data. Core drilling by Afmeco (1998-2000) and Alligator Energy (2011) has identified the presence of Cahill Formation equivalents below the Kombolgie sandstones to the west of the Beatrice Fault in this area. There is minor graphite locally in these dominantly quartz-biotite-

garnet schists and gneisses. The contact between the Nimbuwah Complex and interpreted Cahill Formation is marked by a complex migmatite zone.

In the North East Myra area, such correlations are more problematic. There is a prominent ridge of interpreted Kudjumarndi Quartzite to the immediate south of the faulted contact zone between the Cahill Formation and the Kombolgie, indicating that the overlying rocks are basal (PC_1) Lower Cahill Formation. However, calc-silicate rocks and carbonaceous lithologies which characterize PC_1 Lower Cahill Formation, and which are well-represented just 6 km to the southwest, are rare in the NE Myra area. The psammopelitic gneisses and amphibolites that characterize the NE Myra stratigraphy are better correlated with the Lower Arkosic (PC_2) and or Amphibolitic Unit (PC_3) of the Lower Cahill Formation. Previous RAB drilling has determined that metasediments and amphibolites dominate lithologies south of the quartzite ridge. Neoarchaean (ca. 2500 Ma) Nanambu Complex gneiss is observed 1.6 km south of the ridge (Hollis, Carson et al. 2009b). Faulting and folding may explain the absence of the Nanambu immediately below the Kudjumarndi Quartzite to the south and apparent absence of PC_1 in the Lower Cahill Formation to the north.

The Kudjumarndi Quartzite is not as extensive to the south of the western part of EL 24922 as indicated by Government mapping. Quartzite in this area is mostly exposed as a gentle south dipping dip-slope, which explains the extensive exposures. However, the quartzite does not immediately underlie the unconformity in the east. The quartz-biotite schists and minor amphibolites in this area are better assigned to the Upper Cahill Formation. There is extensive but mostly thin Cainozoic cover in this area that obscures lithological contacts.

In the north of EL 24922 in an area covered by sandstone, historic drilling has intersected para-amphiolitic rocks. Two main stratigraphic units were intersected comprising finely laminated pelitic to psammopelitic schist and a finely laminated para-amphibolite sequence containing pyrrhotite. Graphite is associated with this sequence. This stratigraphy appears comparable to the 'banded amphibolite' with associated graphite described by QML from several prospects in the Nabarlek tenement to the north. The para-amphibolite is typically about 60-70 m thick.

The distribution of Tin Camp Granite as shown by historic exploration work is suspected to differ slightly to that indicated by government mapping. In particular, the Caramal area and the area to the north (along the east-west trending structure approximately 2 km north of Caramal) comprises less extensive outcrop than that shown on government geology maps. Field mapping by S Dorling in 2009 revealed outcropping boulders of Tin Camp Granite approximately 1 km northwest of the Caramal prospect, which is in turn approximately 1.2 km south of the location indicated by the government geology map. The granite observed at Caramal is pink-coloured, biotite-rich granite containing minor quartz shears. More extensive outcrops of Tin Camp Granite have been mapped near the northeastern boundary of EL 24922. An excellent exposure of sandstone in this locality unconformably overlies the granite and xenoliths of Kudjumarndi Quartzite are observed in the granite nearby. There are also quartz-feldspar porphyries in this area which spatially appear to be part of the Tin Camp Granite.

In the Caramal to Two Rocks area, mapping and drilling shows the rocks to be quartz-

mica schists of the Cahill Formation, quartzite, interpreted as the Kudjumarndi Quartzite, and quartz-feldspar (biotite) gneiss previously interpreted as Mt Howship Gneiss. Recent work by the NTGS has re-evaluated the age of the outcropping gneiss in this area, with SHRIMP age dating demonstrating that the rocks are Archaean, ca2500 Ma (Hollis, Carson et al. 2009a). These Archaean gneisses in the Myra and Caramal Inliers have been named the Kukalak Gneiss, and this unit is interpreted to form part of a continuous regional felsic magmatic event with the Nanambu Complex basement throughout the region (Hollis, Carson et al. 2009b).

Field mapping conducted in 2009 by Cameco identified an outcropping ridge of dacite or rhyolite immediately adjacent to a thrust fault in the valley approximately 1 km to the west of the Caramal prospect. The dacite appears to be compositionally similar to dacite that was intersected by drilling at NE Myra in 2005 (drill hole TCD3007, 97.2 – 175.5 m). Quartz-hematite breccias are present and exhibit various north-northeast, north- northwest and east-west trending orientations.

3. PREVIOUS WORK

3.1 Overview

Modern exploration for uranium commenced in the region following regional airborne radiometric surveys over the Alligator Rivers Province by the BMR in 1969. The Nabarlek deposit, 20km north of the Tin Camp Creek Project, was subsequently discovered by QML following a regional fixed wing airborne radiometric survey which identified 135 radiometric anomalies, 95 of which occurred within the Tin Camp Creek region. QML undertook follow up work consisting of radiometric surveys, regional stream sediments surveys, ground follow up and geological mapping. As a result of this work, the Caramal, Mordijimuk, Gorrunghar and Gurri Garri prospects were identified. Drilling was subsequently undertaken on all of these prospects, however the main focus of work was on the Caramal deposit. Esso Minerals, QML and Uranerz Australia Pty Ltd ("UAL") conducted exploration in the area during the early 1970s, which resulted in the discovery of the NE Myra prospect.

Exploration ceased in 1973 following the Federal Government decision to inhibit uranium mining in the Alligator Rivers region. No work was undertaken in the area between 1973 and 1987 due to an embargo on the grant of exploration licences in Arnhem Land.

The former Tin Camp Creek exploration licences (ELs 2505, 2506, 2507, 2516, 2517, 7029 and 9534) were granted in 1995 to QML who subsequently divested the ground to Afmeco in joint venture with Cameco (49%), SAE Australia ("SAE" - 24.5%) and West Arnhem Land Corporation Pty Ltd (2%). The Razorback gold prospect and the South Horn uranium prospect were discovered in this time. In 2003 Cameco acquired the AFMEX and SAE interests and continued exploration until 2005, when the licences were relinquished and exchanged for SELs, which were granted in 2007. Alligator acquired SELs 24921 and 24922 and EL 25002 from Cameco in the later part of 2010.

3.2 1970s

Initially, QML completed a total of 27 diamond drill holes at the ***Caramal*** deposit. Drilling intersected uranium mineralisation associated with chloritised schists of the Cahill Formation adjacent to an intrusive sill of Oenpelli Dolerite.

Gorrunghar was costeaned and percussion drilled in the early 1970s by Queensland Mines. A total of 12 percussion drill holes were completed to a maximum depth of 67m. Uranium mineralisation was identified in three of these holes including a maximum of 8.6m @ 0.33% U_3O_8 from 1.3m in TCGOR-006.

Costeaning and percussion drilling was undertaken at the ***Mordijimuk*** prospect in 1972. Two percussion drill holes were completed to test surface radiometric anomalies. Both holes were drilled to a depth of 51m. Anomalous uranium was intersected in weathered and chloritised amphibolite.

GurriGarri is a radiometric anomaly associated with a prominent quartz-breccia ridge. Soil geochemistry and radiometric surveys were carried out over a gridded area. Costeaning was undertaken to follow up soil geochemical and radiometric anomalies. Results of these surveys are not available.

Following the election of the Whitlam Labour Government in 1973, the Federal Government placed a moratorium on exploration in the Alligator Rivers region and Arnhem Land.

3.3 1980s

The moratorium on exploration was lifted in 1987. The Alligator Rivers Joint Venture ("ARJV"), comprising Uranerz Australia Limited ("UAL") as operator with Kumagai Gumi (50%), completed 4,000m of diamond core drilling between 1987-1989 at the ***Two Rocks*** prospect, and the ***Kudjumarndi/Khyber Pass*** area. Two small pods of uranium mineralisation were located at Two Rocks, while a broad zone of hydrothermal alteration and minor uranium enrichment was outlined in the Kudjumarndi/Khyber Pass area.

3.4 1990s

UAL ceased active operations in Australia in 1991. Afmeco subsequently became operator of a restructured ARJV (Afmeco 50%, Uranerz 25%, Kumagai Gumi 25%). Work focussed on drilling at the **Two Rocks** and **Kudjumarndi** Prospects. No drilling was undertaken in the Khyber Pass area. Diamond drilling totalled 2,323 m.

A best result of 7m at 155ppm U, including 6 m at 1600ppm Cu, was obtained in drill core in MRD061 at **Two Rocks**. In March 1994 UAL discontinued their involvement in the ARJV

Exploration Licences 2505, 2506, 2516, 2517, 7209 and 9534 were granted to QML in September 1995, and subsequently acquired by the ARJV. The combined areas became known as the Tin Camp Creek Project (“TCCP”). An airborne geophysical survey was flown over the tenements in 1996. A series of radiometric anomalies were delineated in the South Horn area and some shallow conductors were outlined elsewhere in the tenements.

Stream sediment surveys were conducted through much of the tenements in 1996, 1997 and 1998 excluding the sandstone plateau country. Prospect areas within the TCCP tenements identified and assessed as part of this work included:

- **Robbie's**: Up to 110 ppm U and 240 ppm Cu in rock chips from hematitic quartzite, located near the eastern edge of the EL2505 sub-blocks outlier .
- **GurriGarri**: Up to 680 ppm U, 170 ppb Au, 2000 ppm P and 550 ppm Cu in reconnaissance rock chips associated with chlorite-white mica altered amphibolite marginal to a quartz-breccia ridge.
- **Gorrunghar and Mordijimuk**: The only work conducted was minor reconnaissance as they were within a restricted area until 1998 as there was a proposal to build an outstation in the area. The restriction on the area was removed in 1998.
- EM anomaly 11/12 and Anomaly 6 in EL2516: Ground EM was conducted at EM anomalies identified in DIGHEM data. Soil surveys designed to test EM anomaly 11/12 and to follow-up stream sediment anomalies were conducted in 1999. Minor base-metal anomalies were detected at Anomaly 11/12.
- **Razorback**: This gold prospect was identified from follow-up of gold in stream anomalies. Up to 546 ppb Au was outlined in soils and up to 1.4 g/t Au (plus anomalous copper) was obtained from rock-chips of malachite stained quartz-muscovite-biotite schist.
- **South Horn**: This prospect was identified from airborne radiometric data. Outcrop sampling and mapping and RAB drilling was conducted initially with follow-up RC/core drilling.
- RAB drilling was also conducted along the Tin Camp Creek to the south of **Gorrunghar** and **GurriGarri**. The drilling was conducted mainly to map the extent of prospective Lower Cahill Formation lithologies in this area with extensive Quaternary cover. The drilling shows that quartz-muscovite schists and amphibolitic units of interpreted Lower Cahill Formation plus Oenpelli Dolerite dominate in this area.

Conventional RC/core drilling and helicopter supported core drilling mainly focused on the South Horn and Caramal prospects with little work elsewhere.

- **Caramal** (27 holes). Wide spaced diamond drilling was undertaken to the northeast of the Caramal mineralisation defined by QML in the 1970's. Drilling intersected chlorite altered meta-sediments of the Cahill Formation as well as anomalous thorium and rare earth geochemistry associated with altered meta-arkoses and patch uranium anomalism.
- **South Horn** (32 holes). Drilling intersected uranium mineralised intervals of up to 1% uranium over 6m in SHD-04 and narrower intervals of up to 1.4 g/t Au. The mineralisation is hosted within altered dolerite in quartz veins with accessory sulphides (dominantly chalcopyrite and molybdenite). There is a selvedge of uranium minerals on the edge of the quartz with hematite-sericite alteration extending up to 3 cm from the vein. Chlorite alteration and alteration of titaniferous magnetite to leucoxene extends several metres from the veins.

- There is also minor anomalous uranium in garnet and graphite bearing schist in the south of the prospect area. Four heli-supported core holes were also drilled to test geophysical and structural targets to the west of South Horn with negative results.
- **GurriGarri**. A single hole was drilled near the old trenches. Due to rugged terrain the hole was not sited in the optimum position to test the target.
- **NE Myra**. A single hole was drilled to test a subtle radiometric anomaly near the east- northeast tending NE Myra Fault. The hole was collared on sandstone 100m to the north of the fault and drilled at 340° away from the fault. The hole intersected extensive silicification-desilicification and chlorite alteration in the sandstone and moderate to strong hematite-chlorite alteration in mostly psammitic rocks below the unconformity, which is at 264 metres AHD. There is +200m vertical displacement, (north side down) on the east-northeast structure. The drill hole did not test the major east-northeast structure.
- A single hole was drilled targeting EM anomaly 11/12 which had been confirmed by a TEMPEST survey conducted in 2001. The drilling intersected sulphidic metasediments, confirmed in petrography to be similar to those at Two Rocks. Analytical results show up to 1330 ppm Zn and 536 ppm Cu, but no anomalous uranium. The sediments locally contain trace graphite, and unaltered staurolite bearing schist was intersected at the end of the hole.

3.5 Post 2000

In 2001, a detailed airborne magnetic and radiometric survey was flown above part of ELs 2505 and 7029. This survey targeted the northwest tending structural corridor which hosts the Nabarlek uranium mine to the northwest of the survey area. TEMPEST surveys were also flown over the South Horn area, EM Anomaly 11/12 and the north-eastern part of EL2505. This survey successfully delineated the EM conductor and the unconformable horizon in the South Horn area, but was unsuccessful in EL2505 in determining the depth to basement due to near surface conductive Nungbalgarri Volcanics.

Several ground-based geophysical surveys were conducted primarily over the Caramal and South Horn Prospect areas. These included Protem, nanoTEM, Max-min, CSAMT and gravity. Other work at South Horn included regional outcrop sandstone sampling and PIMA studies at South Horn, Caramal and NE Myra.

Various airborne and ground based geophysical surveys have been conducted on the TCCP including:

- airborne radiometrics and magnetics over the Gorrunghar, Mordijimuk and GurriGarri prospect areas.
- airborne TEMPEST (Time Domain Electromagnetics) covering the northern part of SEL24922, Two Rocks, Caramal and South Horn.
- airborne gravity at 2km spacing over the entire tenement area as part of a larger regional survey
- ground based SAM (Sub-Audio Magnetics) at NE Myra.

- ground based gravity over Two Rocks.

The ARJV was dissolved on 1 March 2003 and Cameco Australia Pty Ltd ("Cameco") assumed full ownership of the TCCP after Afmeco withdrew from uranium exploration in the NT. Cameco initially undertook a regional characterisation study of the Kombolgie Formation which included rock chip sampling and PIMA analysis. The focus of the study appeared to be exploration for regional alteration halos in the sandstone.

Drilling programs undertaken by Cameco included:

- aircore / rotary air blast (RAB) drilling
    - NE Myra - 144 holes for 3,196 m.
    - Two Rocks - 55 holes for 1,369 m.
- truck mounted diamond drilling
    - Two Rocks - 6 holes for 2,386.6 m.
    - Khyber Pass - 1 hole for 141.7 m.
- Helicopter supported diamond drilling
    - NE Myra – 8 holes for 2,129.5 m.
    - TEMPEST Anomaly – 2 holes for 609.3 m.
    - GurriGarri – one hole 224.6 m.

The drilling at **Two Rocks** intersected patchy uranium mineralisation. The best intersections were in MRD0101 with 0.8m @ 4.16 % U_3O_8 from 71.9m and MRD-0104 with 0.5m at 1.1% U_3O_8 from 36.5m.

Drilling at **NE Myra** identified anomalous uranium with a best result from TCD3007 which returned 2.5m @ 1,002 ppm U3O8 as well as 132 ppb Au and anomalous levels of Pt, Pd, Li, Sn and Zn. The anomalous basement-hosted uranium intervals in the eight cored holes (including TCNMD0001 drilled by Afmeco) drilled at NE Myra are all contained within the hanging wall of a major reverse fault with ~250m of vertical displacement. The mineralisation is hosted within intensely chlorite- altered units of the Cahill Formation and is spatially related to extensive hematite breccias in both sandstone and basement.

Drill holes TCTPD001 and TCD3003 indicated that the conductive basement feature identified in TEMPEST data is related to narrow graphitic shear zones within the pelitic Cahill Formation. Weakly elevated uranium was intersected within granitic pegmatoids, but no anomalous uranium was intersected in association with the graphitic shears. This drilling however indicated the presence of extensive prospective Cahill Formation lithologies under the Kombolgie Formation in the northern part of the project area.

In 2005, Cameco applied to consolidate the tenements in the TCCP area into two Substitution Exploration Licences. Exploration on these tenements commenced during 2007. Application for EL 25002, which covers an area of 10.83 km^2 (4 blocks) and occupies an area that was previously within the southern part of EL 2505, was lodged on 19 April 2006. EL 25002 was granted to Cameco on 2 September 2008 for an initial

period of six years. No ground-based exploration has been conducted over EL 25002 since the tenement was granted.

In the period from 2007 to 2009 Cameco conducted exploration over the TCCP area which comprised RAB/aircore drilling, reverse circulation drilling, various airborne geophysical surveys (TEMPEST and Sub-Audio Magnetics), and diamond drilling. The focus of work during this period was the NE Myra project area.

The best uranium assay returned from the various RAB/aircore drill programs was 156 ppm U_3O_8 from drill hole TCB3142 which was drilled in 2005. Regionally, the project area was found to contain anomalous concentrations of Ni, Au, Co, V, Cu, Zn, Ag, Pb, As, Li Sn, W, TiO2 and Cr. Best uranium assay results from the various reverse circulation drilling programs included 6.6 m @ 1600 ppm U_3O_8 in drill hole TCR3243 within chloritised amphibolite from the North East Myra Fault zone.

Exploration in 2009 consisted of one helicopter-supported diamond drill hole (TCD3245) for 242.70m on SEL24922, an aircore drilling program of 96 holes for a total of 1,097m to the west of Caramal on SEL24291, reconnaissance and outcrop sampling, and a geological evaluation of NE Myra, Caramal and South Horn by CSA Global.

Exploration during the 2010 tenure year was influenced by the sale of the tenements to Alligator Energy Ltd. The sale process and subsequent transfer of title and environmental licence occupied a significant part of the 2010 field season. Nevertheless, exploration work was undertaken by Alligator Energy towards the end of the 2010 season and for the early part of 2011. This work included a re-assessment of past exploration, commissioning an Independent Geologists Report, ground radiometric surveys, re-sampling of historic drill core and the commencement of a detailed airborne magnetics and radiometric survey in the eastern part of the project area.

Exploration conducted by Alligator Energy in 2011 on the Tin Camp Creek project comprised of 4393 metres of diamond drilling with 2 holes at Two Rocks (234m), 6 holes at South Horn (588m) and 25 holes at Caramal (3571m), as well as the completion of the high resolution airborne magnetics and radiometric survey in the eastern part of the project area, the commencement of a high resolution ground based gravity survey, petrographic studies of Caramal Core samples and a JORC resource at Caramal which, using a 1,000ppm U_3O_8 cut-off, identified 943,905t @ 3,143ppm U_3O_8 containing 2,934t U_3O_8 (6.47Mlb U_3O_8).
Uranium mineralisation highlights from this program are outlined in table 1.

Drill Hole	Prospect	Easting MGA94	Northing MGA94	Azimuth Grid	Dip	From (m)	Length (m)	Grade U3O8 (ppm)
CAD11-001	Caramal	321351	8617362	360	-90	10	3	2026
					And	18	11	3687
					And	39	7	1794
CAD11-003	Caramal	321355	8617363	360	-60	24	5	1791
					And	35	7	1884
CAD11-004	Caramal	321354	8617363	315	-60	21	3	1194
					And	30	5	1184
CAD11-005	Caramal	321402	8617620	45	-45	2	13	3095
					And	24	20	2207
CAD11-007	Caramal	321402	8617620	45	-60	3	6	1171
					And	28	14	1146
CAD11-008	Caramal	321402	8617620	360	-55	5	7	1449
					And	33	14	6991
					Including	40	7	10032
CAD11-018	Caramal	321,495	8,617,713	150	-75	117	8	1331
CAD11-019	Caramal	321,490	8,617,714	230	-50	116	18	3381
CAD11-020	Caramal	321,487	8,617,717	230	-75	108	14	7072
Including						111	9	10099
CAD11-021	Caramal	321,495	8,617,718	330	-80	107	2	1193
CAD11-025	Caramal	321,419	861,753	180	-45	113	4	1161
And						139	17	1743
SHD11-003	South Horn	320734	8611174	315	-60	31	1	548
SHD11-004	South Horn	320710	8611197	315	-60	48	2	1158
						76	2	1432
SHD11-005	South Horn	320713	8611197	45	-60	41	11	563
						70	4	1061
SHD11-006	South Horn	320740	8611178	45	-60	34	1	990
						46	5	978

Table 1: 2011 Significant Uranium results

4. EXPLORATION WORK 2012-2013 TENURE YEAR

4.1 Overview

Exploration activities conducted during 2012 - 2013 on the Tin Camp Creek project comprised the following:

- Acquisition of 533 sq. km 0.5-m GeoEye-1 Archive satellite imagery over the Tin Camp Creek Project, captured 15 May, 31 May and 14 June 2010.
- Acquisition of historic aerial photography prints over the Caramal deposit.
- Establishment of new tracks and post wet re-establishment of existing tracks to facilitate exploration activities project wide.
- Drilling of 10,990 metres focussed on the Caramal – South Horn regional area, cumulating in the identification of resource extension potential of Caramal, and the

identification of mineralisation at Mintaka. This consisted of 4517 metres of diamond drilling, and 6473 metres of Reverse circulation. 7348 metres were drilled within 2 km of the Caramal deposit, 1931 metres were drilled around the Mintaka prospect and 1711 metres in proximity to the South Horn prospect.

- Geochemical analysis of 2311 drill samples from the 2012 program by either Bureau Veritas or Australian Laboratory Service in Darwin along with 233 re-assays from historic core taken from the South Horn Prospect.
- Ground based radiometric survey of 6429 sites.
- Atlas Geophysics extended a gravity survey which was commenced during 2011 program. A further 4221 stations were recorded along Orion's Trend.
- 104 rock chip samples, of which 76 were sent for geochemical assay.
- Data review of the Gorrunghar prospect was initiated by Alligator geologist, and as a result is deemed drill test worthy for the 2013 program.
- Helicopter supported geological and logistical reconnaissance for 2013 drilling activities of NE Myra prospect and East Orion prospects was completed.
- Reconnaissance geological mapping was conducted over EL24922 internally by Alligator geologists, and by Andrew Browne, consultant to Alligator Energy.
- Continuation of validation and standardisation of historic data set, including re assessment of historic core.

4.2 Ground Based Radiometric Survey

Alligator commenced a series of ground based scintillometer surveys in areas of interest to refine anomalies highlighted from the 2011 airborne radiometric survey. The distribution of these surveys are shown in Figure 2. Surveys were carried out using a GF Instruments, Gamma Surveyor unit, on grid basis with varying line and point spacing. Average CPS readings were recorded at each station, at 20% of stations a spectrometer measurement was taken to establish uranium – thorium ratios. Readings were taken at waist height and averaged over 10 seconds. Assay readings ran for 30 seconds.

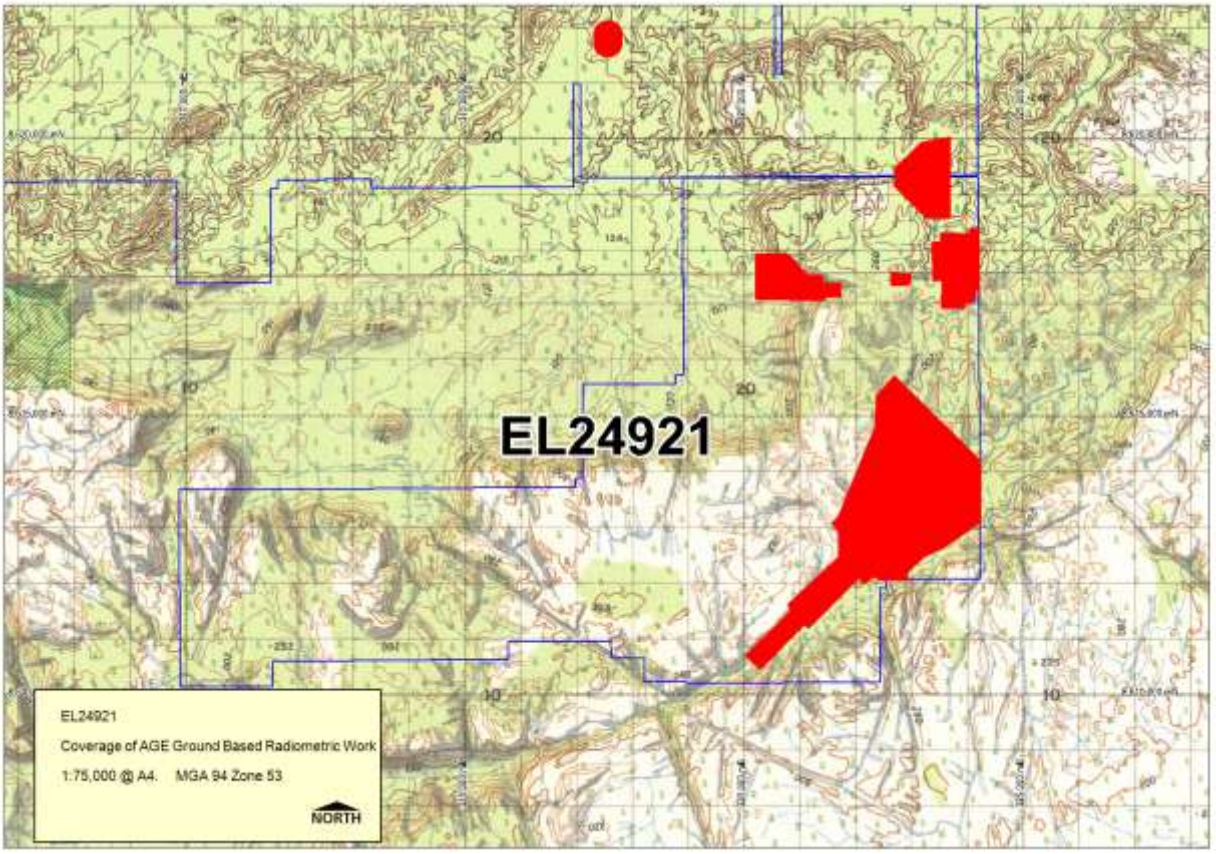

Figure 2: Location of Ground Based Radiometric Survey

4.3 Ground Based Gravity Survey

Atlas Geophysics was re-engaged to conduct a ground based gravity survey over the Caramal – South Horn area, following the survey completed in 2011 of the Caramal prospect. Data acquisition commenced on the 9 June 2012 and the survey was completed on 2 July 2012. Gravity data were acquired using a 50m square grid configuration although many points were offset due to the steep terrain. Acquisition was carried out by a two person walking crew. Data were collected at a total of 3,874 gravity station locations.

This data has been utilised in identifying both basement structures, as discussed below in the Caramal section, and for highlighting continuation of the carbonate sequence of the Lower Cahill, observed in the data as a density contrast between carbonate and the underlying gneiss. This is a key stratigraphic feature for uranium mineralisation in the area.

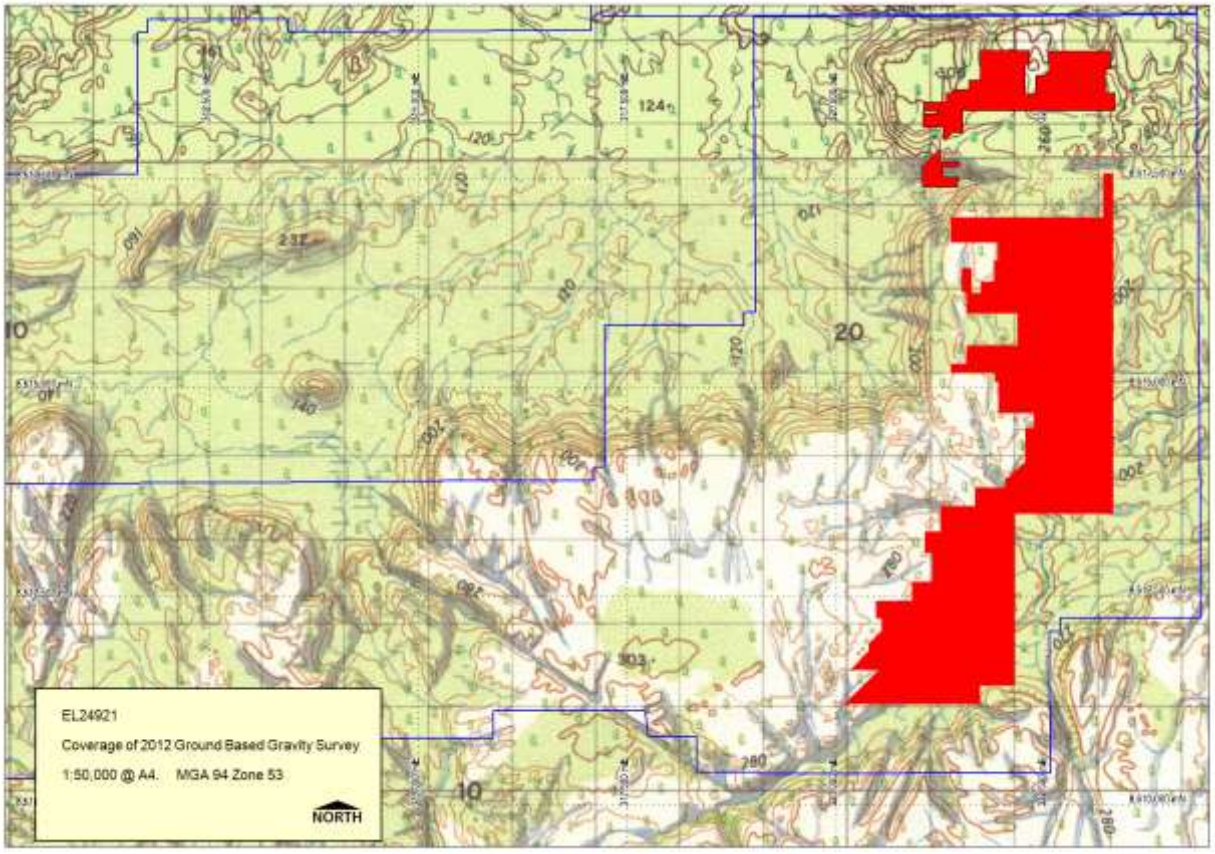

Figure 3: Location of Ground Based Gravity Survey.

4.4 Rock Chip Sampling, Tenement Reconnaissance and Geological Mapping.

Reconnaissance mapping around the Caramal block was conducted by Alligator Geologists, and by Andrew Browne of Geosynthesis. The following text is taken from "Review of the Geology of The Tin Camp Creek Project, NT" by Browne, 2012. A full copy of this report is included in the Appendix.

Mapping and data review by Browne identified the quartzitic lithologies *".....ascribed to the Kudjimarndi Quartzite outcrop in six areas observed in October 2012 (Fig4):*

1. *to the SE of Caramal east of "The Blip" and south of the E-W dolerite through Caramal creek valley – highly siliceous finely banded and fine/coarsely-banded almost non-micaceous quartzite; localised isoclinal folding;*
2. *to the S of Caramal along both banks of the Caramal creek valley – interbedded poorly micaceous banded quartzite, and micaceous gneissic quartzite;*
3. *to the immediate WSW of Caramal in the ridge west of the Caramal track – interbedded poorly micaceous finely banded quartzite, and micaceous gneissic quartzite;*
4. *along the WNW zone of the block adjacent to and surrounding the Gibbon prospect – interbedded poorly micaceous finely banded quartzite, and micaceous gneissic quartzite; localised boudinage where the boudins appear to be coarse-grained quartz-feldspar-muscovite gneiss surrounded by quite finely banded very poorly micaceous quartzite;*

5. *along the NNE corner of the central part of the block where outcropping secondary uranium has been discovered (near the Kokrok prospect) – interbedded poorly micaceous banded quartzite, and micaceous gneissic quartzite;*
6. *as prominent ridges crossing the Caramal track immediately northwest of the Two Rocks prospect – interbedded siliceous quartzite, poorly micaceous banded quartzite, and micaceous gneissic quartzite; outcrop adjacent to the track (the "tourist stop") demonstrates isoclinal folding and intense boudinage.*

These observations are at odds with the 2012 updated 1:100,000 map (Hollis & Glass, 2012), which ascribes the quartzitic outcrop in all of these areas to the Kukalak Gneiss (Ank in Fig 1 below). The reference area (Hollis et al, 2009) is marked "KukGn" on Fig 1 below. The whole area requires remapping for clarification of the units in the area, not least because there should be a tectonised unconformity between the Kukalak Gneiss and the overlying Kudjumarndi Quartzite.

The importance of clarification of mapping outcrop regionally is because it is unlikely that either the Kukalak Gneiss or the Kudjumarndi Quartzite is a viable uranium host, whereas the overlying Cahill Formation definitely is, and its locations must be determined."

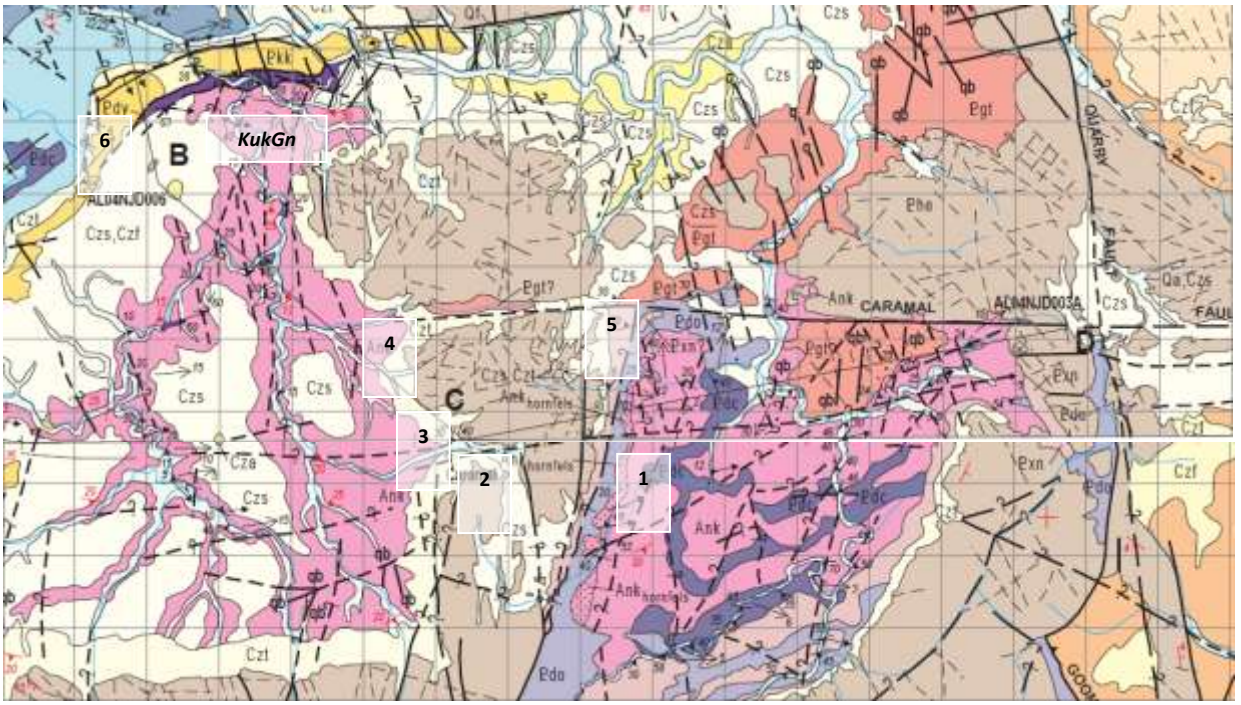

Figure 4: NTGS 2012 map, Caramal block area

Reconnaissance of area 5, "East Orion" led to further investigations by Alligator Geologists, and a small reconnaissance rock chip sampling program was conducted on a 020 striking feature. A total of 76 samples were taken over a 60 metre strike length and sent for multi-element assay. Sample preparation and assay techniques are as described for drill core in section 4.5. The highlight of sampling returned 2.1% U3O8. Located assay data has been provided with this report as attached data files. The anomalous zone is narrow, and is blinded by the presence of Kombolgie sandstone to the north. Mineralisation is in what is interpreted as basement gneiss. The potential for Cahill formation to the north should be drill tested, however the terrain is

steep and access would be a problem. It is suggested that initial drill program should be a helicopter supported.

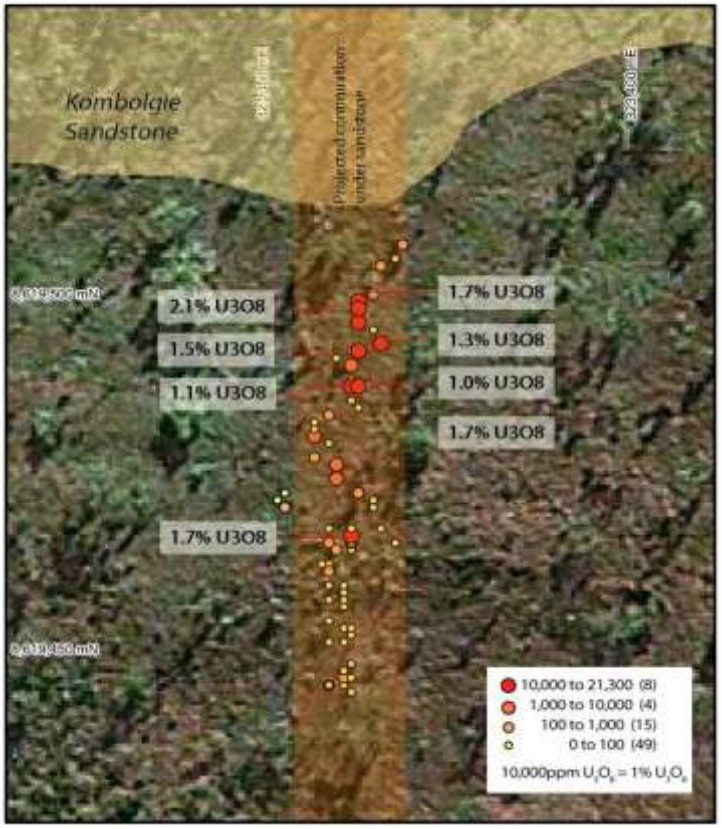

Figure 5: Rock Chip Sampling – Orion East

4.5 Drilling Program

A total of 69 drill holes, for 10,990 metres were completed on the Tin Camp Creek project during the reporting period. This consisted of 4517 metres of diamond drilling, and 6473 metres of Reverse Circulation drilling. Reverse circulation drilling was utilised primarily as a pre-collar method to reduce overall cost and increase time efficiency whilst drilling through the Kombolgie sandstones but was also utilised for more regional scout holes. 15 holes were drilled RC with Diamond tail (OBRD), 42 holes were drilled RC (OBR) and 12 holes were drilled diamond (OBD).

Hole Type	**Hole ID prefix**	**No. of Holes**	**Total Metres**
Diamond	OBD12-	12	2488
RC	OBR12-	42	5203
RC-Diamond	OBRD12-	15	3299 (1270-2029)
Grand Total		**69**	**10990**

Table 2: Summary Drilling Table

All samples were geologically logged at Myra camp. All drilling occurred with the Orion's Trend, with 7348 metres within 2 km of the Caramal deposit, 1931 metres drilled around the Mintaka prospect and 1711 metres in proximity to the South Horn prospect. The distribution of drilling is shown on Figure 6. All core and samples are currently stored at Myra Camp.

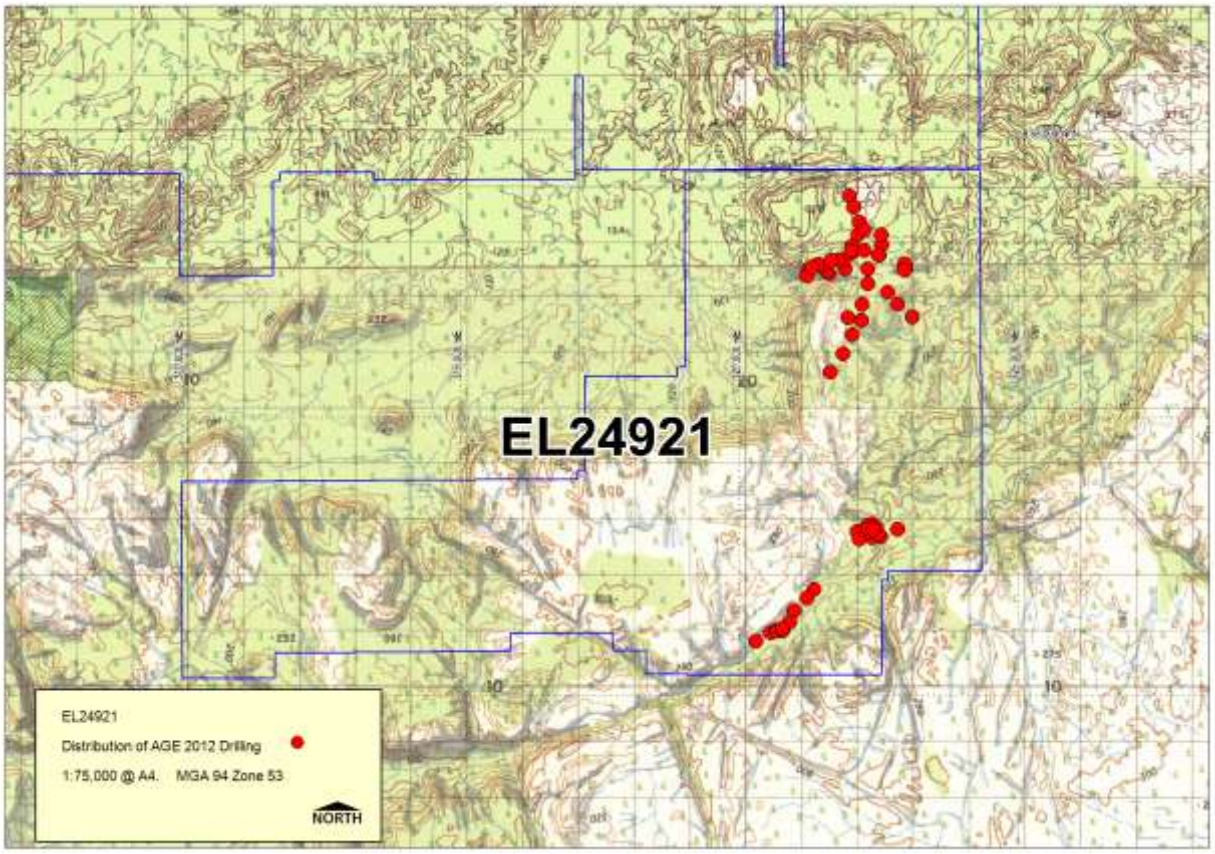

Figure 6: Location of Drilling.

Drilling was conducted initially by AMWD of Victoria utilising a small track mounted diamond rig, and later by Tom Browne Drilling Services of Dubbo, NSW with a track mounted UDR 650. Drilling commenced 13 June and was completed on the 2 November. All core was returned to Myra camp for processing by Alligator Geologists.
After all logging and photography was completed, assay sampling intervals were selected. Selection was based mainly on hand-held scintillometer checking. Any section greater than 50 ppm U_3O_8 (equivalent to 75cps scintillometer reading) is sent for analysis, plus several metres either side of that interval. All RC samples were checked as they were drilled utilising a scintillometer, results of this are attached. Samples were individually removed from the sequence to avoid interference. A background reading was recorded for most sites.

Core was sampled at one-metre intervals within selected zones and then half sawn using a diamond saw. The core was cut along the orientation lines drawn by the geologist during logging where possible. One metre, half core intervals are placed into sequentially numbered calico bags and the sample number and interval entered into the logging spreadsheet.

Drill core samples were transported to AMDEL (Bureau Veritas) Laboratories in Berrimah, or ALS in Winnelie, Darwin for sample preparation. The preferred uranium analysis technique for the 2012 drill program was ICP-MS using Lithium Borate fusion of the pulp sample. This technique is considered a total analysis method.

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

- Drill samples sorted and dried to a core temperature of approximately 100ºC.
- 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 0.1g 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. 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. The full suite of analytical results and detection limits for both core samples and rock chip samples is included in attached data files.

4.5.1 Caramal Prospect

The drilling at Caramal was designed to test for the potential of offset mineralisation following new interpretation after the 2011 JORC resource study of Caramal. This information was made available in the previous year annual report. Highlights of mineralisation can be seen in table 3. The penultimate hole struck 15 metres at 4371ppm U3O8 including 5 metres ay 9278 ppm U3O8, and is interpreted as being on the up thrown side of an 070 striking fault system running to the north of known mineralisation. This strike is seen as significant in opening the area directly north of the Caramal deposit which remains untested, and will be a priority for the 2013 field program. Figure 8 shows a schematic cross section of this. A photograph of uranium mineralisation in core from OBRD12-068 is shown in Figure 7 below.

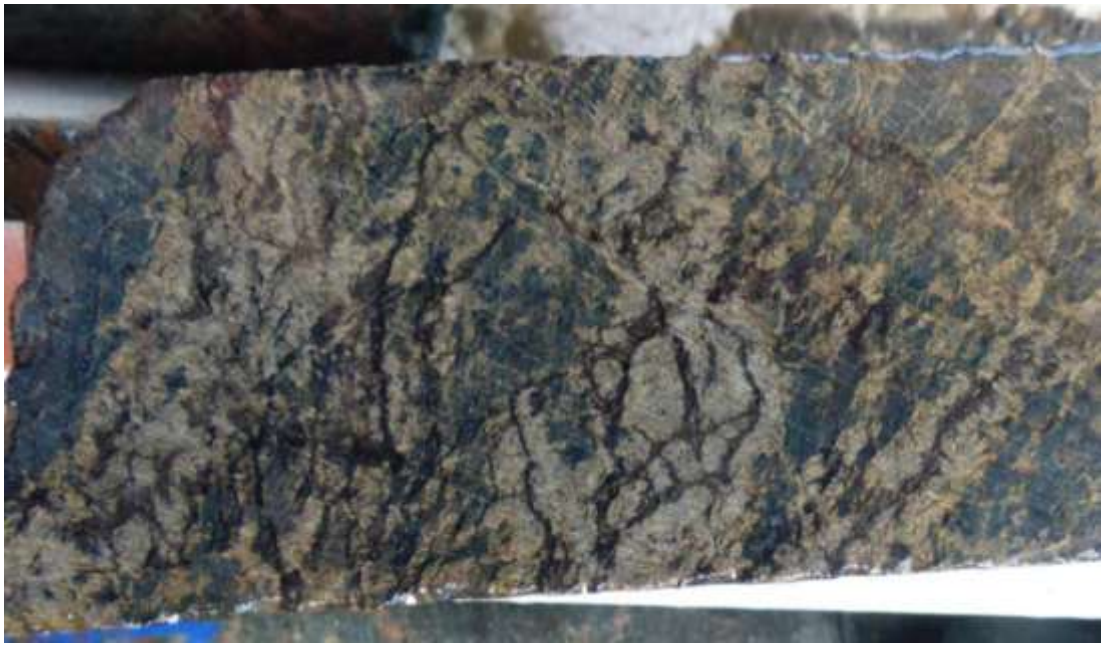

Figure 7: Uranium Mineralisation – OBRD12-068

Hole ID	MGA94 Easting	MGA94 Northing	Azimuth (mag)	Dip	Total Depth	Significant Uranium		
						From (m)	Length (m)	Grade (ppm U3O8)
OBD12-053	321561	8617631	270	-60	195.2	97	4	678
OBD12-054	321561	8617631	270	-50	167	117	3	500
					And	138	3	595
					And	150	4	1038
OBD12-055	321602	8617598	192	-50	188.8	No significant uranium mineralisation		
OBD12-056	321564	8617638	225	-50	170.1	No significant uranium mineralisation		
OBR12-057	321562	8617642	295	-50	168	133	23	1504
					Including	133	12	2302
OBRD12-058	321570	8617636	295	-60	180.1	No significant uranium mineralisation		
OBRD12-059	321492	8617717	195	-60	158.7	109	12	1330
					And	126	8	2464
OBRD12-060	321492	8617717	20	-80	192.5	113	1	710
OBR12-061	321561	8617642	248	-50	168	83	2	472
OBR12-062	321561	8617642	335	-70	168	No significant uranium mineralisation		
OBR12-065	321216	8617628	80	-80	114	No significant uranium mineralisation		
OBR12-066	321211	8617542	0	-90	114	No significant uranium mineralisation		
OBRD12-067	321414	8617753	150	-52	173	123	26	1854
					Including	130	15	3005
OBRD12-068	321299	8617696	156	-50	182.8	75	15	4371
					Including	76	5	9278

Table 3: Significant Uranium Results – Caramal

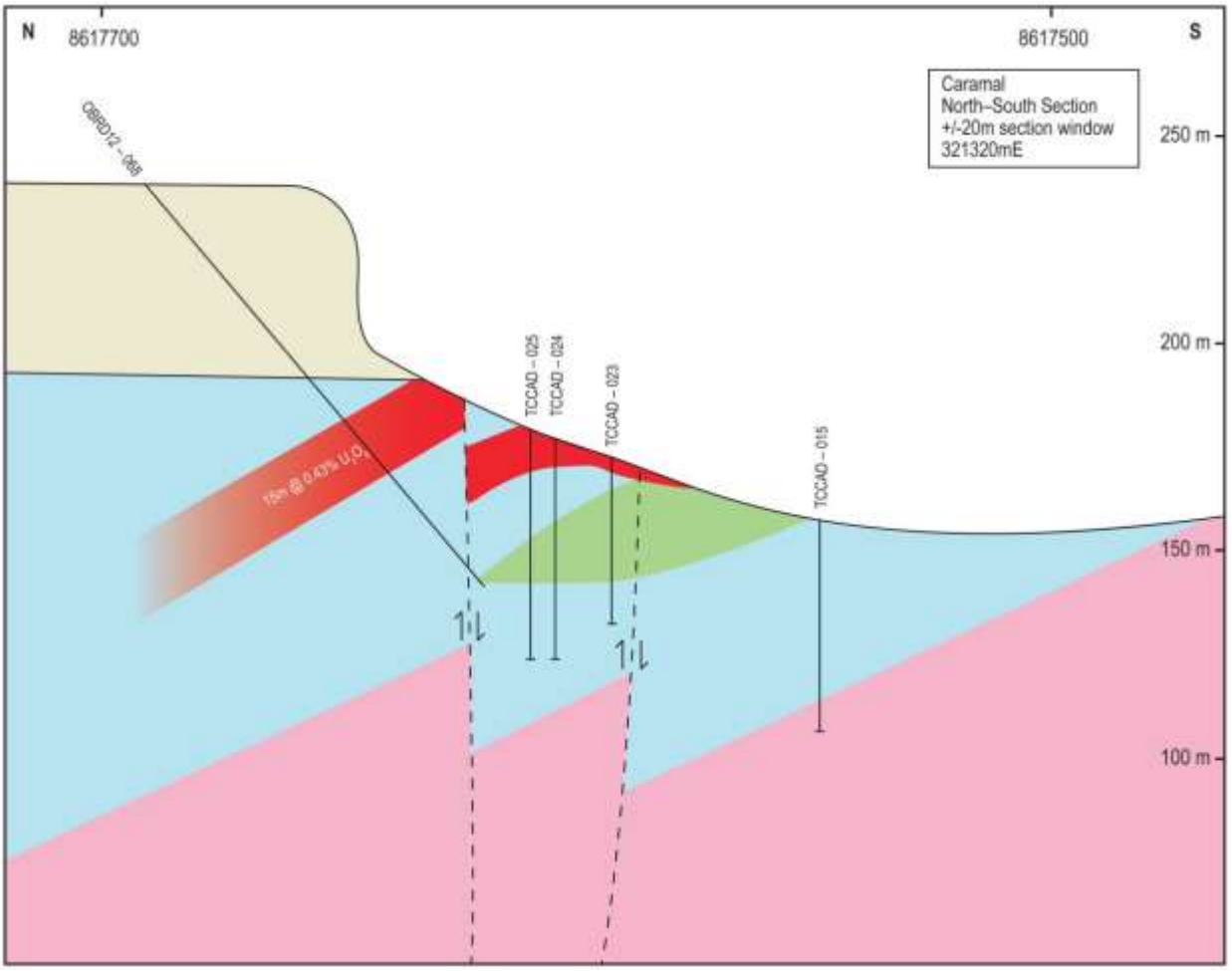

Figure 8: Schematic cross section – Caramal Prospect

4.5.2 Mintaka Prospect

A new zone of dolerite hosted low grade mineralisation was intersected 2km NE of South Horn, 6.7 km SE of Caramal. This area has become known as Mintaka. The target was generated due to structural complexity of the zone as highlighted from Gravity and Magnetic data. Underneath the dolerite, intensely chlorite altered Cahill formation was observed however no mineralisation was recorded in this horizon. Mineralisation remains open to the NW, and Alligator geologists believe the alteration signatures observed in the underlying Cahill warrant further investigation. Highlights of this mineralisation can be seen in table 4.

Hole ID	MGA94 Easting	MGA94 Northing	Azimuth (mag)	Dip	Total Depth	Significant Uranium		
						From (m)	Length (m)	Grade (ppm U3O8)
OBD12-025	322841	8612995	0	-90	150	No significant uranium mineralisation		
OBD12-026	322390	8612943	0	-90	150	12	4	247
					And	33	3	185
					And	42	7	112
					And	80	4	181
OBD12-027	322108	8612959	0	-60	84	No significant uranium mineralisation		
OBD12-028	322530	8612865	0	-90	150	97	1	200
OBR12-035	322390	8612893	0	-90	150	11	1	377
					And	26	2	168
					And	33	3	141
					And	59	2	136
OBRD12-036	322390	8612993	360	-80	183.5	10	7	353
OBR12-037	322380	8612843	360	-80	150	36	3	304
OBR12-039	322149	8612815	180	-75	75	No significant uranium mineralisation		
OBR12-040	322371	8613085	360	-80	151	78	15	512
					Including	85	5	1292
OBR12-041	322340	8612935	360	-80	151	21	50	153
					Including	29	4	601
OBR12-042	322487	8612921	345	-80	97	22	2	127
OBR12-043	322458	8613033	360	-80	139	No significant uranium mineralisation		
OBR12-044	322299	8613067	360	-80	150	6	20	234
OBR12-045	322303	8613023	360	-80	151	32	1	242

Table 4: Significant Uranium Results – Mintaka

4.5.3 South Horn Prospect

Nine (9) drill holes were completed within proximity to the old South Horn prospect and wide spread low level anomalism was observed as dolerite hosted mineralisation. Drill hole OBD12-001 was designed to test Cahill formation to the West of the interpreted Beatrice fault. Drilling failed to intersect the fault structure, with Alligator suggesting it lies further to the East. The contact between Dolerite and Cahill, as seen in proximity to South Horn appears to be intrusive.

Geochemical results show two separate phases of Oenpelli Dolerite, with mineralisation exclusively observed in the upper unit. Highlights of mineralisation can be seen in table 5.

Hole ID	MGA94 Easting	MGA94 Northing	Azimuth (mag)	Dip	Total Depth	Significant Uranium		
						From (m)	Length (m)	Grade (ppm U3O8)
OBD12-001	320667	8611167	318	-60	275	20	32	678
					Including	20	8	1050
OBD12-002	320293	8610977	315	-60	352	No significant uranium mineralisation		
OBR12-029	321336	8611914	135	-70	144	75	1	235
OBR12-030	320984	8611528	30	-70	138	5	6	125
OBR12-031	320898	8611332	135	-70	72	67	3	125
OBR12-032	320765	8611209	315	-70	150	65	6	663
OBR12-033	320565	8611136	360	-90	47	6	6	153
					and	27	3	466
OBD12-034	320769	8611174	135	-65	252	No significant uranium mineralisation		
OBRD12-038	321212	8611759	270	-80	286	72	1	170

Table 5: Significant Uranium Results – South Horn

5. CONCLUSIONS AND RECOMENDATIONS

The Tin Camp Creek project is considered by Alligator as a highly prospective tenement package which warrants considerable further exploration. The results at Caramal are positive, and the discovery of previously unrecognised outcropping surface mineralisation of over 2% U^3O^8 at Orion East highlights the fertile nature of the system. Alligator's current interpretations are neatly summarised in Browne's conclusions as follows:

"1. Uranium is concentrated within structural systems in the Tin Camp Creek region, both in basement foliated sequences and in non-foliated dolerite bodies;
2. Fertile structures appear to oriented roughly normal to host strike, and may be concentrated in the quadrant 340-050o;
3. It seems likely that the most favourable location for substantial tonnages and grades of uranium mineralisation lies within Lower Proterozoic basement schist/carbonate sequences of the Cahill Formation where disrupted by steep fertile structures probably normal to the formational strike;
4. The locations of all Cahill Formation schist/carbonate sequences need to be distinguished from underlying Kudjumarndi Quartzite and Kukalak Gneiss, and established by field mapping and geophysical interpretation;
5. The various non-foliated dolerite bodies require distinguishing into the Oenpelli age group (~1720Ma) and the Galiwinku/Arnhem age group (~1320Ma)".

The following recommendations are made for future exploration:

1. Conduct a drilling program to test potential offset to the direct north of Caramal.
2. Prospect scale mapping and ground based radiometrics should be conducted over Gorrunghar and GarriGurri.
3. Radionuclide sampling of anomalous drainage sediment from North East Myra prospect to establish the source of anomalism, and establish merit and potential targets for further exploration.
4. Aerial photo geological interpretation with field checking to refine regional geology.
5. Further drilling at Mintaka to define underlying stratigraphy.
6. Helicopter supported drilling program at Orion East to establish stratigraphy and potential for further mineralisation.

6. REFERENCES

Browne, A. (2012). Resource estimate, Caramal Uranium Deposit, NT - Geosynthesis Pty Ltd

Browne, A. (2012). Review of the geology of the Tin Camp Creek Project, NT - Geosynthesis Pty Ltd

Hollis, J. A., Glass, L. A. (2012). Howship and Oenpelli, Northern Territory; 1:100 000 Geological Map Series, sheets 5572, 5573; Explanatory notes, Northern Territory Geological Survey.

Ashley, P (2012b). Additional Comments on Thirty-Six Drill Core Samples From The Caramal Uranium Project, Arnhem Land, Northern Territory - Paul Ashley Petrographic and Geological Services

Ashley, P (2012a). Petrographic Report on Thirty-Six Drill Core Samples From The Caramal Uranium Project, Arnhem Land, Northern Territory - Paul Ashley Petrographic and Geological Services

Sowerby, R. (2011). Annual Report, Tin Camp Creek Project, Northern Territory – Alligator Energy Ltd

Otto, G. (2010). Annual Report, Tin Camp Creek Project, Northern Territory - Cameco Australia Pty Ltd

Dorling, S. (2009b). Technical Report, Caramal Prospect, CSA Global - Cameco Australia.

Dorling, S. (2009c). Technical Report, NE Myra Prospect, CSA Global - Cameco Australia.

Dorling, S. (2009d). Technical Report, South Horn Prospect, CSA Global - Cameco Australia.

Ferenczi, P. A., I. P. Sweet, et al. (2005). Mount Evelyn, Northern Territory (Second Edition); 1:250 000 Geological Map Series, sheet SD53-5; Explanatory notes, Northern Territory Geological Survey.

Hollis, J. A., C. J. Carson, et al. (2009a). "SHRIMP U-Pb Zircon Geochronological Evidence for Neoarchean Basement in Western Arnhem Land, Northern Australia." (Northern Territory Geological Survey, Geoscience Australia in press.).

Hollis, J. A., C. J. Carson, et al. (2009b). "Extensive exposed Neoarchaean crust in Arnhem Land, Pine Creek Orogen: U-Pb zircon SHRIMP geochronology." Annual Geoscience Exploration Seminar (AGES). Record of Abstracts. Northern Territory Geological Survey. Record 2009-002.

Kendall, C. J. (1990). Ranger uranium deposits. Geology of the mineral deposits of Australia and Papua New Guinea. F. E. Hughes. Melbourne, Australasian Institute of Mining and Metallurgy. **1:** 799-805.

Needham, R. S. (1988). Geology of the Alligator Rivers uranium field, Northern Territory, Bureau of Mineral Resources, Geology and Geophysics.

Needham, R. S., I. H. Crick, et al. (1980). Regional geology of the Pine Creek Geosyncline.

Uranium in the Pine Creek Geosyncline; proceedings of the International uranium symposium on the Pine Creek Geosyncline. J. Ferguson and A. B. Goleby. Vienna, International Atomic Energy Agency**:** 1-22.

Needham, R. S. and G. J. De Ross (1990). Pine Creek Inlier - Regional Geology and Mineralisation. Geology of the mineral deposits of Australia and Papua New Guinea. F. E. Hughes. Melbourne, Australasian Institute of Mining and Metallurgy. **1:** 727-737.

Needham, R. S., P. G. Smart, et al. (1983). Alligator Rivers, Northern Territory; 1:250 000 Geological Map Series, sheet SD53-3, Bureau of Mineral Resources, Geology and Geophysics.

Sweet, I. P., A. T. Brakel, et al. (1999). "The Kombolgie Subgroup - a new look at an old 'formation'." AGSO Research Newsletter **30**: 26-28.

Sweet, I. P., A. T. Brakel, et al. (1999). Mount Marumba, Northern Territory (Second Edition); 1:250 000 Geological Map Series, sheet SD53-6, Australian Geological Survey Organisation-Northern Territory Geological Survey (NGMA).

Thomas, D. (2002). Reconnaissance structural observations: Myra-Kukalak Project, Arnhem Land, Northern Territory, Cameco Australia.

Appendix 1

Review of the Geology of The Tin Camp Creek Project, NT. Browne 2012.

Appendix 2

Atlas Geophysics Memorandum M2012026
Myra Gravity Survey

Appendix 3

Drill Hole Distribution, 2012.

Appendix 4

Logging Codes.