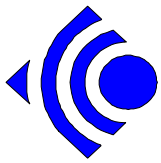

Cameco Australia Pty Ltd

EXPLORATION LICENCES EL 5061 & EL 5062

DEAF ADDER PROJECT – NORTHERN TERRITORY

ANNUAL REPORT FOR PERIOD 27TH MAY 2000 TO 26TH MAY 2001

CONFIDENTIAL

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SUMMARY

In 2000, one drill hole (DAD-0008) was completed in the western portion of exploration licence EL 5062 and one hole (DAW-0006) was deepened in the southern portion of exploration licence EL5061. DAW-0006 was wedged off a previous drill hole (DAD-0006), and was abandoned within the Kombolgie Sandstone, failing to reach the basement unconformity. DAD-0008 reached the unconformity intersecting basement rocks analogous to Burrell Creek Formation.

Other exploration during 2000 consisted of follow up helicopter assisted sampling of fractures over anomalous sites identified from the compilation of previous exploration results, and in likely areas of inferred structural disruption.

A DeBeers Airborne Multispectral Scanner (AMS) survey was flown over both exploration licences with the objective of identifying clay alteration patterns attributable to uranium (U) mineralisation.

The main objective of the exploration program is to discover economic U mineralisation. The Kombolgie Sandstone is analogous to the Athabasca Sandstone of Canada where high-grade U mineralisation occurs along structures at the base of the sandstone.

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1. INTRODUCTION

The Deaf Adder project is a uranium exploration project owned and operated by Cameco Australia Pty Ltd (Cameco). The prime objective of the project is to discover economic U mineralisation within a geological environment similar to deposits in the Athabasca basin of Canada, associated with the Kombolgie basin of the Northern Territory.

The objectives of the work completed by Cameco during the 4th year of the Exploration Licences were:

- To characterise the stratigraphy, structure, alteration and uranium mineralisation potential within regions sampled by diamond drilling. These objectives were to be achieved by evaluating features identified megascopically and by using physical properties, reflectance spectroscopy (PIMA) and geochemistry;
- To further evaluate anomalous areas delineated by multi-spectral analysis of existing data collected during the 3 years exploration of the tenements;
- To continue with regional and detailed geological mapping and prospecting;
- To use remote sensing techniques such as the AMS survey to delineate surface features structure, lithology, alteration etc.

The two exploration licences, EL5061 and EL5062, cover a total of 2,369 km^2 near the south-west margin of Arnhem Land, approximately 150km north-east of Katherine.

Location Map

Routine sampling and prospecting during the 1997 exploration program led to the discovery of significant radioactivity within the Kombolgie Sandstone formation at the Flying Ghost (Prospect Location Map). After preliminary evaluation of an airborne survey flown during August 1997, two additional areas of radioactivity were defined (Casper-Banshee and Stretch). Geochemical analysis of samples collected from Flying Ghost and Casper-Banshee contained elevated gold (Au) and U values.

Prospect Location Map

During 1998, a small diamond drill program was completed at the Flying Ghost prospect. A total of 1603 m was drilled in five holes. Extension of radioactivity below surface was unsuccessful; however, valuable technical and stratigraphic information was obtained during the program. Aerial photography, detailed airborne geophysics, regional sandstone sampling, diamond indicator sampling and detailed and regional mapping were also completed. At the conclusion of the program, regional sampling on a one-kilometre scale was achieved over the extent of the Kombolgie Sandstone. A first pass geological mapping over the entire project area was achieved. Two new areas of radioactivity were delineated at Spectre and Writer areas.

In 1999, two drill holes were completed in the southern portions of the two exploration licences. Both holes were abandoned in Kombolgie Sandstone. They failed to reach the targeted horizon due to drill equipment limitations. Other exploration during 1999 consisted of detailed sampling and prospecting over anomalous sites identified from the multi-spectral analysis of existing datasets and detailed to regional geophysics.

1.1 Location

The Deaf Adder Project is located at the southwest margin of Arnhem Land in the Northern Territory approximately 100 km southeast of the Ranger uranium mine. The tenements are situated along the southeast margin of Kakadu National Park.

The location of the Cameco exploration base camp is indicated on the Prospect Location Map, and is referred to as the Mann River Camp. This site is within EL5061 and lies adjacent to a large waterhole near the headwaters of the Mann River. The base camp is referred to as "Bindalak" by Traditional Owners.

The base camp was established in August 2000 and was occupied for just over two months (August to early October). The base camp consists of two demountable buildings, an ablution block, air-conditioned office and kitchen caravans with up to 15 sleeping tents. Electric power generation was supplied by a 20-kVa diesel powered unit and a small diesel-driven pump was used to obtain water from the Mann River which is 750 m away.

A temporary base camp was established for the Wallis Drilling personnel at the western drill location from mid September to early October. The temporary base camp was situated close to the headwaters of the Katherine River and consisted of one multipurpose caravan for sleeping and cooking.

Four-wheel-drive passenger vehicles were used for personnel movements between Darwin and the camp, and for provisions obtained from Katherine and Darwin. Regular food supplies were picked up from Katherine. A 7-tonne truck was used to deliver fuel drums and mobilise and demobilise camp equipment.

A Rotor Services 206 Jet Ranger helicopter was on site at for three weeks to assist in the sampling program and transport personnel to work areas.

The main track, which extends 160 km northeast from Eva Valley to the Mann River exploration camp required only minimal refurbishment. The Traditional Owners have named the track "Bat Guyangguyang".

A temporary track, 44.6km in length, was built by Wildman River Stock Contractors (WRSC) to facilitate drill rig movement and associated support trucks to the western drill hole location (DAD-0008). This track was closed and rehabilitated at the completion of the drilling program.

1.2 Tenure

The project permits comprise 2,369 km^2 within Exploration Licences EL5061 and EL5062, which were granted on May 27th 1997, and an additional 3,750 km^2 of Exploration Licence applications subject to negotiation with the Aboriginal Traditional Owners (Project Location Map).

Annual reporting for the granted tenements EL 5061 and EL 5062 is due within one month of the anniversary date (due no later than June 27th, 1999). The first statutory 50% surrender occurs at the end of the third year of exploration (May 27th, 2000). The Northern Territory Department of Mines and Energy (NTDME) have waived this requirement until the end of the 4th year of exploration. The expenditure commitment for 2000 was $500,000.

Current Tenement Status

1.3 Regional Geology

The Deaf Adder tenements lie on the Arnhem Land Plateau, which forms the western margin of the Palaeoproterozoic McArthur Basin, and comprises undeformed sediments of the Katherine River Supergroup. These platform fluviatile and shallow marine sediments unconformably overlie the strongly deformed and metamorphosed sedimentary successions of the Pine Creek Basin which host the major unconformity-related U deposits of the Alligator Rivers Region.

The nearest exposure of the prospective Pine Creek Basin succession occurs within the Gilruth Inlier some 5km northwest of EL5061. Older basement to the Pine Creek Basin successions, the Archaean Nanambu Complex, is exposed only in the general vicinity of the Alligator Rivers U deposits.

The thickness of the McArthur Basin platform cover in the Deaf Adder tenements is uncertain but estimates range from 300m in the west and north-west areas, near the Gilruth Inlier, to as much as 1450m in the south-east.

1.4 Structure

It has been regarded by many that the key mineralising structures in Arnhem Land, are second order reverse faults, which form dilation zones in conjunction with major strike slip fault systems within a compressional domain. Conversely, similar dilation zones could be associated with normal faults in an extensional tectonic domain (Regional Structural Map).

Regional Structural Map

Extensional basin tectonics was responsible for the formation of the Palaeoproterozoic Barramundian sequences (Pine Creek Basin) and the Kombolgie Subgroup cover sequence (McArthur Basin). Between these two extension phases, a compression phase (Barramundi-Top End Orogeny) gave rise to multiple deformation and metamorphism of the Barramundian sequences and late tectonic granite intrusion.

In West Arnhem Land, steep 320°-340° (reverse?) faults such as the Khyber Pass Fault are linked to the major east-west (070°) trending strike slip fault systems in a regional sense. The Caramal U Prospect is situated near the intersection of these structures. The Khyber Pass Fault which, based on radiometric evidence, can be considered a fertile structure in terms of mineralising fluid flow. Results to date from exploration on the King River Project also emphasise the importance of the 340° structural trend, particularly at Black Rock.

Within this framework, it is worth considering the main structural elements of the Deaf Adder tenements in South West Arnhem Land and how they relate to known U occurrences.

On a local scale, two conjugate fault sets predominate at Deaf Adder, 340°-070° and 310°-030° (Regional Structural Map). The Kub-O-Wer Fault, a 340°-350° trending right-lateral (dextral) fault displaces the 070° structures between 1-2 km. The 310° Bulman Fault, and a major parallel structure in the far northeast of EL5061, also exhibit dextral movement, displacing the 030° structures up to 2 km. A 295° fault that controls the outcrop of metamorphic basement in the Gilruth Inlier northwest of EL5061, is most probably a reverse fault.

1.5 Local Geology

The Deaf Adder tenements predominantly comprise outcrops of undeformed platform sediments of the Katherine River Group representing the basal portion of the McArthur Basin. Recent mapping by the NTGS and AGSO on the adjacent Milingimbi 1:250,000 map-sheet has renamed the lowermost sequence, previously called the Kombolgie Sandstone, as the Kombolgie Subgroup. This subgroup has been further subdivided into three units, the lowermost Mamadawerre Sandstone (Phe), the middle Gumarrimbang Sandstone (Phl) and the upper Marlgowa Sandstone (Phr). The McKay Sandstone, previously overlying the Kombolgie Sandstone, is now incorporated as a member within the upper Marlgowa Sandstone.

Locally within the project area, the Kombolgie Subgroup is represented by the Gumarrimbang and Marlgowa Sandstone units which are separated by a ferruginous (lateritic) horizon called the Gilruth Volcanic Member (Phkg). This unit was intersected during the 1998 and 1999 drill programs. True thicknesses of up to 14 m of clay-sericite-leucoxene altered, porphyritic, basaltic rock were encountered.

1.6 Previous Explorers

Historically, U exploration in this region has concentrated on the South Alligator Valley, 50km to the west, and the Pine Creek Basin 100 km to the north. The project area, which falls largely on the Mt. Evelyn 1:250,000 map-sheet remains essentially unexplored.

Fieldwork associated with the BMR mapping of the Mt. Evelyn map-sheet was carried out in 1954-58, with work on the Gilruth 1:100,000 map-sheet being carried out in 1973-74. The NTGS has advised that they have recommenced geological mapping and data compilation on the Mt. Evelyn map-sheet area in mid 1998.

The adjoining 1:250,000 Mt. Marumba map-sheet to the west, was originally mapped in 1962, however, compilation of new work by AGSO (1993-4), and by NTGS (1994-95) on the Milingimbi map-sheet, is complete and has been released.

Broad spaced regional airborne radiometric-magnetic surveys were carried out by the BMR (now AGSO) and Queensland Mines Ltd between 1970-80, however the data quality is limited. There is no record of any ground follow-up work associated with these early surveys.

More recently in 1995, the NTGS acquired airborne radiometric and magnetic data for the Mt. Marumba and Milingimbi map-sheet areas to assist with the geological compilations.

1.7 Previous Exploration by Cameco

Cameco commenced a systematic technical evaluation of the project area in 1996 following the successful negotiation of an access agreement with the NLC on behalf of the Aboriginal Traditional Owners. This technical evaluation comprised data acquisition, examination of Landsat TM and SPOT imagery and preparation of an exploration proposal by WJ Fraser (Cameco Australia Pty Ltd Report R97-03).

The proposed exploration program comprised broad spaced lithogeochemical rock chip sampling (1x10km) and regional stream sediment geochemistry (85 sites approved by the NLC). The exploration proposal was subsequently modified in early

1997 to incorporate a fixed-wing airborne magnetic-radiometric survey contracted to World Geoscience (WGC), Perth, WA.

The exploration objective in 1997 was to develop a lithogeochemical database for the Kombolgie Subgroup cover sequence. This data set would be used as a basis for definition of alteration systems associated with unconformity-style U mineralisation (from expertise gained in the Athabasca Basin area of Saskatchewan, Canada).

In the early stages of the 1997 exploration, an area of anomalous radioactivity and alteration was discovered within the Kombolgie Sandstone. This discovery and its potential significance for future exploration strategy indicated the need to focus on the evaluation of this prospect type. This was achieved by implementing a program of detailed grid based geological mapping, radiometrics and lithogeochemical sampling and semi-regional orientation stream-sediment sampling.

The results of this detailed work were used to re-assess other similar radiometric anomalies detected by the 1997 airborne survey.

In addition to the detailed grid-based work, routine ground checking of selected radiometric anomalies and regional lithogeochemical sampling was completed.

Secondary U mineralisation was located in two widely separated areas of strong radiometric anomalism, the Flying Ghost and the Casper-Banshee anomaly group. Geochemically these occurrences are spatially associated with strongly elevated Au values (up to 236.5 ppm), where the gold is restricted to goethitic alteration along fractures. In general, the uranium is associated with clays within zones of intense fracturing in the Kombolgie Sandstone, and may represent a leakage from a primary uranium source at depth. Both anomalies also contain significant areas of surficial enrichment and dispersion of uranium (within goethitic patches) that has enhanced their airborne radiometric signature.

In the Stretch area, intense structurally related radioactivity over a 1 km-strike length appears to be thorium (Th) dominant but still warrants further evaluation.

In 1998, the exploration program objectives were to complete the regional grid spaced lithogeochemical sampling over the exposed Kombolgie Sandstone as well as completing the airborne radiometric anomaly follow-up. Regional geological mapping was finalised by A. Mackie. Drilling was initiated at the Flying Ghost prospect targeting unconformity style uranium mineralisation. An airborne geophysics program was completed covering the Banshee-Casper and Stretch prospect areas.

During this field program, lithogeochemical sampling in continuation with the 1997 exploration program completed the regional sampling coverage of the Kombolgie Sandstone, achieving a sample density of one sample per 2 km^2. Airborne radiometric anomaly follow-up was completed, with two new areas identified, namely Spectre and Writer prospects. Detailed sampling programs (and some ground radiometrics) were completed at Banshee-Casper, Spectre, Writer and Phantom areas. Satellite imagery and aerial photography was used together with small traverses to complete a first pass regional geological map at 1:50,000 scale. Smaller scale mapping was completed at the Banshee-Casper and Spectre prospects. Detailed airborne electromagnetics (Dighem), magnetics, radiometrics and photography was acquired to facilitate targeting and geological analysis of the Flying Ghost and Banshee-Casper prospects. While the airborne geophysics increased the geological

knowledge of the area no response could be attributed to large-scale alteration or structure typical of unconformity U mineralisation.

The diamond drill program at the Flying Ghost prospect failed to reach the basement stratigraphy below the Kombolgie (depth of 794 m exceeded the capacity of the drill). Intersections of the Nungbalgarri and Gilruth volcanic members clearly established the stratigraphic location within the Kombolgie. The volcanic contacts are variably radioactive and altered. Silicification and structure (stress/shearing) within the Kombolgie occurs at both the upper and lower contacts with the Nungbalgarri volcanic unit. Elevated geochemistry is associated with the volcanic horizons (contacts) and locally within the Kombolgie related to facies variations. Kandite clay species have been identified by PIMA to occur stratigraphically beneath the Gilruth horizon (narrow 3 to 5 m unit) and at depth possibly indicative of basal sandstone.

In 1999 four traverses of regional gravity were undertaken in the eastern part of the project with the aim of inferring basement type and sandstone depth away from DAD-0006. Although strong gravity changes are observed in the data, modelling has been inconclusive because of the lack of basement knowledge since DAD-0006 was unsuccessful at penetrating through the sandstone.

Semi-detailed mapping was carried out around Spectre and immediately to the north with the aim of understanding the structurally complex faulting of the area. Detailed mapping was also completed over the Slimer prospect. Regional based mapping was completed over the two exploration licences with particular attention placed on large-scale lineaments, to determine whether these are surficial expressions of basement structures with small post-Kombolgie reactivation or large weathered joints. Detailed airborne magnetics and radiometrics was conducted over the Spectre, Slimer and Stretch prospects to assist with anomaly follow up and geological mapping. In addition semi-regional gravity was also undertaken at Spectre to assist with geological understanding of the prospect and drill targeting. This data supports the interpreted main NW striking Spectre Fault and is on the inflection of a large gravity anomaly indicating a major change in density, possibly due to a change in depth but more likely attributed to basement lithological change.

A multispectral data compilation of all outcrop sampling was completed covering in excess of 150 items of data for each sample. In total, 629 airborne radiometric, 42 U partial, 225 alteration halo, and 143 single element anomalies were generated. Outcrop sampling for 1999 was limited to following up these generated anomalies; a total of 605 follow-up samples were taken representing 298 multi-spectral anomalies. Most of the followed up anomalies were explained after ground checking, with many attributed to lateritic areas, black soil plains or variations in the surrounding topography. Of the other samples taken, only a few stand out as being anomalous in particular elements.

During the 1999 field program, two holes totalling 2,260m (DAD-0006 and DAD-0007) were drilled in the southern portions of the two exploration licences; EL 5061 and EL 5062 respectively; and were abandoned within the Kombolgie Sandstone, failing to reach the unconformity due to drill rig limitations. The depth to the basement exceeded our expectations and the working limits of the respective drill rigs. Both holes were collared within the Mackay Formation.

DAD-0006 was designed as a stratigraphic hole that would intersect the McKay and Kombolgie Sandstone, the unconformity and basement lithologies. Approximately

163m of McKay Sandstone was intersected at the beginning of the hole. Small basaltic sills were intersected between 25-55m, with associated soft sediment deformation and what appears to be very small sandstone dykes. A narrow intersection of Gilruth volcanic unit was intersected at 527m (14m) and associated with a down-hole probe peak of 580cps. At a depth of 763m, 229m of Nungbalgarri volcanics were intersected. A small horizon of very strongly silicified and brittle fractured Mamadawerre Sandstone was intersected between 992m and 1013m. At 1013m, the sandstone sharply contacts with a 175m thick intrusion of massive Oenpelli Dolerite. From 1188m to the end of the hole (1250.4m) strongly silicified and brittle fractured Mamadawerre Sandstone was intersected, before the hole was abandoned. Downhole multiparameter geophysics was performed on DAD-0006 after the completion of the hole, however, an obstruction at the NQ\BQ diameter junction limited the survey to the upper NQ porion of the hole.

DAD-0007 was targeted on the main Spectre Fault, expressed surficially as an extremely silicified breccia with some strong surface U anomalies and secondary uranium mineralisation. The hole was targeted to intersect any associated mineralisation at depth. Strong fracturing throughout the hole was encountered, particularly towards the bottom of the Nungbalgarri volcanic horizon. Two small intersections of dolerite were encountered in the Marlgowa Sandstone. The first at 196m showed very strong fracturing and continued until 223m and the second from 441m to 452m was also highly fractured. A thin intersection of Mamadawerre Sandstone was encountered below the Nungbalgarri Volcanics at 963m. The sandstone was moderately fractured and sharply (fault?) contacted a fine-grained mafic at 1009m which appeared to be the chilled margin of another intrusion of dolerite. Unfortunately, the drill broke down at this point and further drilling was not possible to fully investigate this intersection.

2. EXPLORATION PROGRAM - YEAR 2000

The Summary of Exploration Work table itemises work completed during 2000. The Summary of Expenditures table is the expenditure statistics itemised by work and exploration license.

Summary of Exploration Work Completed during Reporting Period

Summary of Expenditures Cameco Australia Pty Ltd

2.1 Outcrop Sampling

The sampling program for the 2000 field season was designed to follow-up and enhance previously checked anomalies with additional sampling of fractures, drusy quartz veins and breccias within the anomalous area. Samples were collected from fractures, veins and breccias, as these may provide fluid flow conduits from possible U mineralisation at depth, which can be detected by low level detection geochemical techniques.

Fracture samples were also collected from within mapped lineaments and lineament junctions in the northern portion of both exploration licences where a high probability of veining and brecciation may possibly occur. Samples were collected from within lineaments as these areas may host favourable locations for the leakage of U or

indicator element bearing fluids along breccias and drusy quartz fractures from an otherwise blind U deposit at the unconformity.

Samples were taken using a hammer, and often a chisel, in order to collect only the targeted vein or fracture, and as such the sample often consisted of small broken pieces of rock, which were placed into a 100ml vial. The sample physical shape and size characteristics were not favourable for PIMA spectral measurements. Geomorphological, geological and radiometric parameters were recorded, and a digital photograph at each site was taken.

A total of 228 samples from 209 sites were collected during the program.

Outcrop Sample Location Map

Outcrop Sample Locations

Outcrop Sample Descriptions

Outcrop Samples Alteration and Structural Measurements

A list of codes used in the Outcrop Samples Alteration and Structural Measurements Appendix can be found in the Codes for Unilog Appendix.

2.1.1 Geochemical Techniques

All samples were sent to Northern Territory Environmental Laboratories (NTEL, formally ChemNorth) in Darwin and Pine Creek for low level detection multi-element analysis . Two methods are used to analyse for 68 different elements. Geochemical analytical methods and data for outcrop sampling are included in the following Appendix.

The method utilised by NTEL for the outcrop fracture samples (G950) differs from the standard method (G400), used for the drill samples and most outcrop samples, in that samples are only partially digested so that only the mobile fraction or those minerals on the boundaries of quartz grains or are easily dissolved are analysed. The samples collected during the reporting period and those from previous years will not be directly comparable due to the different collection techniques and different chemistry analytical techniques.

NTEL Fracture Analytical Methods

Outcrop Sample Geochemistry

2.1.2 Results

Results for the 2000 sampling program are disappointing. Two samples stand out from the U and metal content map in the figure below, these being DA00W11007 and DA00W11031, both analysing for over 1100ppb U and over 4300ppb metal content.

DA00W11007 was sampled from fractures within a sandstone horizon comprised of preserved silicified gypsum rosette and halite castes indicative of shallow marine to brinal evaporitic environments. Samples taken from similar horizons displaying these textures, in previous years commonly how elevated values in the chemical analysis. Brinal evaporitic environments, during their development and the sandstone deposition, contain concentrated amounts of dissolved metals and other elements within the brine solutions, which is preserved within the stratigraphic horizon. The geochemistry for this sample,

while highly elevated, is not considered anomalous and worthy of follow up work.

Sample DA00W11031 located north of Banshee, was sampled from the K3 sandstone horizon, which immediately overlies the geochemically elevated Gilruth Volcanic unit. The elevated U and metal content in this sample may be attributable to the proximity to the Gilruth Volcanic, as in the case of the Banshee-Casper prospects.

U and Metal Content Map - Year 2000 Samples

2.2 Diamond Drill Program

2.2.1 Contractor and Drill Equipment

Wallis Drilling, based in Perth WA, utilised a UDR-1000 rated to a 1500 (upgraded 1500 mast, motor and hydraulic pumps), for the deepening of DAD-0006 (renamed DAW-0006 after wedging) and drilling of DAD-0008. Access to the DAW-0006 drill areas was by road with the crews commuting between the Mann River Camp and drill site by Toyota Landcruiser vehicles. Access to DAD-0008 was by a temporary track, with the drillers setting up a temporary camp near the drill hole.

2.2.2 Drill Targets

The first drill hole DAW-0006, an extension of DAD-0006, was designed as a stratigraphic hole; to intersect most of the stratigraphic units mapped on the Deaf Adder exploration licences. Drilling during 1999 field program failed to intersect the unconformity, as the depth to the basement exceeded our expectations and the working limits of the Century UDR-1000 drill rig.

The second hole, DAD-0008, was drilled west of the Kub-O-Wer Fault. It was designed as a stratigraphic hole; to investigate possible differences in stratigraphy and basin architecture with current drilling and also to determine by drilling, the basement rock type.

The 2000 drill-hole location map shows the drilling areas and drill hole collars using the 1:50,000 scale geological mapping combined with structural mapping.

2000 Drill Hole Location Map

2000 Drill Summary

2.2.3 Core Logging and Sampling Methodology

The drill core was geologically logged using Cameco's in-house UNILOG database program. The core was systematically logged measuring lithological, structural and alteration features. Results were displayed graphically using the GDM for Windows software program. A series of strip plots were used to display all features logged and measured. The explanatory notes for GDM plots table describes features represented by colours in the strip plots. The Codes for Unilog Appendix lists the codes and parameters that were used during the logging process and the Unilog Drill Core Data appendix contains the entire drill hole log.

Unilog Drill Core Data

Drill Detailed Lithology and Physical Properties

Explanatory Notes for GDM Plots

Codes for Unilog

Codes for Friabiliy, Competency and Grain Size

Codes for Munsell Colours

Routine sampling was completed in every row of core. A representative 5cm-core sample was collected and halved using a core saw. One half was described (grain-size, Munsell colour, magnetic susceptibility, and competency-degree of silicification or de-silicification). Results can be found in the Detailed Lithology and Physical Properties Appendix. The same sample was measured for spectral parameters using the PIMA II spectrometer. 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 (five metre composites). .

2.2.4 Drill Hole Statistics and Results

A total of 1,503m of drilling in two holes were completed during the 2000 field program, from 11 August to 3 October. The geochemistry is attached in the following appendix. Results for Au, B, LOI, Pt, Pd, Pd and the Pb isotope data for the G400 method has not been received from NTEL. Details of each drill hole are described in the sections that follow.

NTEL Analytical Methods

Drill Core Geochemistry

Drill Core PIMA – TSA

Drill Core PIMA - Minspec

2.2.4.1 Drill Hole DAW-0006

DAW-0006 Lithology Strip Plot

DAW-0006 Structure Strip Plot

DAW-0006 Alteration Strip Plot

DAW-0006 Geochemistry Strip Plot

DAW-0006 PIMA Strip Plot

DAW-0006 was designed as a stratigraphic hole, which would intersect most of the mapped units within the Deaf Adder exploration licences, and hopefully the unconformity and basement lithologies. The hole was abandoned during the 1999 field program at 1250.4m within extremely silicified sandstone. A larger drill rig was utilised for the 2000 field program, with the objective of reaming out the BQ portion of the drill hole with size NQ drill diameter, and continue drilling through the unconformity.

Problems were encountered with the NQ reaming bit (lost two reaming bits due to a possible foreign object in the hole at the BQ/NQ junction) and the hole was wedged at a depth of 1155m. The depth to basement exceeded our

expectations and the limits of the drill rig core break-out. The extremely silicified sandstone caused many problems with breaking the core at the end of runs. To minimise damage to the rig, and the possibility of losing the drill stem, the hole was terminated at a depth of 1436.4m.

The Figures are strip plots highlighting lithology, structure, alteration, geochemistry and PIMA parameters. Approximately 163m of McKay Sandstone were intersected at the beginning of the hole. The McKay Sandstone is elevated in most elements assayed for as well as having higher background values for magnetic susceptibility and down-hole gamma radiation. Small basaltic sills were intersected between 25-55m, with associated soft sediment deformation and what appears to be very small sandstone dykes. A narrow intersection of Gilruth volcanic unit was intersected at 527m (14m) and associated with a down hole probe peak of 580cps. At a depth of 763m, 229m of Nungbalgarri volcanics were intersected. The volcanics are generally elevated in most elements, particularly in Au, Pt, Pd, HREE and base metals. Radioactivity is associated with the upper contact (990cps) however, the lower contact at 992m was beyond the depth capability of the gamma logger. A small horizon of Mamadawerre Sandstone was intersected between 992m and 1013m showing a slight elevation in U, although this can possibly be attributed to the close proximity to the overlying volcanics and the intrusive dolerite below. This portion of sandstone is almost a quartzite, being very well silicified and exhibiting brittle fracture. At 1013m, the sandstone sharply contacts with an intrusion of Oenpelli Dolerite, which extends to a depth of 1191.13m. This unit is quite massive and shows similar chemical characteristics to the volcanic horizon, however it does not exhibit the same elevated levels of Pt and Pd.

The Mamadawerre Sandstone immediately beneath the Oenpelli Dolerite to the end of hole (1436.6m) is variably diagenetically silicified, dominantly fine grained with rare granule rich beds, and minor conglomeratic units, and is interpreted as shallow marine to distal fluvial in origin. The lower most portion of the hole is comprised of highly silicified, extremely well sorted, annealed, very fine to fine grained sandstone.

DAW-0006 was abandoned on 10 September due to drill rig limitations; the rig was capable of further drilling and rod pulling, but was proving underpowered in breaking the core from the bedrock. The final run took over two hours to snap the core loose from the bedrock, due to the extreme silicification and paucity of open fracturing through this section of the Kombolgie Sandstone. The drill hole was once again sealed/capped to facilitate the possibility of future drilling re-entry.

2.2.4.2 Drill Hole DAD-0008

DAD-0008 Lithology Strip Plot

DAD-0008 Structure Strip Plot

DAD-0008 Alteration Strip Plot

DAD-0008 Geochemistry Strip Plot

DAD-0008 PIMA Strip Plot

This hole was designed as a stratigraphic hole, to drill a section through the Kombolgie Sandstone and to hopefully intersect the unconformity and basement lithologies. The hole was placed to the west of the Kub-O-Wer Fault, and it was hoped that sequence correlation of the sandstone might show some degree of displacement across this regional structure.

DAD-0008 commenced with 12m of HW pre-collar to begin NQ diamond coring in competent Marlgowa Sandstone, the upper portion of the Kombolgie Formation. The hole was collared in fine grained, silicified, hematitic to bleached banded, marine sandstone, which extends to a depth of 65.1m. A thin transition sequence of coarser material is intersected from 65.1 to 69m and is comprised of moderately rippled sandstone, with minor thin cross beds and graded fining up bedding and trace scour marks.

The Gilruth Volcanic horizon was not visually logged, and was initially assumed to be absent, however indications of it's presence may be interpreted from the geochemistry as seen by an increase in all major oxides, and anomalous copper from 76m to 79m. The geochemical characteristics of this intersection of sandstone are very similar to that of the Nungbalgarri Volcanic unit, and may represent reworked material derived from the Gilruth Volcanics. From previous drilling at the Flying Ghost and Spectre prospects, and DAW-0006 (DAD-0006), the downhole intersection of Gumarrimbang Sandstone between the Gilruth Volcanic and Nungbalgarri Volcanic horizons is approximately 270m. In this hole, the Nungbalgarri Volcanic horizon was intersected at 349m, allowing 270m of Gumarrimbang Sandstone sequence, this would place the Gilruth Volcanic unit (if it was deposited) at approximately 79m, indicating that this interval of geochemically anomalous sandstone may represent the reworked Gilruth Volcanic unit.

If interpreting the lower contact of the Gilruth Volcanic unit at approximately 79m, the Gumarrimbang Sandstone is intersected from 79m to 349.9m. The Gumarrimbang Sandstone is comprised of distal to proximal fluvial (low to high energy, respectively) fine to medium grained sandstone with small sequences of granule stone and conglomeratic sandstone to 259.6m. The sandstone was logged as fine to medium grained with small sequences of granule stone and conglomerate. A thin 4.35m aeolian sandstone unit comprised of millimetre to centimetre scale cross laminations and steep (32º to bedding) cross bedding is present between 122m to 126.35m. From 259.6m to the top of the Nungbalgarri Volcanic unit, the sandstone is silicified, very fine to fine grained, well sorted with minor ripples and contains rare mudstone chips. This unit is interpreted as a proximal marine sandstone sequence. Approaching the top of the Nungbalgarri Volcanic unit, the lower 10m of Gumarrimbang Sandstone becomes brecciated and fractured (healed) by light

apple green chlorite, with very little chlorite infiltrating the matrix of strongly silicified sandstone.

The Gumarrimbang Sandstone sequence is interpreted as a transgressive sequence, with the deposition environments trending from distal fluvial or shallow marine at the bottom of this sandstone, grading through fluvial sands to an aeolian sequence of fine grained, well sorted, high angle cross-bedded sandstone beneath the conjectured Gilruth Volcanic horizon.

A section of Nungbalgarri Volcanic was intersected from 349.9m to 476m. 26 individual flows are recorded. The flows are relatively thin and range form amygdaloidal (drusy quartz-chert and/or chlorite) to micro-porphyritic (euhedral to anhedral pseudomorphs of chlorite after clinopyroxene or plagioclase). One interval of possible volcano-sedimentary lapilli tuff was noted from 388.95m to 392.2m.

This volcanic horizon displays the typically associated radioactivity and geochemical characteristics, with elevated total count radioactivity on the upper and lower contacts with the sandstone, an increase in the major oxides, REE and metals. An increase in uranogenic Pb isotope 206 occurs at the upper and lower contacts of the volcanic unit, and extends for several metres towards the centre of the unit. This increase in the proportion of Pb206 would indicate an addition of U bearing fluids along the margins of the volcanic horizon, and is substantiated with the elevated U content.

The Mamadawerre Sandstone, the lower portion of the Kombolgie Formation, was intersected from 476.5m to the unconformity at 993.45m. The top of this unit is unaffected by the overlying volcanic flows. The sandstone sequence to 767.07m, is comprised of marine massive and well bedded, very fine to fine grained, well sorted, silicified sandstone with white clay intraclasts and mudstone chips. Zones of minor structural disruption at 575m display anomalous geochemistry with increases in the major oxides, U, REE and metals. The copper anomaly associated with the broken core at 585m is due to the debris from a destroyed drill bit. From 767.07m to 809.75m, proximal fluvial, weakly silicified, fine grained, well sorted, low angle trough cross bedded sandstone is intersected. From 809m to the unconformity, the sandstone grades from a 26m interval (to 835.09m) of proximal fluvial fine to medium grained sandstone with siltstone interbeds and clay intraclasts to a fluvial, moderately sorted, very coarse grained pebbly granule stone to conglomerate sequence which extends to the unconformity. Low angle troughs cross bedding and minor massive units are common throughout the coarser grained interval. Chloritic alteration within the lower portion of this coarse unit appears to be structurally controlled, with chlorite haloes surrounding zones of structural disruption and fracturing. Several zones of discreet healed faulting were observed within 30m of the unconformity.

The unconformity was intersected at 993.45m. The unconformity contact is semi-concordant with a fine grained green clay or sericite-serpentinite layer immediately below the contact. Moderate hematite alteration has affected the underlying basement rocks up to two metres below the contact.

Basement rocks consist of intensely sheared to sub-vertically crenulated chloritic-carbonaceous to graphitic volcano-metasedimentary meta-pelitic

gneisses and schists (with abundant pyrite) with narrow quartz veins (± pyrite) and thin quartz (± carbonate) segregations and ribbons. Interbedded with the sheared chlorite-graphitic rocks are narrow intervals of massive to brecciated, chloritic metavolcanic rocks with abundant euhedral leucoxene crystals.

The greenschist metamorphic grade basement rocks have undergone four phases of deformation and are as follows:

S_0 - original sedimentary – volcanic bedding

S_1 – compaction and ductile metamorphism accentuating leucosome-melanosome banding and crude gneissosity

S_2 – folding of S_1; black chlorite – carbonaceous graphite crenulation cleavage developed axial planar to folded S_1 gneiss banding; slickenside lineations along S_0-S_1 planes

S_3 – folding of S_2 crenulation fabric over three metres of core from 85º to 45º to core axis, due to weak open folding.

S_5 - brittle reactivation sub-parallel to S_1 foliation, recorded as shears and shear breccias with abundant sooty graphite and black carbonaceous material ± chlorite

The basement rocks in DAD-0008 appear (from literature descriptions) to be analogous to the chlorite-muscovite-quartz schists and meta-pelites of the Burrell Creek

2.3 Geophysics

Geophysics undertaken during 2000 was limited to a regional hyperspectral survey and down hole geophysics. Digital down hole geophysical data has been submitted with this report. However, the hyperspectral data will be submitted in next years report once the data has been processed and interpreted.

AMS Location Map

2.3.1 Airborne Hyperspectral

A hyperspectral survey using the Airborne Multispectral Scanner system (AMS), was flown by De Beers Pty Ltd over the entire project totalling 2818 km^2. The survey was designed to map minerals and identify alteration associated with unconformity uranium mineralisation. In particular, it was hoped that this system would identify and map variations in kaolinite, illite, dickite, halloysite, iron and magnesium chlorites and silicification, which could be attributed to U alteration.

Whilst the survey was flown in July 2000, the data still requires processing and interpreted. Consequently, the data will be submitted in next year's annual report along with a logistics report.

2.3.1 Down Hole Geophysics

In October 2000, Scintrex Pty Ltd (Scintrex) undertook down hole geophysics on the two holes drilled by Cameco during 2000. Parameters surveyed were natural gamma, radiometrics (potassium, uranium, thorium), magnetic susceptibility, resistivity, self-potential and waveform sonic. The aim of the

down-hole geophysical program was to increase the physical property database.

Although it was planned for Scintrex to log the extent of DAW-0006 the hole was blocked at 600m. Hole DAD-0008 was logged to 1110m, however, winch failure limited the spectral gamma (radiometric) tool to 576m. In addition the gamma tool worked sporadically for hole DAW-0006.

A shift has been made to the depth of the down hole geophysical measurements in the figure in order to correlate the data with geology. The shift is tabulated in the figure and has been applied to the digital data. While it is common to apply a shift to account for dirt on the winch cable and cable stretch, the correction is usually minimal (<2m). However, for the present data the shift is higher then usual and cannot be explained by the contractor. The magnetic susceptibility shows a drift in readings, which is attributed by the contractor to be due to temperature (despite the tool being temperature compensated). A correction has also been applied to this data in a similar manner to the depth correction on the basis of qualitative assessment.

Logistics Report by Scintrex

Logistics Report by Scintrex Describing Sonic Processing

DAD-0008 and DAW-0006 Down-hole Geophysics

3. ROAD REHABILITATION

Prior to the 2000 field season, a temporary track was built to facilitate access to the drill hole DAD-0008 on the western portion of EL 5062. This track branched off the main Bat Guyangguyang Road, 20km south of the Cameco Mann River Camp and continued 45km to the west, crossing several small creeks and the Katherine River. At the conclusion of the drilling program, WRSC graded all windrows back over the track and pulled back and re–contoured the creek crossings. Minor re-vegetation was completed on areas of the creek banks, where soil disturbance had occurred, to minimise erosion during the wet season. Small earthen bunds and fallen tree trunks (where available) were placed across the recovered track surface to minimise the possibility of wet season run-off using the rehabilitated track as a water channel pathway and cause considerable soil erosion. The track has been closed off from future vehicle access.

Due to late finish to the 1999 field season at Spectre, road rehabilitation was not completed on the Spectre track at the conclusion of the drill program. Minor soil erosion and water channels developed to a depth of 30cm within the track during the 1999/2000 wet season. The Spectre track has been closed to vehicle access and road rehabilitation was completed to the same specifications as the western track at the conclusion of this field program.

4. CONCLUSIONS

After the completion of the fourth field season, it is apparent that the Kombolgie Sandstone in the areas explored so far, is very thick and potentially difficult and expensive to explore. From stratigraphic interpolation of the Nungbalgarri Volcanic unit between drill holes using the base of the volcanics in DAD-0008 as datum, and assuming that the Oenpelli Dolerite in DAW-0006 has been forcibly emplaced and spreads the Mamadawerre Sandstone by adding to the stratigraphic thickness, the unconformity in DAW-0006 could be at an approximate

depth of 1700m. This depth to the unconformity at DAW-0006 has not taken into account the possible thickening of stratigraphic sequences towards the paleo-basin centre. Stratigraphic correlations to DAD-0002, on the Flying Ghost prospect, would calculate the unconformity at an approximate depth of 970m.

The diamond-drilling program has shown that the sandstone is quite thick and that we may need to move any future drilling towards the northwest of the tenements where the sandstone cover is possibly thinner. It is shown that the central portion of both exploration licences lie proximal to the paleo-basin centre and expected depths to the unconformity are in excess of 1000m. Further exploration on the exploration licences will concentrate on those portions that are considered to be "shallow".

The roles of the two volcanic horizons is still not fully understood, however the petrographic work suggests that they may not have behaved as barriers to historical fluid flow as was previously thought. If the uranium bearing fluids have originated at depth, the volcanic horizons may still have scavenged uranium from solution thus preventing the uranium from expressing itself on the current surface.

Basement geology in DAD-0008 is encouraging with the presence of sub-vertically foliated graphitic and carbonaceous pelitic gneisses and schists. The minor healed faulting and chlorite alteration in the basal sandstone is encouraging as this indicates fluid movement and circulation through this lower fluvial horizon and possible interaction with basement fluids, in a drill area that is considered benign.

The fracture outcrop sampling program results were disappointing, however further work is warranted to fully test this methodology and it's application in defining deep U deposits.

The Airborne Multispectral Scanner survey completed by De Beers will provide valuable information covering the entire tenement, and will further enhance the mapping of stratigraphic sequences completed to date. This data, when received and merged with our current datasets will provide for a complete coverage of the exploration tenements and hopefully improve the ability to identify any alteration attributable to U mineralisation.

5. RECOMMENDATIONS

Data collection is always an important ongoing process. It is recommended that further anomaly follow-up be completed during the 2001 field season along with additional detailed sampling and fracture sampling. Sampling will primarily focus on areas less than the inferred 1000m unconformity depth, proximal to first and second order regional gravity contours.

The regional gravity (11km stations) will be re-modelled using DAD-0008 to tie in the unconformity depth in that area.

Detailed sampling and mapping of Slimer and selected areas is planned for generating drill targets for the 2002 field season. The results from the Slimer prospect are certainly encouraging, although the stratigraphic position of the area puts it high up in the Kombolgie Sandstone, similar to where all of the previous drill holes were collared, and the unconformity could be in excess of 1000m.

Exploration licences 5061 and 5062 are entering the fifth year of exploration, and as per NTDME requirements, areas of inferred unconformity depths in excess of 1000m will be highlighted as possible regions of exploration licence reduction.

It is anticipated that the total expenditure to complete the program planned for the reduced EL 5061 and 5062 will be $80,000.