Cameco Australia Pty Ltd

KING RIVER PROJECT

NORTHERN TERRITORY

EL 734

ANNUAL REPORT 2004

CONFIDENTIAL

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SUMMARY

This report describes exploration work undertaken within Exploration Licence 734 during the ninth year of tenure ending 12 May 2005. The licence area is located in northwestern Arnhem Land and was initially granted on the 13 May 1996 for a period of six years. A two year renewal was granted in March 2002 for the period ending on May 12 2004. A second renewal of the licence area was applied for at the cessation of the initial two year period. The second application was approved in April 2004, the licence being renewed for the final 2 years commencing 13 May 2004.

The exploration program was managed by Cameco Australia Pty Ltd on behalf of the Nadjinem Joint Venture partners, Cameco Australia Pty Ltd and the Nadjinem Aboriginal Corporation.

The primary exploration target is for unconformity related uranium deposits similar to the nearby Ranger, Jabiluka and Koongarra deposits and the now depleted Nabarlek mine.

The current years exploration activities consisted of a ground reassessment of airborne radiometric anomalies as well as Diamond and RAB drilling. The RAB drilling was utilised to explore several untested airborne anomalies and the diamond core drilling to further explore the Fishtail uranium prospect. Detailed airborne mag-rad was flown over the Fishtail Prospect by UTS, Perth

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INTRODUCTION

This report describes program activities carried out during the 2004 field season on behalf of the Nadjinem Joint Venture, a joint venture between Cameco Australia Pty Ltd (Cameco) and the Nadjinem Aboriginal Corporation. EL734 forms part of the King River Project and exploration is presently being conducted simultaneously with the adjoining King River tenements, EL 5890 and EL 5891. Since the Exploration Licences are located on Aboriginal land the exploration program was carried out under the terms of consent documentation as agreed with the Northern Land Council pursuant to the Aboriginal Land Rights (Northern Territory) Act and dated 1 March 1996.

Clearance for the program was given by the Northern Land Council on behalf of the Traditional Owners (Nadjinem Aboriginal Corporation), following the Liaison Committee meeting held on April 29 2004 at Gunbalanya (Oenpelli).

RAB and a one hole diamond drilling program was undertaken. Diamond drilling on the tenement commenced on the 23 July and was completed on 28 July. RAB commenced on 17 August and was completed 25 August

Contractors who were involved on the project are listed below:

- RAB drilling by GML, Gympie, Queensland;
- Diamond drilling by United Drilling Services, Gympie, Queensland
- Chemical assaying by NTEL, Darwin;
- Petrographic analysis of drill core by Pontifex and Associates, Adelaide
- Airborne Geophysics by UTS Perth;
- RAB track preparation and general rehabilitation work by Wildman River Stock Contractors Pty Ltd, Darwin.

Location and Access

The tenement is located in western Arnhem Land and is centered about 25 kilometres northeast of the Aboriginal settlement of Gunbalanya and is wholly within Aboriginal Land. The Ranger uranium mine is situated approximately 100km to the southwest and the rehabilitated Nabarlek site is within tenements that adjoin the southern boundary of the licence. Access from Darwin is via the Arnhem Highway to Jabiru then north to Gunbalanya. Two main roads traverse the licence, the Gurig National Park and Maningrida-Nhulunbuy roads. The old Murgenella (Wark) road straddles the western edge.

Project Location Plan

Tenure

EL734 was granted on 13 May 1996 for an initial period of six years. The tenement was renewed for a further two years in February 2002 and again in February 2004. The latest renewal will take effect on 13 May 2004. On initial granting, the total area under licence was 919.6 square kilometres of which 67.5 square kilometers was designated as restricted zones following site surveys undertaken by the Northern Land Council. Subsequent reductions reduced the size of the area held. An area of approximately 354.4 square kilometres now constitutes the tenement after a reduction to 106 sub-blocks in 2004.

Physiography

The tenement consists dominantly of gently undulating sandy plains underlain by a ferruginous duricrust. Erosion of this duricrust in the western part has led to the development of a 'breakaway' along the erosional boundary exposing basement rocks beneath. Elsewhere outcrop is extremely sparse. The principal drainage direction is north into the Cooper Creek system.

Regional and Tenement Geology

Please refer to the 2002 Annual Report for details.

Regional Structure and Geological History

Please refer to the 2002 Annual Report for details.

Exploration Target

The focus of the exploration strategy is the discovery of unconformity-related uranium deposits. The nearby economic deposits at Ranger, Jabiluka, Koongarra and the now depleted Nabarlek Mine serve as models for this strategy. The presence of gold, palladium and platinum in these deposits plus the economic gold-platinum (plus uranium) resource at Coronation Hill in the South Alligator Valley, indicates an additional potential for this deposit style. The King River-style of mineralisation has geochemical similarities with these deposits.

Exploration History

Please refer to the 2002 Annual Report for details.

PROGRAM ACTIVITIES

RAB drilling of the airborne anomalies and diamond core drilling of the historical Fishtail uranium prospect took place between mid-July and mid-August. Ground reassessment of radiometric anomalies was conducted in early June. The airborne mag-rad survey at Fishtail

Airborne Radiometric Anomaly Investigation

NIM10: a low ridge bordering scrubby sandy country. Interpreted Nourlangie Schist unit without obvious structural or dolerite association. The ridge is composed of a fringe of ferricrete with sand and pisoliths covering much of the surface. There was a slight elevation in radiometrics over the ferricrete. No obvious anomaly.

NIM20: a large area comprising sandy micaceous soil within heavily timbered country bordering a south trending drainage. Nourlangie Schist unit without structural or dolerite association. Fairly extensive area of x2 radiometric background covered by sand and some micaceous float.

NIM7: soil, sand and pisolith-covered country with isolated outcrops of ferricrete. Anomaly located near the northwest 'corner' of the ovoid-shaped Fishtail dolerite intrusion and on the interpreted contact of the 'quartzofeldspathic gneiss' and 'feldspar-

quartz-mica schist' units. The former unit hosts the majority of identified radiometric anomalies in the Myra Falls Metamorphics. No obvious anomaly

NIM8. Located adjacent to the dolerite, south of NIM7. Abundant ferricrete surrounded by sandy plains. Isolated outcrop of fine grained leucocratic gneiss. No obvious anomaly.

Diamond Drilling - Fishtail

Two deep holes were planned originally to investigate in detail the cause of the Fishtail anomaly as well as to gain stratigraphic data and to determine the thickness of the Oenpelli dolerite. Only one hole was drilled KRD1043, this being located approximately 100 metres south of KRD252 (drilled 1997) and in the vicinity of Fishtail anomaly 2. A second hole was planned adjacent to anomaly Fishtail 3, approximately 500m to the northeast of 1043. It was decided however to postpone any further drilling on the prospect until 2005, pending proper assessment of the close-spaced airborne geophysics.

Radiometric Logging

Natural radiation was logged down-hole by Cameco personnel using an Auslog digital down-hole logging unit. All holes were logged inside the rods due to the ongoing problems with unstable cover rocks\.

All radiometric data can be accessed under the 'Data Folder' \ Excel Data \ DDH Drilling.

Core Logging & Sampling Methodology

The drill core was geologically logged using the new database system DH Logger, which was introduced in 2002 to replace Unilog. The systematic logging measures lithological, structural and alteration features. Results are displayed graphically using a series of strip plots from the DHExplorer program to display all features logged and measured. The Codes for DHLogger appendix lists the codes and parameters that were used during the logging process and the DHLogger Drill Core Data appendix contains the entire drill hole log information.

DHLogger Drill Codes

Routine sampling was completed for every row of core. A representative 5 cm sample was collected and halved using a core saw. One half was read for magnetic susceptibility and density measurements were taken on one sample per core tray. The same sample was measured for spectral parameters using the PIMA II infrared spectrometer. Interpretation of the spectra was achieved utilising TSG with occasional reference to the PimaView system for comparative purposes. These samples are retained within the Cameco storage facility at the Darwin warehouse. The other half of the representative sample was used for lithogeochemical analysis. The samples were combined to form approximately 5 metre composites for sandstone and basement, and 15 metre composites for dolerite. Samples were also collected for petrographic description and forwarded to Pontifex and Associates in Adelaide

Sample analysis

Northern Territory Environmental Laboratories of Darwin (NTEL) carried out the chemical analyses. The principal analytical procedures include G400 (ppm), G950 (ppb) and Fire Assay (ppb).

NTEL Analytical Techniques

KRD1043

Precollared to 21m with a drilled depth of 411m. The hole was located within the anomalous zone, adjacent to anomaly 'Fishtail 2', as originally defined by both airborne and ground-based radiometric and geochemical surveys. The hole was designed to confirm extensions to an area of strong alteration and weak uranium mineralisation first intersected in drill hole KRD252 (PNC 1997). The principal area of interest lies adjacent to a WNW trending fault, which transects pelitic metasediments intruded by Oenpelli dolerite.

Lithologically, the hole was subdivided into the following main rock types (from top to bottom, after Thomas 2004):

- Coarse grained, chlorite-muscovite pelitic schist with lesser granitic pegmatoid and aplitic material to 90.25m.
- Dolerite, consisting of feldspar-phyric and ophitic textured variants to 362.9m
- Grey psammitic and psammopelitic gneisses with up to 15% quartzofeldspathic leucosome lenses to 396m
- Leucocratic quartzofeldspathic gneiss to end of hole. This has the appearance of a recrystallised diatectite

The alteration zone, which consists entirely of chloritised schist and schistose gneiss with abundant white mica, lies above the upper contact of the dolerite. The entire section has undergone hydrothermal alteration to some degree although the radiometrically anomalous section is confined to a discrete part of the interval. The host rock to the radiometrically anomalous interval is an intensely chloritised and deformed metapelite within a semi-pelite to psammitic sequence. Generally the rock is fairly soft, greenish grey to dark green in colour and pervasively altered. Foliation / schistosity is preserved for the most part and in places exhibits intense deformation. White mica occurs as coarse silvery flakes; very finely divided bright red hematite was noted as disseminations.

Down hole radiometrics indicate a wide zone of slightly elevated radiometrics between 45.2 and 67.7m, with maxima between 0.0256% to 0.884%eU_3O_8. The widest anomalous interval is 3.86m (true thickness) between 56.8 and 60.8m with an average grade of 0.0339%. The 5 metre composite samples reflect the lithological variation in the hole. The anomalously radioactive interval is represented by up to x 10 background, in uranium, the latter averaging approximately 1 to 2ppm. The uranium-bearing metapelitic rocks range from 3 to 26.4ppm total uranium (31.1ppm U_3O_8).

Grade sampling over the anomalous 11 metre interval has only one sample exceeding 300ppm. Cursory assessment of the geochemistry shows that there is no obvious elemental enrichment within the alteration envelope although Mg and K are high, the former related to the intense chlorite development and the latter the feldspathic nature of the rocks. There is a depletion in Cu, Mo and Ti while Ni and V are above background.

Composite Assays for Diamond Drilling
Grade Assays for Diamond Drilling

Pontifex Drill Core Petrographic Report

TSA PIMA Majors for Diamond Drilling

KRD1043 Detailed Drill Log
KRD1043 Strip Plot

RAB drilling

NIM 7 and 8

Both anomalies were covered by three 450m long north-south traverses. A total of 54 holes were drilled. Radiometrically elevated ferricrete is a surficial feature of the area with isolated outcrops of fine grained leucocratic gneiss. The anomalies are underlain by ?banded gneiss composed of leucocratic and mafic-rich layers. Some amphibolite was also noted. There was decreasing radiometric response from surface in most of the holes and no anomalous radiometric response at depth.

At NIM 7, uranium is very low with the majority of holes showing below 1ppm. The amphibolitic nature of some of the intersections is reflected by the higher MgO and CaO contents plus elevations in Cu-Co-Ni-Ti-V-Zn. NIM 8 analyses exhibit a higher U background than NIM7 with the majority of samples ranging between 2-3ppm. Rock types logged indicate mostly quartzofeldspathic gneisses and schists with lesser amphibolite. The overall geochemistry reflects the difference between the lithological framework of the two prospects.

NIM 20

NIM20 represents a large area of anomalous airborne radiometric response. Additionally the surficial radiometrics (SPP2) exhibit a constant moderately high background in the vicinity of the anomaly. Two reconnaissance traverses totalling 25 holes were drilled east-west to cover the anomaly. Depths were mostly in the 20 to 30 metre range.

Radiometric recordings on drill cuttings were variable, ranging from insignificant to interesting. A group of eight (8) holes were comparitively radiometrically anomalous with scintillometer readings mostly above 50cps, reaching a maximum of 120cps. Of these, three holes were probable to definitely anomalous with a maximum analytical result of 52.6ppm U.

Rock types logged included quartz-feldspar and / or biotite schist. Amphibolites were intersected at various places on the grid but more particularly on the eastern side. Most of the higher radiometric readings (and uranium contents) were

associated with biotite schist and amphibolite on the eastern edge of the northern line. Chloritic alteration was noted but is indicated to be widespread and not necessarily an associate of the anomalous ground.

Geochemistry of the samples containing anomalous uranium tend to have some elevation in elements such as Be-Bi, some of the rare earths as well as Ni-Sn-Ta-V-W-Zr.

RAB Collars
RAB Lithology
RAB PIMA

Sample analysis

Northern Territory Environmental Laboratories of Darwin (NTEL) carried out the chemical analyses on the RAB samples. The principal analytical procedures include G400 (ppm), G950 (ppb) and Fire Assay (ppb).

NTEL Analytical Techniques

RAB Assay

GEOPHYSICS

During 2004, UTS Geophysics of Perth conducted a detailed airborne magnetic, radiometric and DTM (Digital Terrain Model) survey over the Fishtail prospect. The survey covered 314 line kilometres at a line spacing of 50 m and flying height of 30 m. The survey was aimed at increasing the radiometric and magnetic resolution to assist with the ongoing evaluation of the prospect.

UTS Logistics Report for Airborne Survey

Airborne Radiometrics (Red, Green, Blue = Potassium, Uranium, Thorium)
Airborne Magnetics (Reduced to Pole with 1st Vertical Derivative)
Airborne Digital Terrain Model (with sun-angle shading)

CONCLUSIONS

Diamond drilling at Fishtail has confirmed the presence of a southward thickening zone of intense alteration and associated uranium mineralisation. This zone is confined to metapelitic and metapsammitic rocks, which have been intruded by Oenpelli dolerite. Further diamond drilling is planned.

No further work on anomalies NIM7 and NIM8 is warranted. An additional program of RAB drilling at NIM20 has been planned for 2005.

WORK PROGRAM EXPENDITURE 2004

Estimated expenditure for the year, as stated in the 2004 work program was $175,000. Actual expenditure amounted to $175,029.54. Details are contained in the link below 'Summary of Expenditure'.

EL734 Summary of Expenditure

WORK PROGRAM PROPOSALS 2005

A summary of the proposed exploration activities, timing and contractors under consideration for Year 8 is tabulated below. Budgeted exploration expenditure for the tenement is $160,000. An approximate additional $25,000 is budgeted for non-assessable DBIRD and NLC costs.

Location and Scheduling of Activities

Activity	Duration of Activity	Timing	Amount	Approximate Location
Camp mobilisation & demobilisation	N/A			
Access & site preparation for diamond drilling	2 days	Mid to late June	Clearing of any pre-existing access tracks and new access if required. Clearing of 2 sites	Fishtail Prospect
Access and site preparation for RAB	1 day	Mid or Late July	Clearing only of pre-existing access to RAB location then additional access and site prep if warranted. Approximately 4km.	Airborne anomaly NIM20. Located on western side of tenement, adjacent to Davidson's camp access track.
Helicopter assisted Geological Reconnaissance/ Mapping	1-2 days	Early-Mid June	Various radiometric anomalies	Western part of EL
Diamond Drilling	12 days	Mid July	Maximum 800m. (2 holes). Estimated depths 300 to 400 metres.	Fishtail Prospect
RAB Drilling	3 days	August	700 metres, 30 holes. Maximum depths 30 metres.	NIM20

Listing of On-Site Contractor Requirements

Activity	Equipment	Personnel	Potential Contractor
Track / Site clearing	Front End Loader	1	Wildman River Stock Contractors, Darwin
Anomaly check	Jetranger Helicopter	1	Jayrow, Darwin
All Drilling	UDR Diamond/RC rig and RAB rig with suppport vehicles	2 to 3 per shift	Titeline Drilling Pty Ltd. Ballarat Victoria

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