



Cameco Australia Pty Ltd

Exploration Licenses EL 5061 & EL 5062

Deaf Adder Project, Arnhem Land, NT

Partial Relinquishment Report for Period 27th May 1997 to 27th May 2001

Date: August 2001

Report No.: DA01-03

Authors: Ted O'Connor, Project Geologist
Gavin Otto, Geologist II
Geoff Beckitt, Geophysicist II

Copies: Cameco Australia Pty Ltd (1)
Northern Territory Department of Mines & Energy (1)
Northern Land Council (1)
Cameco Corporation (1)

TABLE OF CONTENTS

| | |
|--------------------------------------------------|------------|
| TABLE OF CONTENTS | i |
| APPENDICES | i |
| FIGURES | ii |
| TABLES | ii |
| SUMMARY | iii |
| 1. INTRODUCTION..... | 1 |
| 1.1 Location | 1 |
| 1.2 Tenure | 2 |
| 1.3 Regional Geology | 2 |
| 1.4 Structure | 3 |
| 1.5 Local Geology..... | 3 |
| 1.6 Previous Explorers | 4 |
| 2. CAMECO AUSTRALIA EXPLORATION WORK..... | 4 |
| 2.1 Personnel and Contractors | 5 |
| 2.2 1997 Cameco Australia Exploration Work..... | 5 |
| 2.3 1998 Cameco Australia Exploration Work..... | 6 |
| 2.4 1999 Cameco Australia Exploration Work..... | 6 |
| 2.5 2000 Cameco Australia Exploration Work..... | 7 |
| 2.6 Overall Exploration Results | 8 |
| 2.6.1 Geological Map Products..... | 8 |
| 2.6.2 Geological Data and Report Tables | 9 |
| 2.6.3 Geophysics | 9 |
| 2.6.4 Geophysical Survey Maps | 11 |
| 2.6.5 Geophysical survey Logistics Reports | 12 |
| 3. CONCLUSIONS | 12 |

APPENDICES

| | |
|-------------------------------------------------------------------------------------------|----|
| 1998 Stockdale Exploration Report on Diamond Indicator Sampling | 9 |
| 1999 Stockdale Exploration Report on Diamond Indicator Sampling | 9 |
| Outcrop Sample Location & Description Data Report | 9 |
| Outcrop Sample Alteration & Structure Data Report | 9 |
| Outcrop Sample Geochemistry Data Report..... | 9 |
| Outcrop Sample PIMA MINSPEC Data Report..... | 9 |
| Outcrop Sample PIMA TSA Data Report | 9 |
| Outcrop Fracture Sample Geochemistry Data Report | 9 |
| World Geoscience Logistics Report for DTM, Magnetism & Radiometrics Airborne Survey | 12 |
| Geotrex DIGHEM Logistics Report for DTM & Frequency Domain EM Airborne Survey | 12 |
| UTS Logistics Report for Magnetism Airborne Survey for Stockdale | 12 |
| UTS Logistics Report for DTM, Magnetism & Radiometrics Airborne Survey | 12 |
| Haines Surveys Logistics Report for Gravity Survey | 12 |
| Haines Surveys Terrain Corrections for Gravity Survey | 12 |
| De Beers Logistics Report for Hyperspectral Airborne Survey | 12 |

FIGURES

| | |
|----------------------------------------------------------------------------------------------------------------------|----|
| Project Location & Current Tenement Status Map..... | 1 |
| Current Tenement Status Map | 2 |
| Regional Structure and Uranium Occurrences Map | 3 |
| Map of Cameco Australia Outcrop Sample Locations (1997-2000) | 8 |
| Geological Map of Surrendered Tenement Areas (1998-99) by A. Mackie..... | 8 |
| Map of Stockdale Diamond Indicator Stream Sediment Samples (1998) | 8 |
| Map of Stockdale Diamond Indicator Stream Sediment Samples (1999) | 8 |
| Location Map of Surrendered Geophysics | 10 |
| World Geoscience Airborne Survey Digital Terrain Model Map (NE Sun) | 11 |
| World Geoscience Airborne Survey Total Magnetic Intensity Map – 1 st Vertical Derivative | 11 |
| World Geoscience Airborne Radiometric Survey Map - Total Count (TC)..... | 11 |
| World Geoscience Airborne Radiometric Survey Map - Uranium (U) channel | 11 |
| World Geoscience Airborne Radiometric Survey Map - Thorium (Th) channel | 11 |
| World Geoscience Airborne Radiometric Survey Map - Potassium (K) channel | 11 |
| World Geoscience Airborne Radiometric Survey Map - Uranium (red), Thorium (green) and Potassium (blue) channel | 11 |
| UTS Airborne Survey Digital Terrain Model Map (NE Sun) | 11 |
| UTS Airborne Survey Total Magnetic Intensity Map – 1 st Vertical Derivative..... | 11 |
| UTS Airborne Radiometric Survey Map - Total Count (TC)..... | 11 |
| UTS Airborne Radiometric Survey Map - Uranium (U) channel..... | 11 |
| UTS Airborne Radiometric Survey Map - Thorium (Th) channel | 11 |
| UTS Airborne Radiometric Survey Map - Potassium (K) channel | 11 |
| UTS Airborne Radiometric Survey Map - Uranium (red), Thorium (green) and Potassium (blue) channels | 11 |
| De Beers UTS Airborne Survey Total Magnetic Intensity Map..... | 11 |
| Geoterrex Airborne DIGHEM Survey Map | 11 |
| Gravity Survey Map (Haines Surveys) | 11 |

TABLES

| | |
|-----------------------------------------------------------------------|----|
| Codes for Competency and Grain Size Table..... | 9 |
| Codes for Munsell Colour Table..... | 9 |
| Codes for UNILOG Alteration and Mineralogy Table..... | 9 |
| Chemnorth/NTEL Analytical Techniques for Outcrop Samples Table..... | 9 |
| Chemnorth/NTEL Analytical Techniques for Fracture Samples Table | 9 |
| Geophysics Specifications and Results Table..... | 9 |
| Geophysical Surveys Logistics Reports Table | 10 |

SUMMARY

This report describes exploration work undertaken on the Deaf Adder project within the 218 blocks relinquished from EL 5061 and the 130 blocks relinquished from EL 5062 during the four years of tenure between 1997 and 2000. The tenements are located in north-central Arnhem Land and were granted 27th May 1997.

The prime objective of the Deaf Adder project is to discover economic unconformity-related uranium mineralisation within a geological environment similar to deposits in the Athabasca basin of Canada, associated with the Kombolgie basin of the Northern Territory.

Unconformity uranium-type deposits represent the highest-grade uranium deposits known and are generally located proximal to the unconformity between Mesoproterozoic sandstone and underlying Paleoproterozoic to early Mesoproterozoic pelitic schists and gneisses. Numerous examples of this deposit type are found in northern Canada and the Northern Territory in Australia. Cigar Lake and McArthur River deposits in northern Saskatchewan, Canada are true unconformity-type uranium deposits. The Kiggavik deposit in eastern Nunavut, Canada and the Ranger, Jabiluka and Nabarlek deposits in the Northern Territory are hosted in basement schists and gneisses, but are believed to be unconformity-related uranium deposits. Cameco Australia's strategy is to systematically investigate the basal Katherine River Supergroup, Kombolgie and McKay Formations for evidence of buried uranium deposits. Trace element and clay alteration haloes occur high up in the sandstone above unconformity-type uranium deposits and their recognition has led to discoveries in Canada.

Stockdale Prospecting Ltd (now De Beers Australia Exploration Ltd - DBAE) entered into a farm-in agreement with Cameco Australia Pty Ltd and carried out reconnaissance sampling and investigations for diamonds in 1998 and 1999.

The relinquished areas have been investigated thoroughly with the conclusion that these areas have a low prospectivity for hosting economic deposits of uranium, diamonds or base and precious metals. The thickness of the Katherine River Supergroup rocks in the relinquished portions of EL 5061 and EL 5062 is interpreted to be greater than 1000 m impacting greatly on the economics of any sub-Kombolgie deposit.

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.

This report covers exploration work carried out over portions of EL 5061 and EL 5062, which have been relinquished during 2001, immediately prior to the beginning of the 5th year of exploration. This represents the first reduction in land holdings on these two ELs since they were granted in 1997. An exemption from reduction was received for ELs 5061 and 5062 in 2000 precluding the necessity for reduction after the third anniversary, as is normally required.

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.

Project Location & Current Tenement Status Map

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” or “Duluk Nguluk” (Sand Goanna) by Traditional Owners.

The base camp was established in August 1998 and has been occupied for two to three months (August to October) between 1998 and 2000. 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 located 750 m away.

Temporary base camps were established for the 1999 and 2000 drill programs near to the drill sites DAD-0007 (1999) and DAD-0008 (2000). 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.

Rotor Services provided helicopter services each year the project was operational to assist in the sampling programs, geophysical surveys, the 1998 diamond drill program and to transport personnel to work areas.

The main track, which extends 160 km northeast from Eva Valley to the Mann River exploration camp, requires only minimal refurbishment following annual close-down

procedures aimed at securing the track from erosion during the wet season. The Traditional Owners have named the track “Bat Guyangguyang”.

Temporary tracks were established by Wildman River Stock Contractors (WRSC) in 2000 and the Oenpelli Council in 1999. The tracks were utilised to facilitate drill rig movement and associated support vehicles to the western drill hole locations (DAD-0007 & DAD-0008). These tracks have been closed and rehabilitated in October 2000 at the completion of the western drilling program.

1.2 Tenure

The project permits originally comprise 2,369 km² within Exploration Licences EL 5061 and EL 5062, which were granted on May 27th 1997, and an additional 3,750 km² of Exploration Licence applications subject to negotiation with the Aboriginal Traditional Owners.

Current Tenement Status Map

Prior to the 4th Anniversary of these licences a reduction of land holdings is required by the NTDME. 218 blocks representing 50.1% of the original tenement area were relinquished from EL 5061. 130 blocks representing 46.9% of the original tenement area were relinquished from EL 5062.

The current land holdings for the Deaf Adder project after the 2001 relinquishment total 1216.2 km². This includes 725.3 km² (217 blocks) retained in EL 5061 and 490.9 km² (147 blocks) retained in EL 5062. The covenants for 2001 exploration expenditures are set at \$40,000 per licence.

1.3 Regional Geology

The Deaf Adder tenements lie on the Arnhem Land Plateau, which forms the western margin of the Paleoproterozoic McArthur Basin, and comprises undeformed sediments of the Katherine River Supergroup. These platform fluvial 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 Structure and Uranium Occurrences Map

Extensional basin tectonics was responsible for the formation of the Paleoproterozoic 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 Gumarrinbang 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 Gumarrinbang 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.

2. CAMECO AUSTRALIA EXPLORATION WORK

The prime objective of the Deaf Adder project is to discover economic unconformity-related uranium mineralisation within a geological environment similar to deposits in the Athabasca basin of Canada, associated with the Kombolgie basin of the Northern Territory.

Unconformity uranium-type deposits are the highest-grade uranium deposits known and are generally located proximal to the unconformity between Mesoproterozoic sandstone and underlying Paleoproterozoic to early Mesoproterozoic pelitic schists and gneisses. Numerous examples of this deposit type are found in northern Canada and the Northern Territory in Australia. Cigar Lake and McArthur River deposits in northern Saskatchewan, Canada are true unconformity-type uranium deposits. The Kiggavik deposit in eastern Nunavut, Canada and the Ranger, Jabiluka and Nabarlek deposits in the Northern Territory are hosted in basement schists and gneisses, but are believed to be unconformity-related uranium deposits.

All data, maps and locations are included as links in Section 2.6.2. A chronological outline of the type of work completed on the project is provided below.

2.1 Personnel and Contractors

Several Cameco Australia and Cameco Corporation geologists, geophysicists, technical field personnel and camp cooks have worked on the Deaf Adder project during the period between 1997-2000.

Contractors and consultants used include the following:

Geophysical Surveys

- Airborne radiometric and magnetic surveys by World Geoscience
- Airborne electromagnetic surveys by Geoterrex (DIGHEM)
- Detailed radiometric, magnetic and Digital Terrain Model surveys by UTS
- 256 channel radiometric data processing by Pitt Research
- Gravity Surveys by Haines Surveys
- 1999 Downhole Geophysical Surveys by Surtron Geophysics
- 2000 Downhole Geophysical Surveys by Scintrex/AUSLOG (now Fugro)
- 2000 Airborne Hyperspectral Infrared Reflectance Spectrometer survey by De Beers

Diamond Drilling

- Century Drilling
- Wallis Drilling

Diamond indicator sampling

- Stockdale Prospecting (now De Beers Australia Exploration)

Geochemical Analytical Services

- Chemnorth – Darwin/Pine Creek (now NTEL)
- Amdel - South Australia

Autoradiography

- Amdel - South Australia

Petrographic and Scientific Studies

- Mason Geoscience – Adelaide
- Saskatchewan Research Council – Canada (DAD-0002 sandstone study)
- Pontifex and Associates

Digital Aerial Photography

- Airesearch Mapping

2.2 1997 Cameco Australia Exploration Work

The 1997 field program was completed in two stages over 40 days between 19 June and 28 September. This included a two-week period in June required for the construction of an access track into a temporary campsite on Snowdrop Creek. A field crew of 6-7

people were employed comprising up to three field technicians, three geologists and a geophysicist. A cook, helicopter pilot and engineer were employed to support the exploration field crew.

Due to the total lack of access tracks within the tenements, all exploration work during 1997 was carried out with helicopter assistance.

The 1997 exploration program comprised, fixed wing airborne magnetics-spectrometer radiometric surveys, ground follow-up radiometric prospecting, and regional sandstone sampling for PIMA (Reflectance Spectroscopy analysis) and lithogeochemical studies. Detailed work carried out on the Flying Ghost prospect included grid-based geological mapping, spectrometrics, sandstone rock chip sampling, and orientation stream sediment sampling.

2.3 1998 Cameco Australia Exploration Work

During 1998, a small diamond drill program was completed at the Flying Ghost prospect. A total of 1603m was drilled in five holes. Extension of radioactivity below surface was unsuccessful, however, valuable technical and stratigraphic information was obtained during the program. No diamond drill holes are located on ground relinquished in 2001.

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. Neither area is located within ground relinquished in 2001.

Based on a letter of agreement with Cameco Australia Pty Ltd, Stockdale Prospecting Limited completed a reconnaissance diamond-indicator mineral sampling program on the Deaf Adder project. A map of 1998 sample locations and a link to the 1998 Stockdale diamond indicator sampling report are included in Section 2.6.2.

2.4 1999 Cameco Australia Exploration Work

The objectives of the work completed by Cameco during the 3rd 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 1st and 2nd year of the tenements;
- To continue with regional and detailed geological mapping and prospecting;
- To use remote sensing techniques such as airborne and ground geophysical surveys to delineate sub-surface features (structure, lithology, alteration etc.).

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. No diamond drill holes are located on ground relinquished in 2001.

Other exploration during 1999 consisted of detailed sampling and prospecting over anomalous sites identified from the multispectral analysis of existing datasets.

Stockdale completed diamond indicator mineral sampling follow up to anomalous areas from their 1998 program. A map of 1999 sample locations and a link to the 1999 Stockdale diamond indicator sampling report are included in Section 2.6.2. No additional diamond sampling occurred after the 1999 field season. The farm-in arrangement on EL 5061 and EL 5062 with Stockdale/De Beers was terminated in 2000.

2.5 2000 Cameco Australia Exploration Work

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.

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. Neither drill hole is located on ground relinquished in 2001.

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

A hyperspectral survey using the Airborne Multispectral Scanner system (AMS), was flown by De Beers Pty Ltd over the entire project totalling 2818 km². 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.

The hyperspectral survey was flown in July 2000; however, the data still requires processing and interpretation. Data processing and interpretation is being carried out by in-house Cameco Corporation personnel in Canada and has yet to be completed.

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 the 2000 field program.

2.6 Overall Exploration Results

Exploration results and data have been combined grouping like data and products together to include all four years of exploration on the relinquished areas. Data, Tables, Reports and map products for the relinquished areas are included as links below. Data tables are also included as ASCII tab-delimited (.TXT) files on accompanying CD-ROMs. Geophysical data and logistical reports also accompany this relinquishment report.

2.6.1 Geological Map Products

[Map of Cameco Australia Outcrop Sample Locations \(1997-2000\)](#)

[Geological Map of Surrendered Tenement Areas \(1998-99\) by A. Mackie](#)

[Map of Stockdale Diamond Indicator Stream Sediment Samples \(1998\)](#)

[Map of Stockdale Diamond Indicator Stream Sediment Samples \(1999\)](#)

2.6.2 Geological Data and Report Tables

Data are included as ASCII tab delimited TXT files and as Excel files and are also included as PDF links below.

[1998 Stockdale Exploration Report on Diamond Indicator Sampling](#)

[1999 Stockdale Exploration Report on Diamond Indicator Sampling](#)

[Outcrop Sample Location & Description Data Report](#)

[Outcrop Sample Alteration & Structure Data Report](#)

[Outcrop Sample Geochemistry Data Report](#)

[Outcrop Sample PIMA MINSPEC Data Report](#)

[Outcrop Sample PIMA TSA Data Report](#)

[Outcrop Fracture Sample Geochemistry Data Report](#)

Explanatory tables for abbreviation codes used in the outcrop data collection as well as explanatory tables for analytical techniques/detection limits area included as PDF links below.

[Codes for Competency and Grain Size Table](#)

[Codes for Munsell Colour Table](#)

[Codes for UNILOG Alteration and Mineralogy Table](#)

[Chemnorth/NTEL Analytical Techniques for Outcrop Samples Table](#)

[Chemnorth/NTEL Analytical Techniques for Fracture Samples Table](#)

2.6.3 Geophysics

Geophysics has been undertaken each year the project has been operated, between 1997 and 2001. Project scale surveys have consisted of airborne magnetics, radiometrics and digital terrain model (DTM) surveys along with ground gravity. Prospect scale airborne geophysics has consisted of magnetics, radiometrics, DTM and heliborne frequency domain electromagnetics (DIGHEM). Ground prospect scale geophysics has consisted of magnetics, radiometrics and gravity.

The summary table below shows the geophysical surveys undertaken by Cameco Australia where the quantity refers to the survey quantity and not necessarily the relinquished quantity.

[Geophysics Specifications and Results Table](#)

All data has been submitted in digital format with this report. However, the hyperspectral data is not yet available for submission and will be surrendered as soon as it is received {NOTE: Although the hyperspectral survey was flown in July 2000, the data has still not been extracted from the raw data tapes due to the unique nature of this relative new technology. It is intended that this data will be supplied as soon as possible on separate CD's by the end of the year. This has been verbally conveyed to R. Brescianini (Chief Geophysicist for NTGS)}.

Location Map of Surrendered Geophysics

Geophysical Surveys Logistics Reports Table

| Reporting Period | Work | Type | Contractor | Hyperlink |
|---------------------|--------------------|------------------------------------------------|---------------------|--------------------------------------------------------------------|
| 27/05/97 - 26/05/98 | Remote Geophysics | Digital Terrain Model, Magnetism, Radiometrics | WGC | Summary Logistics |
| 27/05/98 - 26/05/99 | Remote Geophysics | Digital Terrain Model, Frequency Domain EM | Geotrex-Dighem | Logistics |
| 27/05/98 - 26/05/99 | Remote Geophysics | Magnetism | UTS for Stockdale | Logistics |
| 27/05/99 - 26/05/00 | Remote Geophysics | Digital Terrain Model, Magnetism, Radiometrics | UTS | Logistics |
| 27/05/99 - 26/05/00 | Surface Geophysics | Gravity | Haines Geophysics | Logistics , Terrain Corrections |
| 27/05/00 - 26/05/01 | Remote Geophysics | Hyperspectral | Stockdale - DeBeers | Logistics |

2.6.4 Geophysical Survey Maps

World Geoscience Airborne Survey Digital Terrain Model Map (NE Sun)

World Geoscience Airborne Survey Total Magnetic Intensity Map – 1st Vertical Derivative

World Geoscience Airborne Radiometric Survey Map - Total Count (TC)

World Geoscience Airborne Radiometric Survey Map - Uranium (U) channel

World Geoscience Airborne Radiometric Survey Map - Thorium (Th) channel

World Geoscience Airborne Radiometric Survey Map - Potassium (K) channel

World Geoscience Airborne Radiometric Survey Map - Uranium (red), Thorium (green) and Potassium (blue) channel

UTS Airborne Survey Digital Terrain Model Map (NE Sun)

UTS Airborne Survey Total Magnetic Intensity Map – 1st Vertical Derivative

UTS Airborne Radiometric Survey Map - Total Count (TC)

UTS Airborne Radiometric Survey Map - Uranium (U) channel

UTS Airborne Radiometric Survey Map - Thorium (Th) channel

UTS Airborne Radiometric Survey Map - Potassium (K) channel

UTS Airborne Radiometric Survey Map - Uranium (red), Thorium (green) and Potassium (blue) channels

De Beers UTS Airborne Survey Total Magnetic Intensity Map

Geoterrex Airborne DIGHEM Survey Map

Gravity Survey Map (Haines Surveys)

2.6.5 Geophysical survey Logistics Reports

World Geoscience Logistics Report for DTM, Magnetism & Radiometrics Airborne Survey

Geotrex DIGHEM Logistics Report for DTM & Frequency Domain EM Airborne Survey

UTS Logistics Report for Magnetism Airborne Survey for Stockdale

UTS Logistics Report for DTM, Magnetism & Radiometrics Airborne Survey

Haines Surveys Logistics Report for Gravity Survey

Haines Surveys Terrain Corrections for Gravity Survey

De Beers Logistics Report for Hyperspectral Airborne Survey

3. CONCLUSIONS

The relinquished areas have been investigated thoroughly with the conclusion that these areas exhibit low prospectivity for hosting economic deposits of uranium, diamonds or base and precious metals. Multi-element geochemical analysis and clay alteration signature determinations combined with geological and structural mapping and airborne geophysical surveys have not led to discovery of any mineralisation or alteration haloes that could be attributed to economic mineral deposits of any kind.

The thickness of the Katherine River Supergroup rocks in the relinquished portions of EL 5061 and EL 5062 is interpreted to be greater than 1000 m impacting greatly on the economics and size requirements of any sub-Kombolgie deposit.