Cameco Australia Pty Ltd

EL 5893

WELLINGTON RANGE PROJECT

NORTHERN TERRITORY

ANNUAL REPORT

CONFIDENTIAL

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SUMMARY

This is the seventh year of tenure for EL5893 referred to by Cameco as the Wellington Range project. The licence is located in Arnhem Land approximately 100 km north northeast of the Jabiru Township. The tenement was granted for a period of six years on May 5 2004 and to the end of year five there has been one statutory reduction. A 'Partial Waiver of Reduction' application submitted in March 2008 involved the relinquishment of 68 blocks for 216.5 km^2, all within no-go zones. This partial relinquishment was actioned on the anniversary date of 3 May 2008 with 201 blocks for an area of 639.9 km^2 being retained. The first of two renewals on the tenement was granted in February 2010. The renewals are valid for two year periods. In 2010, 30 diamond core holes were drilled with a total meterage drilled of 10313.1 m, including 1229.1 m of rotary mud pre-collaring. The primary target, the Angularli prospect has structural environments with similarities to the Aurari Fault Zone. It is located in the eastern part of the project. Twenty-four drill holes intersected uranium mineralization residing either within the Cataclastic breccia/sandstone contact (up to 3.51% U_3O_8) or within the basal part of the Kombolgie Subgroup (Mamadawerre Sandstone) at or in proximity to the unconformity. The aforementioned intercept, is one of the most significant intercepts encountered by Cameco in Arnhem Land to date. A total of 108 rock samples were collected from various outcrop/subcrop within the project. Of the samples collected, only one returned elevated uranium assays, while other samples were anomalous in pathfinder trace elements. Geophysics surveys in 2010 consisted of 568 unique gravity stations collected over the Angularli prospect by Haines Surveys Pty. Ltd. of Adelaide, SA and a suite of physical property logs in 5 diamond drill holes performed by Borehole Wireline Pty. Ltd. of Edwardstown, SA. Eligible exploration expenditure for Cameco's activities for the reporting period totalled $4,382,900.70. The exploration program for 2011 will consist of mapping and prospecting, diamond drilling and ground based gravity survey. A minimum of 20 holes will be drilled focusing primarily on Angularli following primary structures.

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

INTRODUCTION

Exploration was carried out by Cameco Australia Pty. Ltd. over EL5893 (Wellington Range) for the seventh year of tenure ending 3rd May 2011. The exploration license is located on aboriginal land with the work program carried out under the terms of consent documentation agreed with the Northern Land Council, pursuant to the Aboriginal Land Rights (NT) Act. The program was presented at the liaison committee meeting held on 5th May, 2011 at Minjilang (Croker Island) and approved by the NLC on behalf of the Traditional Owners.

The 2010 exploration activities consisted of ground based gravity and various downhole geophysical surveys, as well as diamond drilling and regional mapping and outcrops sampling. Contractors used on the project in conjunction with these exploration activities include:

- Titeline Drilling Ltd, Ballarat, Victoria
- Jayrow Helicopters, Darwin, NT
- Haines Surveys Pty. Ltd. of Adelaide, SA
- Borehole Wireline Pty. Ltd. of Edwardstown, SA

Location and Access

Wellington Range (Figure 1) is located in western Arnhem Land, and centred 100 km north northeast of Jabiru.

Relevant map sheets are:

- 1:250K Cobourg Peninsula SC5313
- 1:100K Wellington Range 5574
- 1:50K Laterite Point

Figure 1 - Wellington Range Location Map

The unsealed road to Gurig National Park on the Cobourg Peninsula provides good vehicular access to the eastern margins of the tenement. Several east to west trending roads and tracks provide additional access. In general sandstone escarpment areas are only accessible by helicopter.

Tenure

EL5893 was granted on 5 May 2004 for an initial period of six years. On granting, the total area under licence was 269 blocks for 856.4 km^2 of which 378.8 km^2 (44%) was excluded from exploration by the Northern Land Council. The current area available for exploration is 477.6 km^2.

Cameco applied for a 'Partial Waiver of Reduction' in March 2008, involving the relinquishment of 68 blocks for 216.5 km^2, all within no-go zones in the project. This partial relinquishment was actioned on the anniversary date of 3 May 2008 with 201 blocks for an area of 639.9 km^2 being retained.

Cameco applied and was granted a renewal of the exploration license for two years in February, 2010. The renewal is the first of two renewals eligible on the exploration lease before reapplication of the property will occur.

Physiography

The tenement contains several areas of large remnant dissected sandstone plateau, which form the western extension of the Wellington Range. The remainder consists predominantly of gently undulating country covered by savannah woodland. The principal drainage systems within the region are Angularli creek draining to the east and Murgenella Creek draining to the west.

Regional Geology

This section 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 Wellington Range project area is located within the eastern margin of the Neoarchean and Paleoproterozoic Pine Creek Orogen, in a region that has been subdivided into the Nimbuwah Domain of the Alligator Rivers region.

Figure 2 - Regional Geology

The oldest exposed rocks in the Alligator Rivers region are those of the Neoarchean (ca. 2500 Ma) Nanambu Complex, a group of paragneiss, orthogneiss, migmatite, and schist forming dome structures. The Nanambu complex is unconformably overlain by by a Paleoproterozoic metasedimentary and metavolcanic sequence, formerly included in the Pine Creek Geosyncline (PCG). Recent U-Pb age dating by the NTGS and Geoscience Australia (GA) of rocks within the Myra Inlier, previously mapped as part of the Paleoproterozoic PCG and named the Myra Falls Metamorphics, indicates that they are in fact part of the Neoarchean Nanambu Complex (Hollis, et al, 2009). These rocks have thus been re-mapped as the Kukalak Gneiss.

Paleoproterozoic rocks in the Alligator Rivers region are amphibolite-facies psammites assigned to 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 on-lap Neoarchean 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 Munmarlary Quartzite. The Cahill formation can be separated geologically into two groups, the lower Cahill Formation consisting of calcareous marble and calc-silicate gneiss, overlain by pyritic, garnetiferous and carbonaceous schist, quartz-feldspar-mica gneiss, and minor proportions of amphibolite; and the more psammitic Upper Cahill Formation consisting of feldspar-quartz schist, quartzite, lesser proportions of mica-feldspar-quartz-magnetite schist, and minor proportions of metaconglomerate and amphibolite. The Lower Cahill Formation is host to all of the major deposits of the Alligators Rivers Uranium Field, including Jabiluka, Ranger, Koongarra and Nabarlek. Mafic sills and dykes assigned to the Goodparla and Zamu dolerites intrude the Upper Cahill Formation.

Overlying the Cahill Formation is the Nourlangie Schist, 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 Paleoproterozoic to Mesoproterozoic Kombolgie Subgroup (Thomas, 2002). The rocks have also been locally migmatized during the ca. 1847 +/-30 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.

Overlying the Proterozoic metamorphics with a marked regional unconformity is the the Kombolgie Subgroup, the basal unit of the late Paleoproterozoic to Mesoproterozoic Katherine River Group of the McArthur Basin (Sweet et al., 1999a, b). The subgroup consists of sandstone units called the Mamadawerre Sandstone, Gumarrirnbang Sandstone, and Marlgowa Sandstone (oldest to youngest) which are divided by thin basaltic units called the Nungbalgarri Volcanics, and Gilruth Volcanics respectively. 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. It intrudes various Neoarchean and Paleoproterozoic units, as well as the Kombolgie Subgroup, forming magnetic sills, dykes, lopoliths, and laccoliths. The Oenpelli Dolerite has a U-Pb baddeleyite date of 1723 ± 6 Ma (Ferenczi 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. Localized effects in the sandstone include silicification, desilicification, chloritization, sericitization, 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 Paleozoic 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.

Local Geology

The basement geology of the Wellington Range project has been clarified in the last three years from regional diamond core and air core drilling by Cameco. The diamond drilling programs had and will continue to be guided by mineralization as well as interpreted geophysics, specifically airborne magnetics and gravity and ground-based EM surveys.

Interpreted lower Proterozoic Cahill Formation rocks form an arcuate linear trend, which parallels the northwestern boundary of the project. Recent drilling has shown these rocks to consist of characteristic Cahill Formation 'marker' horizons such as the magnetic pelite and an underlying carbonate-calcsilicate unit. Graphitic structures and a semipelitic graphite bearing unit are also present at different stratigraphic levels. The bulk of the sequence however consists of pelitic and semipelitic rocks with minor psammite and interlayered amphibolite. Intrusive rocks include pegmatite and dolerite. The intersected stratigraphy suggests that both Upper and Lower Cahill Formation rocks are present.

A flaggy quartzite has been observed outcropping at or near the Kombolgie Subgroup sandstone unconformity on the western side of the tenement adjacent to the escarpment. These isolated outcrops had been mapped as Cahill Formation by the BMR in the 1970s, however it is uncertain where they fit into the stratigraphic succession. Quartzitic rocks had been cored in some of the Wellington Range drill holes and well scattered outcrops of flaggy quartzite were mapped by PNC geologists near the top of the Myra Falls Metamorphics succession on the King River licence (SEL 25064). Correlation of these "quartzites" in the region may provide an idea as to where the Wellington Range intercepts of Cahill Formation are in relation to the middle Proterozoic unconformity.

Granitoid and quartzofeldspathic gneisses and some migmatite of the early Proterozoic Nimbuwah Complex form the basement rocks in the southern part of the tenement. Large sill-like bodies of Oenpelli Dolerite intrude the basement.

The basal Mamadawerre Sandstone of the Kombolgie Subgroup forms the Wellington Range escarpment, which dominates the southwestern quarter of the project. Several smaller isolated outcrops of sandstone occur in the southeast. In places along the unconformity a prominent cobble conglomerate has been mapped.

Up to 300 m of Cretaceous sediments, equated with the Bathurst Island Formation, obscure the basement geology in the northern part of the Wellington Range tenement. The sequence consists principally of dark coloured micaceous mudstone with intercalated thin sandy beds. Other lithotypes include calcareous sandstone, siltstone and green glauconitic sandstone.

Recent cover materials include sands, clay, gravel and cemented ferruginous deposits.

Figure 3 – Wellington Range Local Geology

PREVIOUS EXPLORATION

Interpretation of government funded geophysical surveys was carried out by Mobil Energy Minerals Australia in the early 1980s. There is no known record of whether this work was followed up on the ground. McIntyre Mines was also active in the region investigating radiometric anomalies linked to conglomeratic beds in the Kombolgie Sub-group. Substantial exploration programs were completed immediately east and south of the present tenement boundaries. For example, during 1970-1972, Union Carbide Exploration Corporation, explored for uranium in the King River area, now held by Cameco. This work included airborne magnetics and radiometrics with follow-up geochemical surveys, geological mapping, and drilling.

Exploration work conducted by Cameco in the first year of tenure (2004) included airborne radiometric, magnetic and hyperspectral surveys. Ground follow-up of radiometric anomalies and systematic rock sampling was also completed. A total of 89 outcrop samples, mostly sandstone, were collected for geochemical analysis. Nothing of significance was found.

Work for the second year of tenure (2005) included a TEMPEST airborne EM survey and detailed interpretation of the airborne magnetics, the latter activity providing a basis for year three (2006) planning.

Work for the third year of tenure (2006) encompassed three fences comprising 13 pre-collared diamond drill holes. The holes targeted a linear, approximately north-south trending magnetic feature, interpreted to correlate with a more regional trend representing the lower portion of the Upper Cahill Formation. The results of the drilling proved significant with the predicted Cahill Formation being intersected in the majority of holes confirming stratigraphy similar to that hosting several of the uranium deposits of the ARUF. Gneissic terranes were confirmed to enclose the trend both to the east and west. Airborne gravity was completed over the northern part of the project.

Work for the fourth year of tenure (2007) consisted of eight diamond core drill holes targeting the Cahill Formation magnetic trend, 71 air core holes to clarify geology and acquire geochemistry and rock outcrop sampling. A ground EM survey was conducted along one line targeting the graphitic unit. Table 1 gives a summary of all Exploration work completed by Cameco Australia.

Work for the fifth year of tenure (2008) consisted of 12 diamond core drill holes targeting northwest inferred structures thought to be of similar orientation and possible extensions of the Aurari Fault Zone located in the adjacent King River project. To the north, the target was an inferred basement high east of the existing drill holes. The drilling was also aimed at refining knowledge of the basement geology since all the targets had thick cover and/or sandstone. Included in the 2008 exploration program were 120 air core holes, outcrop sampling/mapping, a ground EM survey and some orientation airborne EM lines using VTEM.

Work for the sixth year of tenure (2009) consisted of 10 diamond core drill holes, outcrop mapping/sampling, airborne magnetic/radiometrics geophysics and ground based Dipole-Dipole Resistivity and IP (DDIP) occurred on the tenement. The program was designed to target three main areas. The primary target, the Angularli prospect, has structural environments with similarities to the Aurari Fault Zone. It is located in the eastern part of the

project. In 2009, the second and third targets were geophysics targets. The first being a TEMPEST target that had been planned since 2006 and the third target being an assumed conductor identified in the 2008 ground geophysics survey. Seven drill holes intersected uranium mineralization residing either within the structure/sandstone contact or within the basal part of the Kombolgie Subgroup (Mamadawerre Sandstone) at or in proximity to the unconformity.

Table 1 - EL5893 Summary of Exploration Work Conducted to Date

2010 Program Activities

Work conducted in 2010, shown in Figure 4, consists of 30 diamond core drill holes, rock outcrop sampling in conjunction with reconnaissance mapping, a ground based gravity survey and some downhole geophysics.

Figure 3 - 2010 Work Locations

Drilling on the project commenced on June 12 and was completed on October 12 2010. Titeline Drilling Pty. Ltd. of Ballarat Victoria completed the program using two UDR650 truck mounted rigs. Thirty holes were drilled, with a total meterage of 10313.1 m, including 1229.1 m of PCD pre-collaring through the Cretaceous cover and 9084 m of recovered core. All holes were drilled with variable orientations as conditions and targeting warranted.

The collection of samples and subsequent analysis was performed using Cameco standard methodology. Drill codes used during the logging are detailed in Appendix 1. All samples were submitted to Northern Territory Environmental Laboratories (NTEL) in Darwin for geochemical analysis. The laboratory sample preparation, analytical methods and techniques and analysed elements are detailed in Appendix 2, Appendix 3, and Appendix 4. Details regarding the reflectance spectroscopy measurements and interpretation are shown in Appendix 5 and Appendix 6 respectively. Any references to clay alteration within the drill hole results are derived from reflectance spectroscopy measurements. Logging grain size and competency codes are outlined in Appendix 7.

All relevant digital data is included in Appendix 1.

Appendix 1 - Drillhole Datasets

Appendix 2 - NTEL Sample Preparation

Appendix 3 - NTEL Analytical Methods

Appendix 4 - NTEL Analytical Suite

Appendix 5 - Reflectance Spectroscopy Methodology

Appendix 6 - TSG Procedures and Definitions

Appendix 7 - Grainsize and Competency

RESULTS

Diamond Drilling

Drilling in 2010 was designed to test various targets derived from mapping and geophysics including airborne magnetics, TEMPEST and Ground TDEM as well as to follow up drilling from 2009. To the east of the project a particular focus was placed on northwest inferred structures thought to be of a similar orientation and possible extension of the Aurari Fault Zone located on the adjacent King River project. The drilling was also aimed at refining our knowledge of the basement geology since all the targets had thick cover and/or sandstone. Table 2 is a summary of drill hole collar details.

Table 2 - Diamond Drill Hole Collar Details

Figure 4 - Drill Hole Locations

The Cretaceous cover sequence, which averaged around 41 m in thickness, unconformably overlies the Kombolgie sandstone and in some areas, the Early Proterozoic metasediments. A zone of interpreted paleoweathering is evident in some of the basement rocks and in some cases was estimated to extend at least 15 m beneath the unconformity. The rock type present determined the depth and degree of weathering, i.e. competent quartzites exhibited negligible weathering while pelitic or feldspathic rocks had more extensive weathering profiles. All holes were pre-collared through the Cretaceous sediments with a PCD bit utilising mud additives.

Down hole gamma logging was conducted within the rods for all diamond holes and the data is submitted with this report in Appendix 8. Generally within the sandstone minor peaks relate to heavy mineral bands with increased thorium content. Probe data from the basal part of the Mamadawerre sandstone in proximity to the unconformity is also elevated. This relates to elevated uranium found within this unit.

Appendix 8 - Gamma Logging Data

A detailed description of individual diamond drill transects, containing multiple drill holes is outlined below along with a summary of the results including discussions of the Angularli prospect. Drill hole cross sections were generated on a 25 m line spaced grid with lines running west to east. Some drill holes cross multiple lines and as such are part of different sections created based on the grid. For detailed individual drill hole descriptions, see Appendix 1, drill hole datasets. Figures 6, 6a, 6b and 6c show the drill hole locations and traces for 2010 drilling

Figure 5 - Angularli Drill Hole Plan

Figure 6a - Angularli Drill Hole Plan South

Figure 7b - Angularli Drill Hole Plan Central

Figure 8c - Angularli Drill Hole Plan North

8700750mN (Drill holes: WRD0059, WRD0060)

Two drill holes on the southernmost grid line were drilled to test the southern extension of a north-northwest trending reverse fault along strike and down dip of known uranium mineralization occurrences along that trend.

Results from these holes show a sequence of Cretaceous siltstone and recent sediments overlying Cahill Formation metasediments. The intersected pelitic to semipelitic rocks had steeply dipping foliations and major structural breaks suggesting displacement due to a significant structural event. Minor pegmatitic intrusions occur within the hanging wall sequence with partial melting/recrystalization of the metasediments occurring along the contacts. Chlorite replacement of biotite within the hanging wall pelitic sequences is the most prominent alteration evident. A prominent fault zone represented by a significant geochemical/geomorphological change of the host pelitic sequences occurs. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. The lower fault zone contact is defined by a graphitic gouge. A second fault zone of similar composition but differing orientation and thickness is intersected in the easternmost drill hole in the section. This fault zone is stratigraphically higher than the fault zone observed in WRD0059. Clay alteration within the hanging wall metasedimentary package is primarily composed of chlorite with minor illite.

The westernmost hole, WRD0059, continues into the footwall Mamadawerre Sandstone. The sandstone is moderate to strongly bleached decreasing in intensity with depth. Clay alteration within the sandstone is primarily composed of pyrophyllite with minor illite and dickite.

Below the unconformity in WRD0059 and after the down-dip intersection of the north-northwest trending fault in WRD0060, the drill holes intersected the Cahill Formation metasediments on the footwall. The intersected sequence of interbedded, semipelitic to pelitic metasediments had generally flat lying foliations with minor instances of isoclinal folding. No major structural trends were intersected within this sequence of stratigraphy below the down-dip extension of the major north-northwest trending structure as evident in the easternmost drill hole on the section line. Alteration within the basement is primarily composed of moderate to weak chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the footwall metasedimentary package is primarily composed of chlorite with minor illite.

No elevated radioactivity was encountered throughout the two drill holes on the section line with only a maximum value of 25 ppm U_3O_8 in the hanging wall of the easternmost hole. This value is associated with a sample taken from a minor pegmatite in the stratigraphic sequence.

Figure 7 - Cross Section (L 8700750 N)

8700825mN (WRD0064)

One drill hole on grid line 8700825mN was drilled to test the continuation of mineralization intersected at the hangingwall/footwall contact of drill hole WRD0056. The drill hole targeted the southern extension of a north-northwest trending reverse fault along strike of known uranium mineralization occurrences along that trend.

A sequence of Cretaceous and recent sediments overly Cahill Formation metasediments. The intersected pelitic to semipelitic rocks had steeply dipping foliations and major structural breaks suggesting displacement due to a significant structural event. Chlorite replacement of biotite within the hanging wall pelitic sequences is the most prominent alteration event evident in the cored intervals. Chlorite alteration is increasing in amplitude and abundance with depth. A prominent fault zone represented by a significant geochemical/geomorphological change of the host pelitic sequences occurs. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. The lower hanging wall/footwall contact is defined by a graphitic gouge. Clay alteration within the hanging wall metasedimentary package is primarily composed of chlorite with minor illite.

WRD0064 continues into the footwall Mamadawerre Sandstone. The sandstone is moderate to strongly bleached decreasing in intensity with depth. Clay alteration within the sandstone is primarily composed of illite with minor pyrophyllite. Uranium mineralization is intersected below the fault contact within the sandstone unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.1% U_3O_8 / 8.0 m from 204.5 to 212.5 m with a max sample of 0.44% U_3O_8 / 0.5 m from 204.5 to 205.0 m. The mineralization is in the form of blebs and coatings on quartz grains within a permeable sandstone bed. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary.

Below the unconformity the drill hole intersected the footwall Cahill Formation metasediments. The intersected sequences of pelitic metasediments had generally flat lying foliations. No major structural trends were intersected within this sequence of stratigraphy. Minor micro-scale normal faults are evident within the drill core with distinguished displacements evident on the foliations. Alteration within the basement is primarily composed of moderate chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the footwall metasedimentary package is primarily composed of chlorite with minor illite.

Figure 8 - Cross Section (L 8700825 N)

Section 8700850mN (WRD0052, 53, 55, 56, 62)

Five drill holes were drilled to test the southern extension of a north-northwest trending reverse fault along strike and down dip of known uranium mineralization occurrences along that trend. Drill hole WRD0055 failed due to technical difficulties and had to be redrilled 5 meters east of its present drill collar location. The resulting second attempt is called WRD0056.

After PCD drilling through recent sediments, the four easternmost drill holes cased into the hanging wall section of Cahill Formation metasediments. The intersected pelitic to semipelitic rocks had steeply dipping foliations and major structural breaks suggesting displacement due to a significant structural event. Chlorite replacement of biotite within the hanging wall pelitic sequences is the most prominent alteration feature evident in the intervals. A prominent fault zone represented by a significant geochemical/geomorphological change of the host pelitic sequences occurs. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. The lower hanging wall/footwall contact is defined by a graphitic gouge. A second fault zone of similar composition but differing orientation and thickness is intersected in the easternmost drill hole in the section. This fault zone is stratigraphically higher than the fault zone observed in WRD0056. Clay alteration within the hanging wall metasedimentary package is primarily composed of chlorite with minor illite.

The westernmost hole, WRD0052, collared directly into the footwall Mamadawerre Sandstone. Holes WRD0053 and 56 intersected the sandstone after drilling through the north-northwest trending fault zone. The sandstone is moderate to strongly bleached decreasing in intensity with depth as well as in relation to its proximity to the footwall contact of the north-northwest trending structure. Clay alteration within the sandstone is primarily composed of illite and minor dickite. Uranium mineralization is intersected below the fault contact within the sandstone unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.13% U_3O_8 / 11.75 m from 202.25 to 214.0 m with a max sample of 1.2% U_3O_8 / 0.45 m from 203.1 to 203.55 m. The mineralization is in the form of blebs and coatings on quartz grains within a permeable sandstone bed. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary. Minor uranium mineralization occurs in association with the unconformity contacts averaging between 0.02 to 0.03% U_3O_8 / 1 to 3 m.

Below the unconformity on the western side of the north-northwest trending fault and after the downdip intersection of the same fault in WRD0062, all drill holes intersected the footwall section of Cahill Formation metasediments. The intersected sequence of interbedded, semipelitic to pelitic metasediments had generally flat lying foliations with minor instances of isoclinal folding. No major structural trends were intersected within this sequence of stratigraphy. Alteration within the basement is primarily composed of moderate to weak chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the footwall metasedimentary package is primarily composed of chlorite with minor illite.

Figure 9 - Cross Section (L 8700850 N)

Section 8700900mN (WRD0046 and WRD0048)

Two drill holes were drilled to test the southern extension of a north-northwest trending reverse fault along strike and down dip of known uranium mineralization occurrences along that trend. Drill hole WRD0046 failed due to technical difficulties and was not redrilled as it had conceivably reached its target depth without intersectingfavourable lithology.

A sequence of Cretaceous and recent sediments overly Cahill Formation metasediments. The westernmost drill hole, WRD0046, intersected Oenpelli dolerite, a common mafic intrusion of varying size and orientations in the Angularli prospect area. The drill hole continued to the 200 meter mark before running into technical difficulties and had to be stopped. It intersected two minor brecciated units, one of which was of similar geochemical composition to the cataclastic breccia associated with the main north-northwest trending fault zone. The other was a brecciated dolerite. Chlorite as veins and fracture coatings is the dominant alteration feature with moderate to minor bleaching of the dolerite in proximity to the breccia contacts. The intersected semipelitic rocks, in hole WRD0048, had steeply dipping foliations and major structural breaks suggesting displacement. Chlorite replacement of biotite within the hanging wall pelitic sequences is the most prominent alteration event evident in the sequence. A prominent fault zone occurs in the lower portion of the metasedimentary package. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. The lower hanging wall/footwall contact is defined by a graphitic gouge. Clay alteration within the hanging wall metasedimentary package is primarily composed of chlorite with minor illite.

The easternmost hole continues into the footwall Mamadawerre Sandstone. The sandstone is moderate to strongly bleached and silicified decreasing in intensity with depth. Clay alteration within the sandstone is primarily composed of illite with minor paragonite. Weak uranium mineralization is intersected within the sandstone unit and isolated to a very small interval. Geochemical analysis through the mineralized interval has returned a max grade of 0.12% U_3O_8 / 0.2 m from 220.3 to 220.5 m. The mineralization is in the form of disseminations and coatings on quartz grains within a permeable sandstone bed. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary.

Below the unconformity the drill hole intersected the footwall Cahill Formation metasediments. The intersected sequences of semipelitic to pelitic metasediments had generally flat lying foliations with minor instances of isoclinal folding. No major structural trends were intersected within this sequence of stratigraphy. Alteration within the basement is primarily composed of moderate chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the footwall metasedimentary package is primarily composed of chlorite with minor illite.

Figure 10 - Cross Section (L 8700900 N)

Section 870950mN (WRD0044, 45, 47, 49, 50, 51, 54, 65)

Eight drill holes were drilled to test the continuity along strike and down dip of known uranium mineralization occurrences intersected in 2009 diamond drilling.

A sequence of Cretaceous siltstone and recent sediments overly Mamadawerre sandstone, in the hanging wall of the structure. The majority of the drill holes collar into this sandstone with the exception of WRD0049 (Cataclastic Breccia) and WRD0051 (Dolerite). The sandstone is moderate to strongly bleached and silicified increasing in intensity with depth and proximity to structures. Clay alteration within the sandstone is primarily composed of illite with minor kaolinite and dickite. Uranium

mineralization is intersected within the sandstone unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.04% U_3O_8 / 5.9 m from 100.1 to 106.0 m with a max sample of 0.13% U_3O_8 / 0.3 m from 100.6 to 100.9 m (WRD0044). The mineralization is in the form of one prominent 1 to 3 mm wide black uraninite vein with minor disseminations and coatings on quartz grains on the surrounding sandstone beds. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary. A prominent fault zone represented by a significant geochemical/geological change of the host sandstone occurs. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. The lower hanging wall/footwall contact is defined by a graphitic gouge. A second fault zone of similar composition but differing orientation and thickness is intersected in subsequent drill holes to the east of WRD0044 except WRD0051. This fault zone is stratigraphically higher than the fault zone observed in WRD0044, 47 and 50. Unlike the other holes, Drill hole WRD0051 undercuts this second fault zone and collars into a dolerite intrusion before intersecting the hanging wall section of Cahill Formation metasediments. The intersected pelitic to semipelitic rocks had steeply dipping foliations and major structural breaks suggesting displacement due to a significant structural event. Chlorite replacement of biotite within the hanging wall pelitic sequences is the most prominent alteration feature evident in the intervals. A prominent fault zone represented by a change of the host pelitic sequences occurs significantly downdip of the regional north-northwest fault intersected in drill holes to the west of WRD0051. The lower hanging wall/footwall contact is defined by a graphitic gouge. Clay alteration within the hanging wall metasedimentary package is primarily composed of chlorite with minor illite.

WRD0044, 45, 47 and 50 continue into the footwall Mamadawerre Sandstone. The sandstone is moderately bleached and silicified decreasing in intensity with depth. Clay alteration within the sandstone is primarily composed of illite with minor paragonite and dickite. Weak uranium mineralization is intersected within the sandstone units in proximity to the hangingwall/footwall contact of the north-northwest trending structure and again near the unconformity. Geochemical analysis through the mineralized interval has returned an average grade of 0.04% U_3O_8 / 2.8 m from 228.8 to 231.5 m with a max sample of 0.17% U_3O_8 / 0.3 m from 230.2 to 230.5 m (WRD0050). The mineralization is in the form of disseminations and coatings on quartz grains within a permeable sandstone bed. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary.

Below the unconformity and after the downdip intersection of the north-northwest trending fault, the drill holes intersected the footwall section of Cahill Formation metasediments. The intersected sequence of interbedded, semipelitic to pelitic metasediments had generally flat lying foliations. No major structural trends were intersected within this sequence of stratigraphy. Alteration within the basement is primarily composed of moderate to weak chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the metasedimentary package is primarily composed of chlorite with minor illite.

Figure 11 - Cross Section (L 8700950 N)

Figure 12 - Cross Section (L 8700950a N)

Section 8700975mN (WRD0057 and WRD0065)

Two drill holes were drilled to test the northern extension of a north-northwest trending reverse fault along strike and down dip of known uranium mineralization occurrences along that trend. Confirmation of a second cataclastic breccia fault zone was also sought from this drilling to aid in future targeting along strike.

WRD0057 undercuts the second fault zone and collars into the hanging wall section of Cahill Formation metasediments. The intersected pelitic to semipelitic rocks had steeply dipping foliations and major structural breaks suggesting displacement due to a significant structural event. Chlorite replacement of biotite and garnets, within the hanging wall pelitic sequences, is the most prominent alteration feature evident in the intervals. A prominent fault zone represented by a change of the host pelitic sequences occurs significantly downdip of the regional north-northwest fault intersected in drill holes to the west along the same orientation. The lower hanging wall/footwall contact is defined by a graphitic gouge. Clay alteration within the hanging wall metasedimentary package is primarily composed of chlorite with minor illite. After the downdip intersection of the north-northwest trending fault, the drill holes intersected the footwall section of Cahill Formation metasediments. The intersected sequence of pelitic metasediments had generally flat lying foliations. No major structural trends were intersected within this sequence of stratigraphy. Alteration within the basement is primarily composed of moderate to weak chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the metasedimentary package is primarily composed of chlorite with minor illite.

WRD0065 was a scissor hole drilled for confirmation of the secondary fault zone in the area. The hole was collared into the hanging wall Mamadawerre sandstone in the area. The sandstone is moderate to strongly bleached and silicified increasing in intensity with depth and proximity to structures. Clay alteration within the sandstone is primarily composed of kaolinite with minor paragonite and dickite. Uranium mineralization is intersected within the sandstone unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.033% U_3O_8 / 2.8 m from 46.2 to 49.0 m with a max sample of 0.12% U_3O_8 / 0.2 m from 47.1 to 47.3 m. The mineralization is in the form of fracture coatings with minor disseminations within the surrounding sandstone beds. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary. A prominent fault zone represented by a significant geochemical/geomorphological change of the host sandstone occurs adjacent to the mineralization. The fault zone is primarily composed of cataclastic breccias of varying compositions dependent on proximity to host sequences. The first section of the breccia is sandstone related with prominent sandstone mineralogy within the sequence. This is followed by minor sections of predominantly unaltered metasediments with partial melting/recrystalization. The remainder of the cataclastic sequence is silica overprinting of host pelitic rock that has been completely reworked. Ghost blading of epithermal quartz within the sequence is common. Clay alteration within the fault zone package is primarily composed of illite with minor chlorite. The remainder of the drill hole after the fault zone is the hanging wall pelitic sequence as described above.

Figure 13 – Cross Section (L 8700975 N)

Section 8701025mN (WRD0058, 61 and 63)

Three drill holes were drilled to test the northern extension of a north-northwest trending reverse fault along strike and down dip of known uranium mineralization occurrences along that trend. Confirmation of a second cataclastic brecciated fault zone was also targeted for future targeting along strike.

The drill holes collared into Mamadawerre sandstone. The sandstone is predominantly hematized with bleaching and silicification increasing in intensity with depth and proximity to structures. Clay alteration within the sandstone is primarily composed of kaolinite and dickite with minor pyrophyllite and Illite. Uranium mineralization is intersected within the sandstone unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.03% U_3O_8 / 5.2 m from 190.5 to 195.7 m with a max sample of 0.09% U_3O_8 / 0.3 m from 190.5 to 190.8 m (WRD0063). The mineralization is in the form minor disseminations and coatings on quartz grains on the sandstone beds. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary. A prominent fault zone represented by a significant geochemical/geomorphological change of the host sandstone occurs. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. The lower hanging wall/footwall contact is defined by a graphitic gouge. A second fault zone of similar composition but differing orientation and thickness is intersected in WRD0063. This fault zone is stratigraphically higher than the north-northwest trending fault zone

WRD0058 and 61 continue into the footwall Mamadawerre Sandstone. The sandstone is moderately bleached and silicified decreasing in intensity with depth. Clay alteration within the sandstone is primarily composed of illite with minor dickite. Weak uranium mineralization is intersected within the sandstone units in proximity to the unconformity. Geochemical analysis through the mineralized sample has returned a grade of 0.34% U_3O_8 / 0.3 m from 273.7 to 274.0 m (WRD0058). The mineralization is in the form of disseminations within the sandstone. The mineralized sandstone is strongly oxidized/hematized with significant pyrite alteration.

WRD0063 continues into the hanging wall section of Cahill Formation metasediments. The intersected semipelitic rocks had steeply dipping foliations and major structural breaks suggesting displacement due to a significant structural event. Chlorite replacement of biotite, within the hanging wall pelitic sequences, is the most prominent alteration feature evident in the intervals. A prominent fault zone represented by a change of the host pelitic sequences occurs significantly downdip of the regional north-northwest fault intersected in drill holes to the west along the same orientation. The lower hanging wall/footwall contact is defined by a graphitic gouge. Clay alteration within the hanging wall metasedimentary package is primarily composed of chlorite with minor illite. After the downdip intersection of the north-northwest trending fault as well as below the unconformity in WRD0058 and 61, the drill holes intersected the footwall section of Cahill Formation metasediments. The intersected sequence of pelitic metasediments had generally flat lying foliations. No major structural trends were intersected within this sequence of stratigraphy. Alteration within the basement is primarily composed of moderate to weak chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the metasedimentary package is primarily composed of chlorite with minor phengite.

Figure 14 – Cross Section (L 8701000 N)

Figure 15 – Cross Section (L 8701025 N)

Section 8701200mN (WRD0069 and WRD0072)

Two drill holes were drilled to test the northern extension of a north-northwest trending reverse fault along strike and down dip of known uranium mineralization occurrences along that trend.

The drill holes collared into Mamadawerre sandstone. The sandstone is predominantly hematized with bleaching and silicification increasing in intensity with depth and proximity to structure. Clay alteration within the sandstone is primarily composed of kaolinite and dickite with minor pyrophyllite and illite increasing in frequency with depth. A prominent fault zone represented by a significant geochemical/geomorphological change of the host sandstone occurs in WRD0072. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. Uranium mineralization is intersected within the cataclastic brecciated unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.52% U_3O_8 / 2.5 m from 248.0 to 250.5 m with a max sample of 1.4% U_3O_8 / 0.5 m from 248.5 to 249.0 m (WRD0072). The mineralization is in the form of fracture coatings and disseminations through the cataclasite.

Below the unconformity the drill holes intersected the footwall section of Cahill Formation metasediments. The intersected sequence of interbedded, semipelitic to pelitic metasediments had generally flat lying foliations. No major structural trends were intersected within this sequence of stratigraphy. Alteration within the basement is primarily composed of moderate to weak chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the metasedimentary package is primarily composed of chlorite with minor illite.

Figure 16 - Cross Section (L 8701200 N)

Figure 17 - Cross Section (L 8701225 N)

Section 8701625mN (WRD0067, 73 and 74)

Three drill holes were drilled to test the northern extension of a north-northwest trending reverse fault along strike and down dip of known uranium mineralization occurrences along that trend.

A sequence of Cretaceous and recent sediments overly Mamadawerre sandstone. The sandstone is predominantly hematized with bleaching and silicification increasing in intensity with depth and proximity to structure. Clay alteration within the sandstone is primarily composed of kaolinite with minor illitic muscovite. A prominent fault zone represented by a significant geochemical/geomorphological change of the host sandstone occurs in WRD0073 and significantly downdip in WRD0074. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. Uranium mineralization is intersected within the

hanging wall sandstone as well as the cataclastic brecciated unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.26% U_3O_8 / 70.0 m from 205.5 to 275.5 m with a max sample of 3.5% U_3O_8 / 0.5 m from 210.0 to 210.5 m (WRD0073). The mineralization is in the form of veins, blebs, massive breccia infill, fracture coatings and disseminations through the sandstone and cataclastic units.

Below the unconformity the drill holes intersected the Cahill Formation metasediments. The intersected sequence of interbedded, semipelitic to pelitic metasediments had generally flat lying foliations. Alteration within the basement is primarily composed of moderate chlorite replacement of biotite and garnets, decreasing in intensity with depth to predominantly fresh rock. Clay alteration within the metasedimentary package is primarily composed of chlorite with minor illitic muscovite. In WRD0074, a prominent fault zone represented by a significant geochemical/geomorphological change of the host metasediments occurs. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. Uranium mineralization is intersected within this cataclastic brecciated unit. Geochemical analysis through the mineralized interval has returned an average grade of 0.11% U_3O_8 / 6.5 m from 309.8 to 316.3 m with a max sample of 0.8% U_3O_8 / 0.5 m from 309.8 to 310.3 m. The mineralization is in the form of veins, fracture coatings and disseminations through the cataclasite.

Figure 18 - Cross Section (L 8701600 N)

Figure 19 - Cross Section (L 8701625 N)

Section 8702200mN (WRD0071)

One drill hole was drilled to test for mineralization and structure 150 m south of the northern extension of a north-northwest trending reverse fault intersected in line 8702350mN.

A sequence of Cretaceous and recent sediments overly Mamadawerre sandstone. The sandstone is intensely bleached and desilicified. Clay alteration within the sandstone is primarily composed of kaolinite and illite. Weak uranium mineralization is intersected within the sandstone unit. Geochemical analysis through the mineralized interval has an average grade of 0.007% U_3O_8 / 0.2 m from 22.5 to 29.4 m. The mineralization is in the form of disseminations within the sandstone. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary.

Below the unconformity the drill hole intersected the footwall Cahill Formation metasediments. The intersected sequences of pelitic metasediments had generally flat lying foliations. Alteration within the basement was primarily composed of moderate chlorite replacement of biotite and garnets. Clay alteration within the metasedimentary package is primarily composed of chlorite with minor illite. A prominent fault zone represented by a significant geochemical/geomorphological change of the host metasediments occurs. This fault zone is the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area. The drill hole continues into a dolerite lopolith, a common mafic intrusion of varying size and orientations through the area. Moderate to strong chlorite alteration as veins and fracture coatings is the dominant alteration feature with moderate to minor bleaching of

the dolerite in proximity to clay gouges and minor faults. Clay alteration within the dolerite is composed of chlorite.

Figure 20 - Cross Section (L 8702200 N)

Section 8702350mN (WRD0066, 68 and 70)

Three drill holes were drilled to test for mineralization and structure along the northern extension of a north-northwest trending reverse fault. The area is identified from aerial radiometrics as anomalous with ground investigations and geochemical sampling of the outcrop in the vicinity confirming weak uranium mineralization at surface.

A sequence of Cretaceous and recent sediments overly Mamadawerre sandstone. The sandstone is intensely bleached and desilicified. Clay alteration within the sandstone is primarily composed of kaolinite and illite. Weak uranium mineralization is intersected within the sandstone unit. Geochemical analysis through the mineralized interval has an average grade of 0.035% U_3O_8 / 10.5 m from 34.0 to 44.5 m with a max sample of 0.12% U_3O_8 / 0.5 m from 35.5 to 36.0 m (WRD0066). The mineralization is in the form of disseminations within the sandstone. The mineralized sandstone is strongly oxidized/hematized with moderate to weak fuschite alteration at the redox boundary.

Below the unconformity the drill hole intersected the footwall Cahill Formation metasediments. The intersected sequences of pelitic metasediments had generally flat lying foliations. Alteration within the basement is primarily composed of moderate chlorite replacement of biotite and garnets. Clay alteration within the metasedimentary package is primarily composed of chlorite with minor illite. . The drill hole continues into a dolerite lopolith, a common mafic intrusion of varying size and orientations through the area. Moderate to strong chlorite alteration as veins and fracture coatings is the dominant alteration feature with moderate to minor bleaching of the dolerite in proximity to clay gouges and minor faults. Clay alteration within the dolerite is composed of chlorite. A prominent fault zone represented by a significant gouges and shears within the dolerite occurs. This fault zone may be the representation of the north-northwest trending regional fault being targeted in the Angularli prospect area although it bears none of the characteristics of the intersection of this fault in previous drilling.

Figure 21 - Cross Section (L 8702350 N)

Outcrop Sampling

A total of 108 outcrop samples were collected, the majority of the samples taken were located around outcropping sandstone escarpment in the central part of the tenement. The object of the sampling was to increase sample density and geochemical knowledge of the surrounding area and improve drill hole targeting in areas of little to no prior work. Figure 22 shows the location of all outcrop samples.

Out of the outcrop samples collected in 2010, only one returned elevated uranium assays, while other samples were anomalous in pathfinder trace elements. Theylatter were samples of Mamadawerre Sandstone collected in the Telstra target area (west

central portion of tenement) and the Angularli prospect area. They had anomalous U (total rock), labile U (Weak Acid Leach [WAL]) and labile radiogenic Pb (expressed in anomalous Pb^{206}/Pb^{204} ratios – from WAL).

Mapping of the Angularli Prospect and Telstra target areas, conducted in conjunction with the outcrop sampling program, are displayed in Figure 23 and Figure 24

Figure 9 - Outcrop Sample Location

Figure 23 - Angularli Geology Map

Figure 24 - Telstra Geology Map

Geophysics

Summary

Between June 16th and July 21st 2010, Haines Surveys Pty. Ltd. of Adelaide, SA, performed 568 unique gravity stations within Cameco's Wellington Range Lease (EL5893). The survey grid (Figure 25) was planned within an area of previous exploration, with the primary intent to identify and map structures caused by secondary porosity and/or preferential weathering. A secondary task of the surveys was to map geology, in particular the extent of the Oenpelli Dolerite, which is significantly denser than the surrounding geology. Results of the Gravity survey show that overburden thickness and the presence of cretaceous sediments dominate the gravity field. Influences from preferentially weathered dolerite are also believed present as gravity lows. Linear gravity trends seen at 161° are believed to exist and represent significant structure. Also observed is a series of gravity linears that trend at 054° and another set that strike 090°. This last set of linears display an apparent offset to the south when crossing those striking 161°, suggesting dextral movement on the latter. Figure 26 displays the basic locations of these described linears.

Figure 25 - Geophysics Surveys Location Map

Figure 26 – Interpreted Gravity Linears

Between July 25th and August 5th 2010, Borehole Wireline Pty. Ltd. of Edwardstown, SA, performed a suite of physical property logs in five diamond drill holes totaling 1543 meters, centered at the Angularli prospect. Physical properties of selected geological units from this survey will aid the interpretation of historic geophysical surveys, as well as help plan new approaches for exploring in the surrounding area. Analysis of physical property data was performed using representative sections of sandstone, basement, and dolerite from drill holes WRD0035, WRD0037, WRD0039, WRD0045 and WRD0049.

Gravity Survey by Haines Geophysics

Equipment, Base stations and Survey Tolerances

Gravity measurements were made using a Scintrex CG5 Autograv instrument with serial number 080340352. This unit has a resolution of 0.001mgal. Base station readings of 120 seconds were performed at base stations while 40 second readings were taken at survey location points. Base station readings were taken at the beginning and end of each day of surveying. The primary gravity base station was established on the 2010 Angularli survey grid at 299311.82 E, 8701081.86N, Observed Gravity Isogal84 978275.872mgal. Thirty six repeats were performed throughout the survey resulting in an absolute average difference of 0.021mGal with a standard deviation of 0.012mGal. From these simple statistics the minimum survey error is accepted to be +/- 0.02mGal. Further details of survey specifications and survey grids may be found in the contractor logistics report in Appendix 9.

Appendix 9 – Haines Surveys

Trimble 4000 series geodetic receivers were used in conjunction with Real Time Kinematic (RTK) techniques providing 5cm precision in the horizontal and vertical. Static techniques were used when radio link was not available, resulting in a 2cm precision in the horizontal and vertical.

Gravity Processing

Reported gravity values have been "related to the Australian Gravity Base Station Network using the Isogal84 (IGSN71) values at known gravity stations as provided by DMR." (Haines Logistic Report, J1022)

Internal tidal and tilt corrections are applied to the meter reading before post processing is done using standard formulae and constants, resulting in a Bouguer Anomaly. This includes first applying instrument drift corrections with respect to the accepted Isogal84 base station, resulting in an observed gravity reading (Obs). A theoretical gravity field is then calculated using the 1967 International Gravity Formula and subtracted from Obs, defining the gravity anomaly (Anom). Freeair and Bouguer (2.67g/cc) corrections were then calculated and subtracted from Anom to correct for elevation above the accepted geoid and the mass between the geoid and the survey station, respectively. Again, further details this processing is available in the contractor's logistics report in Appendix 9. The final result of this processing stream is referred to as the bouguer anomaly in the remainder of this report.

Also included in the Haines Logistic Report, J1022, are figures of the survey grids, contour maps of the calculated Bouguer Anomaly, and Repeat Observation Results, and text of the processed results.

Gravity Survey Discussion

Figure 27 displays the color grid and contours of the bouguer anomaly and is representative of variations in density of the underlying geology. Before discussing the results of the gravity survey it is important to remember that the station spacing varies, with the highest spatial resolution over the primary area of interest, and then widening towards the edge of the survey area. This effects the over-all depth of investigation, with closer spaced stations able to distinguish discrete features close to the surface, such as sub cropping structures. As the station spacing increases the lateral resolution decreases and broader density variations become dominant.

Figure 27 – Bouguer Gravity Anomaly

The most prominent quality seen in Figure 27 is the north to south, high – low – high – low – high gravity variation. What is curious about this is that the central gravity high is directly correlated with a large section of outcropping sandstone. Sandstone was shown to have the lowest density of the geology encountered in the 2010 geophysical logging program. This begs the question of what is controlling the gravity lows seen within the survey area. The most likely explanation for the anomalous lows is that either a thickening regolith or Cretaceous sedimentary unit that is dominating the gravity field (Table 3). This is supported by the correlation of a thickening overburden/cretaceous between drill holes WRD0058, WRD0048 and WRD0059, which shows a gradual decrease of one mGal as the overburden/cretaceous thickens by approximately 82 m.

Table 3 – Gravity Low Correlation

A preferentially weathered dolerite is also believed capable of producing a gravity low if significant sap rock has developed. An example of this may be seen in Figure 28 where the bouguer gravity contours overlay the first vertical derivative reduced to pole total magnetic intensity grid collected during a UTS airborne magnetic survey in 2009. In this figure, centered at approximately 299400E and 8701600N, a gravity trough is seen striking approximately 070°. This feature correlates very well with a magnetic high, both in extent and strike. Results from the 2010 geophysical logging program showed that the Dolerite was the densest geological unit encountered in the area. Suggesting that if the gravity low and magnetic high are related to the dolerite then a thickening weathered dolerite is likely involved.

Figure 28 – Gravity Contours

These weathering features are masking more subtle variations of basement geology but do indicate the presence of linear lows and edges that may indicated preferential weathering along structures. Three main trends are observed to exist in the gravity data: 161°, 054° and 090°.

Physical Property Logs Performed by Borehole Wireline

Table 4 outlines the drill holes logged by Borehole Wireline (BHWL) during the 2010 Wellington Range field program. All of the drill holes were located in the Angularli prospect area as indicated in Figure 25. Drill holes WRD0037 and WRD0035 were chosen for their long sequences of relatively uninterrupted sandstone, and consistent meta-sedimentary basement. Drill holes WRD0039 and WRD0049 were chosen for their extensive dolerite content and available cataclastic breccia. Drill hole WRD0045 was primarily selected for its relatively uninterrupted cataclastic breccia. Unfortunately WRD0045 became blocked during the survey and only resistivity, self-potential and gamma were collected, significantly limiting the physical analysis of the cataclastic breccia.

Table 4 - Diamond Drill Hole Logged by Borehole Wireline

Table 4 outlines the logs collected during the survey, which includes Gamma ray detection, Resistivity, Induction Conductivity, Magnetic Susceptibility, Density, Velocity and SP. Appendix 10 displays the collected data along with the basic geology determined from diamond drill core. Details of the BHWL gamma probe and density probe calibrations are provided in Appendix 11. Also included in the "Summary Report Probe Calibrations & Verifications" are the methodologies used when performing the daily gamma probe source checks and casing factor calculations.

Table 5 – Description of Geophysical logs by Borehole Wireline

Appendix 10 – Geophysics Compilation Logs

Appendix 11 – Borehole Wireline Surveys

Statistical Summary of Geophysical Logs

Sections of the Geophysical logs have been selected for statistical analysis based on continuity of units. Table 6 outlines selected sequences from each hole and the statistical analysis of sandstone, dolerite, basement pelites, and cataclastic breccia. These units were treated as a whole and little if any effort was placed in differentiating between changes within the broader unit. Histograms of the data, from which the statistical information was generated, is presented in Appendix 12. The histograms presented and the derived statistics were generated using the software package Matlab, created by Math Works of Natick, MA, USA.

Table 6 – Summary of Statistics of Physical Property Logs

Appendix 12 – Histograms of Physical Property Logs

Statistical Analysis of Sandstone (Mamadawerre)

Analysis of the geophysical logs collected within the sandstone show that its physical properties change significantly between approximately the upper 150 meters and the lower 100 meters. This is most distinctly seen in the bimodal distribution of the Log Resistivity Histogram for WRD0035 and WRD0037. This distinct resistive zone appears to be correlated with digenetic hematite with the relationship between the two being unclear.

Sandstone Resistivity

The upper section of sandstone displays a relatively high resistivity commonly exceeding 10k Ohm-m, while the underlying sandstone section is an order of magnitude lower in resistivity, typically between 1k ohm-m and 3k ohm-m. While the histograms for the sandstone in both drill holes displays a bimodal distribution in the Log Resistivity, the relative difference in resistivity between the two locations is also significant. The approximate low/high resistivity means for WRD0035 are 1860 ohm-m and 12k ohm-m respectively, and for WRD0037 these peaks are seen at 870 ohm-m and 8k ohm-m respectively. The control on this overall shift in electrical properties is unclear, yet is likely related to a combination of structural intensity, porosity, and degree of desilicification/silicification.

Sandstone Density

The density of the sandstone from both locations correlate well, with WRD0035 averaging out to 2.77 +/- 0.06 g/cc and WRD0037 to 2.78 +/- 0.06 g/cc. A bimodal distribution, as seen in the log resistivity, was not observed in the long spaced density data. It is expected however that one exists within the standard deviation. Characterizing the variations of sandstone density will require both additional data collection and refinement of analysis.

Sandstone Velocity

The p-wave velocity data was post processed by BHWL. Histograms of the sandstone velocity from both WRD0035 and WRD0037 show a distinct bias to particular bins, suggesting a rapid, approximate first arrival picking technique was used. The mean velocities for these two holes were 5.05 +/- 0.33 Km/s, and 5.16 +/- 0.24 Km/s respectively. It is apparent in the sandstone histograms that distinct variations in velocity exist, but like the density, it will require further analysis and possibly reprocessing to accurately characterize velocity contrasts.

Sandstone Magnetic Susceptibility

Analysis of magnetics susceptibilities within the sandstone is curious, with a distinct normal distribution that represents negative values on the left flank. Means of $0.13x10^{-3}$SI and $0.20\ x10^{-3}$SI were reported for WRD0035 and WRD0037 respectively, with standard deviations that exceed the reported means. This suggests that the calibration of the magnetic susceptibility probe was not designed to accurately represent such low values. Thus, all that can be taken from

these measurements is that the magnetic susceptibility of the sandstone involved is likely less than $0.5x10^{-3}$SI.

Statistical analysis of Dolerite (Oenpellie)

Drill holes WRD0039 and WRD0049 were used to analyze properties of the dolerite, as these drill holes contained relatively long uninterrupted sections.

Dolerite Resistivity

Histograms for the dolerite resistivity show a relatively wide distribution of resistivity between the drill holes with a high positive skewness leading to significant standard deviations. As with the sandstone, analysis was performed in Log10 space with mean values of resistivity identified as 942 Ohm-m and 434 Ohm-m for WRD0039 and WRD0049 respectively. Such low values were not expected for the dolerite and it is hypothesized that unaltered, structure free dolerite is resistive and displays a resistivity in the thousands of Ohm-m's, but when structurally enhanced or altered it becomes relatively conductive.

Dolerite Density

Long spaced density analysis for WRD0039 and WRD0049 resulted in a mean of 3.01+/-0.08 g/cc and 3.03+/-0.10g/cc respectively. There is likely distinct variability in the dolerite density, on the order of approximately 0.05 g/cc that is not being resolved due to an insufficient number of overall samples. It is expected that the presence of structure and alteration would lower the reported dolerite density. In light of this the mean reported dolerite from WRD0039 and WRD0049 is likely lower than structure free, unaltered dolerite.

Dolerite Velocity

As with that seen in the Sandstone velocity analysis of WRD0035 and WRD0037, a distinct bias to particular velocity picks is a result of a biased processing methodology. The mean velocities of 5.57 +/- 0.49 Km/s and 5.53 +/- 0.41 Km/s for WRD0039 and WRD0049 respectively, like the sandstone velocities, could likely be refined with reprocessing.

Dolerite Magnetic Susceptibility

The dolerite has by far the highest magnetic susceptibility of the geologic units analyzed. Measurements from both WRD0039 and WRD0049 were found to be slightly bimodal with a heavy positive skew, suggesting that either alteration is playing a key role in demagnetizing or that the magnetic minerals within the dolerite have an inhomogeneous distribution. While the reported means for both drill holes were approximately $15.75x10^{-3}$ +/- $6x10^{-3}$ SI, a peak distribution of approximately $20x10^{-3}$SI was observed from both WRD0039 and WRD0049.

Statistical analysis of Basement Metasediments (Lower Cahill)

Drill holes WRD0035, WRD0037 and WRD0049 were used to analyze properties of the basement metasediments. It is believed that the basement in the area is representative of the Lower Cahill formation. No attempt in preparation of the logs was performed before analysis was made to distinguish between the varying pelites, and possible minor intrusives. A wide range of values were reported, especially for resistivity but it is believed that is the physical properties are more controlled by alteration and not minor changes in rock type.

Basement Resistivity

WRD0035 displayed the widest range of resistivity, with measurements between 30 Ohm-m, and 29k Ohm-m. When plotted in Log10 three distribution peaks become apparent at approximately 62 Ohm-m, 360 Ohm-m, and 15k Ohm-m. These are correlated with intense clay alteration at the unconformity, moderate chlorite altered pelites and unaltered pelites respectively.

Analysis of WRD0037 resulted in a mean Resistivity of 515 +/-270 Ohm-m. Descriptions of the core recognize that paleo weathering is evident between 270 meters depth and the end of the hole, with no fresh rock observed in the basement.

WRD0049 contained a relatively large arkose unit observed to be quartz rich and contain aggregations of Pyrite throughout. The resistivity for this unit was found to be typically below 1000 Ohm-m. The underlying pelites were found to be more resistive, likely representing a relative decrease of alteration.

Basement Density

Basement densities from WRD0035, WRD0037 and WRD0049 were found to be 2.91 +/-0.08 g/cc, 2.90 +/- 0.06 g/cc, and 2.87 +/- 0.09 g/cc respectively.

Basement Velocity

Basement velocities from WRD0035 had two primary distributions; 4.80 Km/s was most dominant and correlated with arkose. A secondary distribution peaking at 5.68 Km/s is believed to be representative of the observed pelites in WRD0035.

The mean velocity reported for the basement in WRD0037 was 4.67 Km/s with three distinct velocities distributions between 4.5 Km/s and 5.0 Km/s that roughly correlate with variations of observed resistivity, with resistive units having the higher velocity.

Analysis of WRD0049 also shows a number of distinct velocity peaks that match those of WRD0037, with the overall distribution shifted to higher velocities. The mean velocity for WRD0049 is 4.83 +/-0.42 Km/s

Basement Magnetic Susceptibility

Analysis of WRD0035, WRD0037 and WRD0049 were 0.45 +/- 0.30 $x10^{-3}$ SI, 0.42 +/- 0.24 $x10^{-3}$ SI, and 0.41 +/- 0.73 $x10^{-3}$ SI. Like the sandstone the readings are believed to be inaccurate and simply signify the low magnetic susceptibility of the Basement units.

Statistical analysis of Cataclastic Breccia

Drill holes WRD0045 and WRD0039 where selected for analysis of cataclastic breccia, unfortunately problems with WRD0045 prevented the use of most geophysical probes, and only gamma, resistivity and SP were collected. Due to this a 13m section of Cataclastic breccia from WRD0049 was analyzed. The cataclastic breccia in the area is obviously sourced from the local geology, and may contain sandstone, dolerite, or pelite fragments. Sulphides (pyrite, chalcopyrite) may also be present, as observed in WRD0045.

Cataclastic Breccia Resistivity

The Long Normal Resistivity data from WRD0045 was widowed above and below a dolerite intrusion to avoid biasing the statistics to a lower resistivity value. The analysis of the resulting combined data from WRD0045 displays a slightly bimodal distribution with peaks at approximately 600 Ohm-m and 1300 Ohm-m. The mean resistivity of the Log10 distribution for this section was found to be 908 Ohm-m. This corresponds well with the short section of Cataclastic Breccia seen in WRD0049, with a Log10 resistive mean of 893 Ohm-m. Analysis of the resistivity data from WRD0039 was also found to be bimodal with one peek at approximately 300 Ohm-m and the other at approximately 900 Ohm-m. The later resistivity matches nicely to that seen in WRD0045 and WRD0049. The lower resistivity distribution is believed to be related to the degree of silicification within the Breccia and possibly controlled by the composition of the breccia clasts.

Cataclastic Breccia Density

Cataclastic Breccia densities from WRD0039 and WRD0049 were found to be 2.78 +/-0.10 g/cc, and 2.71 +/-0.06 g/cc. It is noticed that a positive skew exists for the WRD0039 Cataclastic Breccia long spaced density log. The shift to higher densities is correlated with a decrease in resistivity; the reason for this is unclear.

Cataclastic Breccia Velocity

Velocities determined for the Cataclastic breccia in WRD0039 has a number of peaks between 3.7 Km/s and 5.5 Km/s with high and low velocity following high and low resistivity zones respectively. The mean velocity of cataclastic breccia in WRD0039 is 4.62 +/-0.47 Km/s. The mean reported for cataclastic breccia seen in WRD0049 was determined to be 4.59 +/-0.27 Km/s.

Cataclastic Breccia Magnetic Susceptibility

The reported magnetic susceptibility of the cataclastic breccia in WRD0039 and WRD0049 was 0.19 x10^{-3} SI and 0.18 x10^{-3} SI respectively, with standard deviations that exceed the means. This again suggests that the magnetic susceptibility probe is not capable of accurately representing such low values.

Geochemistry

A total of 2672 samples were collected for geochemistry on the Wellington Range Project in 2010, including 2564 samples from drill core and 108 surface samples. All of the samples collected for geochemistry were sent to Northern Territory Environmental Laboratories (NTEL) for analysis for the standard Cameco Australia suite of elements as outlined in Appendix 4. All samples were crushed, milled, digested and analysed at NTEL according to the methods described in Appendix 2. All analytical geochemistry results for Wellington Range for 2010 are presented in Appendix 1.

All geochemistry from Wellington Range passed the following Cameco Australia quality control procedures:

1. Rigorous checking of the laboratory's accuracy and precision in the analysis of U, Al_2O_3, As, Ba, Be, CaO, Ce, Co, Cr, Cu, Dy, Fe_2O_3, Hf, K_2O, La, MgO, Mn, Mo, Nb, Nd, Ni, P_2O_5, Pb, Rb, S, Sr, Ta, Th, TiO_2, U, V, W, Y, Zn, and Zr via the use of three matrix matched certified geochemical standards (at the insertion rate 4.7% or approximately 1 in 20 samples) of differing U content (with average U concentrations of 4.76 ppm, 42.18 ppm and 111.1 ppm U);
2. Monitoring the laboratory's ability to repeat results on analyses of sub-sets of the powdered sample via monitoring of the laboratory's analytical duplicates (lab duplicate insertion rate was 10% or approximately 1 in 10 samples) for the entirety of the standard Cameco Australia analytical element suite as given in Appendix 3, and including loss on ignition (LOI); and

In 2010 no blanks were used to test for cross-contamination during the laboratory sample preparation process due to the lack of availability of a blank with concentrations low enough so that such a test could be adequately accomplished.

An examination of the geochemical data from the drilling at Angularli shows that the main uranium mineralization tend to be associated with brecciated zones or cataclasites although the higher grade mineralization itself is often in fractures, blebs or cavities adjacent these zones.

Given the chemistry of the mineralized zones and surrounding wall rock, as well as the proximity of these zones to the dolerite, it is possible that ore bearing fluids have interacted with the dolerite. The dolerite is distinctly unmineralized.

Some minor mineralization is found adjacent dolerite, even smaller dolerite shoots, suggesting that interaction with the mafic dolerite may have been involved with the chemical changes necessary for precipitation of U in some circumstance, although this is yet to be confirmed and may not correlate to the main mineralizing event. Minor mineralization is also found in oxidized zones close to the unconformity. Importantly

the chemistry of both of these minor zones of mineralization is not dissimilar to the higher grade ore zones.

DISCUSSION

Angularli and Surrounds

Mineralization has been encountered in multiple drill holes within the north east section of the tenement referred to as the Angularli prospect. It has become the most prospective mineralized zone found on the Wellington Range exploration license to date. The type of mineralization found within the prospect has characteristics similar to alteration assemblages proximal to unconformity uranium deposits found within the Athabasca Basin, Saskatchewan, Canada. The mineralization is open in all directions, thus it is considered that there is excellent potential the prospect may contain a mineral deposit.

The mineralization is hosted in the basal part of the Mamadawerre Sandstone and intimately associated with cataclastic breccias and overthrusted basement gneiss. The mineralization hosted within the sandstone is primarily disseminated, whereas the mineralization associated with the cataclastic breccia is in veins, blebs and fracture coatings. Mineralization has been intercepted on the down-dip hanging wall side of the metasedimentary Cahill formation rocks through the central section of the prospect. This mineralization is in the form of veins and fracture coatings. The presence of this mineralization within the pelitic sequences of rocks in the area opens up the potential for exploration of deeper basement hosted mineralization on the hanging wall side of the main fault structure.

A cursory structural analysis of the Angularli drill core was undertaken and a rudimentary 3-D model of Angularli was compiled in an effort to better understand the setting of the mineralization. The Cataclastic Breccia that appears to be controlling mineralization, north of a dolerite dyke in the central portion of the prospect area, has been intersected in multiple drill holes in the project area. The mineralization has also been found in the sandstone proximal to breccias.

The silicified breccias intercepted in drill holes that undercut the secondary, probable normal fault related breccias, are interpreted to be down-dip intersections of the cataclastic breccia intersected in earlier drilling to the west. The thrust planes are interpreted to strike approximately north to north-northwest, coinciding with mapped and significant breaks in the sandstone outcrop. The east-west striking dolerite dyke is interpreted to have exploited an east-west coeval to later extensional structure that has seen multiple phases of intrusion. Both structural orientations had seen later brittle reactivations. A number of dolerite sills and dykes are within the prospect area. They potentially post date all mineralization within the area. A number of re activated faults seen within the dolerite sills to the north can potentially be traced back to the main through going reverse fault structure related to mineralization.

CONCLUSIONS and RECOMENDATIONS

The Angularly Prospect, targeted as a structural environment similar to the Aurari Fault Zone, produced favourable intercepts of uranium mineralization within the basal layer of the Kombolgie Subgroup (Mamadawerre Sandstone) as well as along the structural contacts with adjacent gneissic units. It is concluded that the area remains prospective for large reverse faulting structures capable of producing a hydrothermal system necessary for uranium mineralization. Furthermore, samples from several kilometres away also returned anomalous geochemistry possibly indicating a broader regional hydrothermal system.

The 2011 drilling campaign will focus on targeting the nose of the mineralizing structure/sandstone contact, the structure/unconformity contact. Deeper drilling up to 150 m below the unconformity may be required to identify prospective basement rock thought to be part of the Cahill Formation, host to all the major uranium deposits in the Alligator Rivers Uranium Field.

Lithologies of the Nanambu Complex are now understood to exist in the northern portion of the project and may even flank Lower Cahill Formation to the west and east, as testified by NTGS dating of gneiss from WRD006 and the similarity of rocks from WRD0030. The full implications of this geological scenario are being assessed, which may provide further encouragement to explore in the northern portion of the Wellington Range tenement. Follow up ground geophysics is being proposed over areas related to magnetic anomalies potentially associated with numerous north-northwest trending mineralized structures as well as being proximal to Nanambu Complex rocks.

EXPENDITURE

Eligible exploration expenditure Cameco Australia for EL5893 for the reporting period totalled $4,382,900.70. Expenditure for 2011 is expected to be $2,000,000.

Table 7 - EL5893 Eligible Expenditure

PROGRAM RECOMMENDATIONS FOR 2011

Diamond Core Drilling

- A diamond drilling program to follow up mineralization intersected at Angularli, stepping out 25 to 50 m along the structure in evenly spaced drill fences

Geophysics

- Ground based Gravity surveys to attempt to better refine the location of the target structure south of Angularli as well as better target definition of potentially prospective north-northwest trending structures along the western side of the tenement.

REFERENCES

Carter M and Beckitt G., 2006. Exploration Licence EL5893, Wellington Range Project, Northern Territory. *Cameco Australia, 2005-2006 Annual Report*, WR06-02.

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

Hollis, Julie A., Chris J. Carson, and Linda M. Glass. 2009. 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. *In:* Hughes F.E. (Ed.), Geology of the mineral deposits of Australia and Papua New Guinea, vol. 1. *Australasian Institute of Mining and Metallurgy*, *Monograph Series*, 14; p. 799-805.

King M., Bzdel L., Mathieson T., Perkins C.T., Beckitt G., and Shirtliff G., 2009. Exploration Licence EL5893, Wellington Range Project, Northern Territory. *Cameco Australia, 2008-2009 Annual Report*, WR09-02.

Melville P., 2007. Exploration Licence EL5893, Wellington Range Project, Northern Territory. *Cameco Australia, 2006-2007 Annual Report*, WR07-02.

Needham R.S., 1988. Geology of the Alligator Rivers uranium field, Northern Territory. *Bureau of Mineral Resources, Geology and Geophysics, Bulletin*, 224.

Needham R.S., 1990. Geological and mineralization Map of the Alligator Rivers uranium field, Northern Territory. 1:250 000 scale Map. *Bureau of Mineral Resources, Geology and Geophysics*.

Needham R.S. and Stuart-Smith P.G., 1980. Geology of the Alligator Rivers uranium field. *In:* Ferguson J. and Goleby A.B. (Eds.), Uranium in the Pine Creek Geosyncline; proceedings of the International uranium symposium on the Pine Creek Geosyncline. *International Atomic Energy Agency*; p. 233-257.

Otto G., Melville P. and Beckitt G., 2005. Exploration Licence EL5893, Wellington Range Project, Northern Territory. *Cameco Australia, 2004-2005 Annual Report*, WR05-02.

Ranford, C., Melville P. and Beckitt G., 2008. Exploration Licence EL5893, Wellington Range Project, Northern Territory. *Cameco Australia, 2007-2008 Annual Report*, WR08-02.

Sweet I.P., Brakel A.T., Rawlings D.J., Haines P.W., Plumb K.A. and Wygralak A.S., 1999b. Mount Marumba, Northern Territory (Second Edition); 1:250 000 Geological Map Series, sheet SD53-6. *Australian Geological Survey Organisation-Northern Territory Geological Survey (NGMA), Map and Explanatory Notes*.

Thomas D., 2002. Reconnaissance structural observations: Myra-Kukalak Project, Arnhem Land, Northern Territory. *Cameco Australia, Internal Report*.

Worden KE, Carson CJ, Close DF, Donnellan N and Scrimgeour IR, 2008a. Summary of results. Joint NTGS – GA geochronology project: Tanami Region, Arunta Region, Pine Creek Orogen and Halls Creek Orogen correlatives, January 2005 – March 2007. *Northern Territory Geological Survey, Record* 2008- 003