CAMECO AUSTRALIA PTY LTD

Annual Report – EL 5893

CONFIDENTIAL

Date	14 April 2014
Period	4 May 2013 to 3 May 2014
Target Commodity	Uranium
Authors	Ben Walsh, Geologist Daniel Hawkins, Project Geologist
Contact Details	PO Box 748 Osborne Park, BC WA 6916 Ph. 08 9318 6600
Email for further technical details	Daniel_Hawkins@cameco.com
Email for expenditure	Daniel_Hawkins@cameco.com
Datum/Zone	GDA94 (Zone53)
Map Sheets	1:250K Cobourg Peninsula SC5313 1:100K Wellington Range 5574
Tenement Manager	Austwide
Drafting	Tim Dunlevie
Copies	Cameco Corporation (1) Cameco Australia Pty Ltd (1) Department of Mines and Energy (1) Northern Land Council (1)

Verified By:	Approved By:
Jason Bishop Principal Geologist	Damien Ewington Regional Manager

CONTENTS

FIGURES

TABLES

APPENDICES

Abstract

EL5893 was granted on 5 May 2004 for an initial period of six years. Upon granting, the total area under licence was 269 blocks for 856.4 km^2 of which 378.8 km^2 (44%) was excluded from exploration by the Northern Land Council. EL5893 has been explored every year since tenure was granted.

In 2013 Cameco Australia Pty Ltd explored for uranium mineralisation within EL5893. Two prospects named Angularli and Shadow Falcon were explored with diamond drilling. At Angularli exploration targeted a NNW trending reverse fault intersected during 2012 drilling in search of unconformity style mineralisation found at Angularli in 2011. At Shadow Falcon a NE trending reverse fault was targeted in search of uranium mineralisation hosted in hanging wall Cahill Formation thrust over Mamadawerre Sandstone.

Drillhole WRDD0119 at Angularli intersected 983 ppm uranium over 0.8 m from 243.3 m at the unconformity.

Forty-eight termitaria samples were collected over the Emu prospect across a radiometric anomaly identified in a high resolution aerial radiometric survey collected in 2012. Elevated uranium was detected within multiple samples.

1. Introduction

Exploration was completed by Cameco Australia Pty Ltd (Cameco) over EL5893 (Wellington Range) for the 10th year of tenure that ends on 4 May 2014. The exploration licence is located on aboriginal land with the work program carried out under the terms of consent documentation agreed with the Northern Land Council (NLC), pursuant to the *Aboriginal Land Rights (NT) Act 1976*. The program was presented at the liaison committee meeting held on 5 June 2013 at Oenpelli and approved by the NLC on behalf of the Traditional Owners.

The 2013 exploration activities consisted of diamond drilling as well as a ground based Induced Polarity (IP) survey and various downhole geophysical surveys. Contractors used on the project in conjunction with these exploration activities include:

- Zonge Engineering and Research Organization (Aust) Pty Ltd
- Mount Magnet Drilling

1.1. Location and Access

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

Relevant map sheets are:

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

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

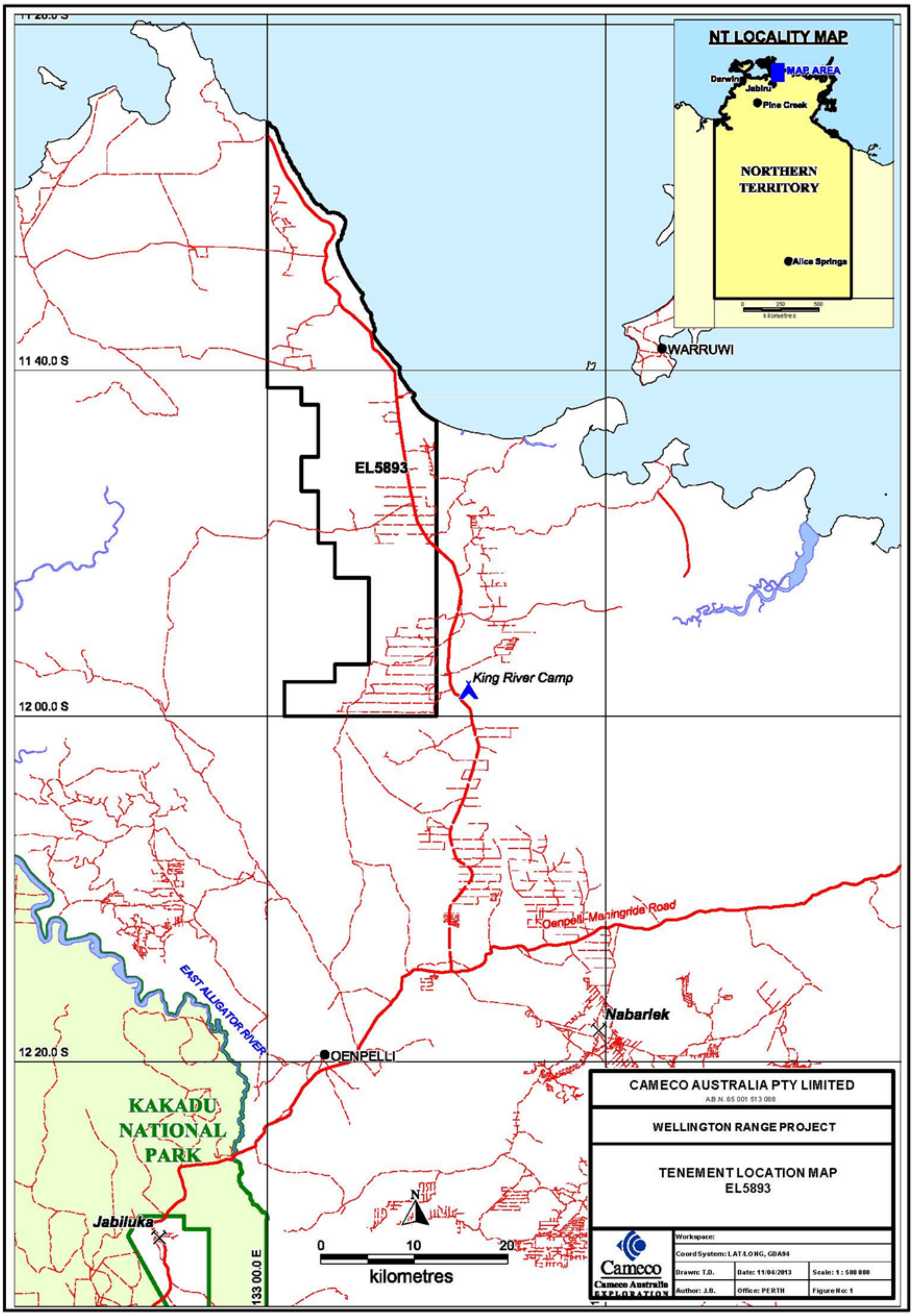

Figure 1: Wellington Range tenement location map

1.2. Tenure

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

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

Cameco was granted a renewal of the exploration licence in February 2010. A second renewal was granted in October 2012. A further renewal was submitted in May 2014 and is currently under review by the DME.

1.3. Physiography

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

2. Regional Geology

This section is largely based on the work by Needham et al. (1988), Needham (1998, 1990), and Needham and Stuart-Smith (1980).

The Wellington Range project area is located near the eastern margin of the Neoarchean and Paleoproterozoic Pine Creek Orogen (PCO), in an area that has been subdivided into the Nimbuwah Domain of the Alligator Rivers region.

The oldest exposed rocks in the Alligator Rivers region are those of the Neoarchean (ca. 2500 Ma) Nanambu Complex, a sequence of intercalated paragneiss, orthogneiss, migmatite, and schist that outcrop in the form of domes. The Nanambu Complex is unconformably overlain by a Paleoproterozoic meta-sedimentary and metavolcanic sequence, formerly known as the Myra Falls Metamorphics. Recent U-Pb age dating by the NTGS and Geoscience Australia (GA) of rocks from the Myra Falls suite, indicates that this sequence are in fact part of the Neoarchean Nanambu Complex (Hollis, et al., 2009). These units have thus been re-mapped as the Kukalak and Arrarra Gneiss and are now considered part of the Archean basement.

The basal unit in the Paleoproterozoic meta-sedimentary sequence in the Alligator Rivers region are packages of amphibolite-facies intercalated psammite, amphibolite and schists assigned to the Mount Howship Gneiss and the Kudjumarndi Quartzite. These formations are included in the Kakadu Group and are probably correlatives of the Mount Basedow Gneiss and Munmarlary Quartzite, respectively (Ferenczi et al., 2005). These metasediments on-lap Neoarchean basement highs, but gneissic variants are also thought to pass transitionally into paragneiss of the Nanambu Complex.

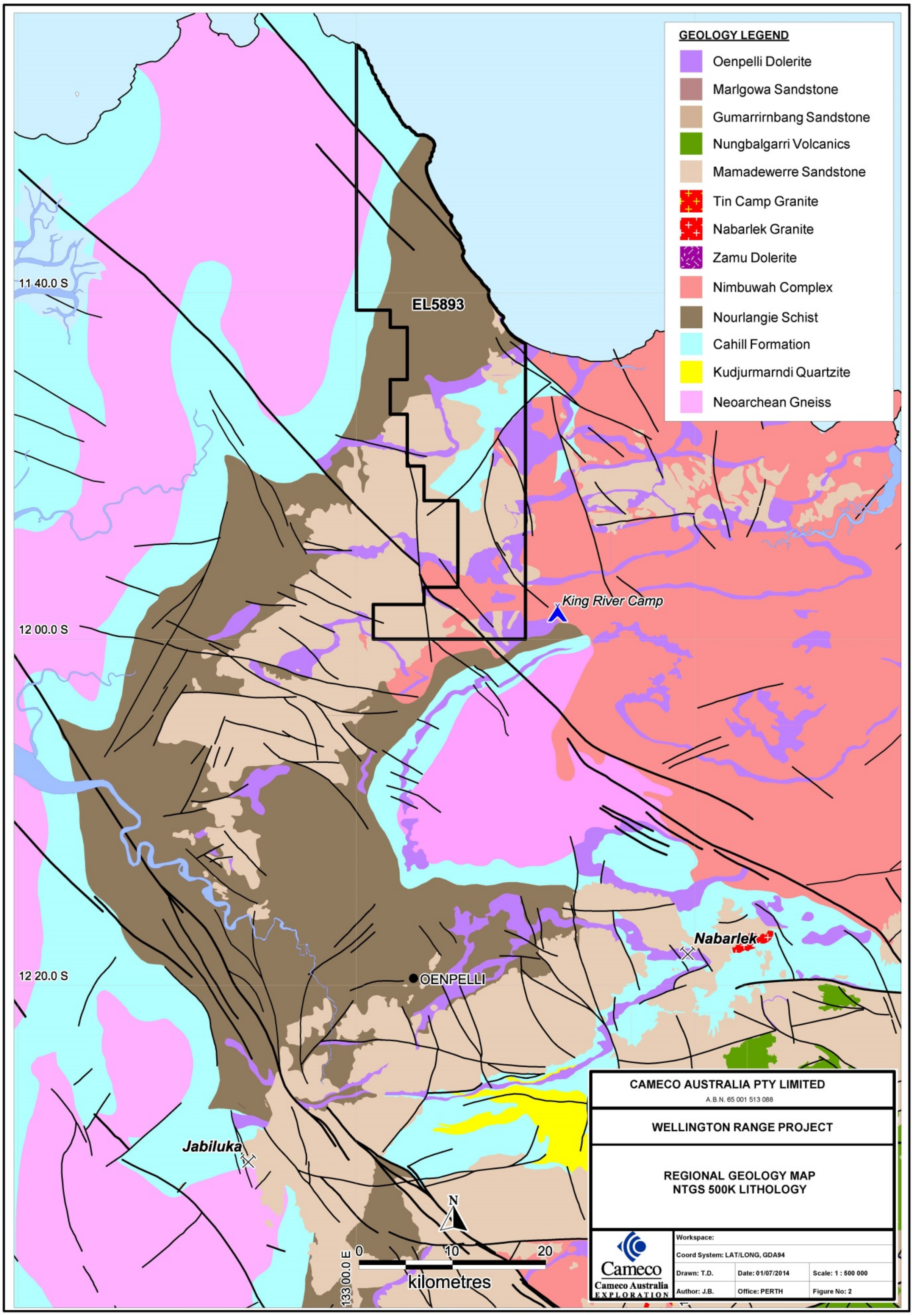

Figure 2: Regional geology map. Tenement EL5893 is outlined in black.

The Paleoproterozoic Cahill Formation of the Namoona Group conformably overlies the Munmarlary Quartzite. The Cahill Formation is separated into two groups, the Lower Cahill Formation consisting of calcareous marble and calc-silicate gneiss, overlain by pyritic, garnetiferous and carbonaceous schist, quartz-feldspar-mica gneiss, and minor amphibolite; and the more psammitic Upper Cahill Formation consisting of feldspar-quartz schist, quartzite, lesser proportions of mica-feldspar-quartz-magnetite schist, and minor meta-conglomerate and amphibolite. The Lower Cahill Formation is host to all major deposits of the Alligator Rivers Uranium Field, including Jabiluka, Ranger and Koongarra. Mafic sills and dykes, assigned to the Goodparla and Zamu dolerite units, intrude the Upper Cahill Formation. Overlying the Cahill Formation is the Nourlangie Schist; argillaceous to quartzose phyllite and quartz-mica schist that locally contain garnet and staurolite porphyroblasts.

The supracrustal rocks of the region are structurally complex, having been affected by at least three deformation events before deposition of the late Paleoproterozoic to Mesoproterozoic Kombolgie Subgroup. The rocks have also been locally migmatized during the ca. 1847 ± 30 Ma Nimbuwah Event. In addition, there is a broad trend of increasing metamorphic grade from southwest to northeast in the Nimbuwah Domain. This gradient is thought to reflect the synchronous emplacement of ca. 1865 Ma granites in the Nimbuwah Complex.

Overlying the Paleoproterozoic metamorphic units with a marked regional unconformity is the Kombolgie Subgroup, the basal unit of the late Paleoproterozoic to Mesoproterozoic Katherine River Group of the McArthur Basin (Sweet et al., 1999a, b). The subgroup consists of three distinct sandstone units named the Mamadawerre Sandstone, Gumarrirnbang Sandstone, and Marlgowa Sandstone (oldest to youngest) which are divided by thin basaltic units – the Nungbalgarri Volcanics and Gilruth Volcanics, respectively. The Mamadawerre Sandstone has a minimum age of ca. 1723 Ma, which is the minimum age of the intrusive Oenpelli Dolerite. Detrital zircon SHRIMP data from the GA OZCRON database constrain the maximum age of the sandstone at ca. 1810 Ma.

The Oenpelli Dolerite is the most pervasive mafic intrusive suite to affect the Alligator Rivers region. It intrudes various Neoarchean and Paleoproterozoic units, as well as the Kombolgie Subgroup, forming sills, dykes, lopoliths, and laccoliths. The Oenpelli Dolerite has a U-Pb baddeleyite date of 1723 ± 6 Ma (Ferenczi et al., 2005); however, geochemical and geophysical data suggest several phases of intrusion throughout the region. These intrusive events had a pronounced thermal effect on the Kombolgie Subgroup, with the formation of fluid flow through the dynamic system of aquifers and aquitards within the sandstone. Localized effects in the sandstone include silicification, desilicification, chloritisation, sericitisation, and pyrophyllite alteration. A characteristic mineral assemblage of prehnite-pumpellyite-epidote has formed in the quartzofeldspathic basement rocks adjacent to the intrusions.

Deformation since deposition of the Katherine River Group includes transpressional movement along steep regional-scale strike-slip faults and possibly shallow thrust faults. These regional faults follow a pattern of predominantly north, northwest, north-northwest and northeast strikes, creating the characteristic linearly dissected landform pattern of the Kombolgie Subgroup. Another significant set of regional fault structures trends east – west, and includes both the Ranger and Beatrice Faults.

The Bulman Fault Zone is a principal regional feature and is considered to represent a long-lived deep crustal structure, with a large lateral component in rocks of the PCO. However, it appears that post-Kombolgie displacements along this and other faults have not been significant, because the Arnhem Land Plateau is essentially coherent and offsets along lineaments are generally minor. Field investigations of many interpreted ‘faults’, including those with a marked geomorphic expression, show no displacement, and are best described as joints or lineaments.

Erosional remnants of flat-lying Paleozoic Arafura Basin and Cretaceous Carpentaria Basin are present as a veneer throughout the coastal zone of the Top End. Various regolith components are ubiquitous as overburden cover throughout much of the region.

3. Local and Project Geology

The Paleoproterozoic Cahill Formation forms a curved linear trend, running parallel to the northwest boundary of the project area (Figure 3). Drilling has confirmed this package of stratigraphy to contain characteristic Cahill Formation 'marker' horizons such as the magnetic pelite and an underlying marble and calc-silicate unit. Graphitic bearing faults have been intersected and a semipelitic graphite-bearing unit is also present at different stratigraphic levels. However, the bulk of the sequence consists of pelitic and semipelitic rocks with minor psammite and interlayered amphibolite. Basement Archean Nanambu Complex has been intersected in multiple drillholes. Intrusive rocks include pegmatite and dolerite. The intersected stratigraphy suggests that both Upper and Lower Cahill Formation units are present within the Wellington Range tenement. Nourlangie Schist is also most likely present in some parts of the tenement overlying the Cahill Formation.

A flaggy quartzite outcrops at or near the Kombolgie Subgroup sandstone unconformity on the western side of the tenement adjacent to the escarpment. Similar quartzite dominated sequences have been cored in some of the Wellington Range drillholes. The quartzite outcrops had been mapped as Cahill Formation by the BMR in the 1970s; however, their location in the stratigraphic succession is uncertain.

Granitoid, quartzofeldspathic gneiss and local migmatite of the Paleoproterozoic Nimbuwah Complex form basement units in the south part of the tenement and extend as far north as the South Angularli prospect.

The basal Mamadawerre Sandstone of the Kombolgie Subgroup forms the Wellington Range escarpment, which dominates the southwest quarter of the project (Figure 3). Several smaller isolated outcrops of sandstone are scattered in the southeast. In places along the unconformity, a prominent quartz pebble to cobble conglomerate has been mapped. The Mamadawerre Sandstone is intruded by multiple dolerites. Most commonly, the Oenpelli Dolerite intrudes basement lithologies and sandstone as large sills, lopoliths and dykes. These features commonly exploit pre-existing structural features such as east-trending subvertical faults.

Up to 300 m of Cretaceous marine sediments of the Bathurst Island Formation unconformably overlies the Paleoproterozoic basement in the northern part of the Wellington Range tenement. The sequence consists principally of dark coloured micaceous mudstone with intercalated thin sandy beds. Other rock types include calcareous sandstone, siltstone and green glauconitic sandstone. Recent overburden cover material includes sand, clay, gravel and cemented ferruginous concretions.

Mineralisation was discovered within the Wellington Range tenement in 2009 at the Angularli prospect. Uranium is now known to occur within the Mamadawerre Sandstone both as tabular redox-related mineralisation and structural/unconformity-related mineralisation. This is the only known example of sandstone hosted mineralisation in the ARUF. The majority of mineralisation at Angularli is contained within a silica-sericite-sulphide-altered fault breccia. This breccia occurs in the hanging wall of the Angularli Fault and is hereafter referred to as a "silica flooded breccia". Mineralisation at Angularli is in the form of pitchblende occurring in veins, breccia fill and as replacement of both breccia clasts and wall rock.

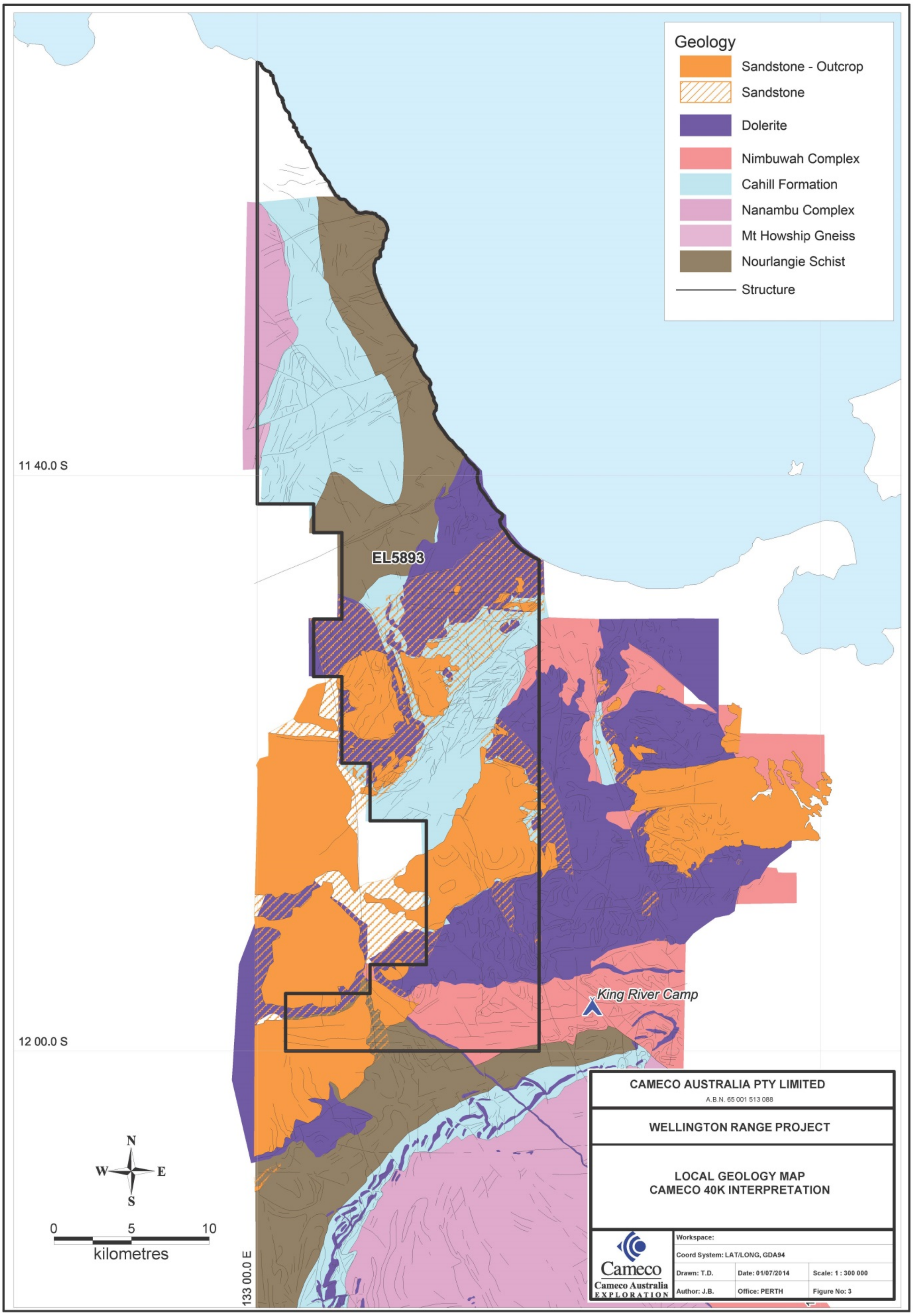

Figure 3: Wellington Range local geology map. Tenement EL5893 is outlined in black.

4. Previous Exploration

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

Exploration work conducted by Cameco in the first year of tenure (2004) included airborne radiometric, magnetic and hyperspectral surveys. Ground follow-up of radiometric anomalies and systematic rock sampling was also completed. A total of 89 outcrop samples, mostly sandstone, were collected for geochemical analysis. No anomalous results were reported.

Work during the second year of tenure (2005) included a TEMPEST airborne EM survey and detailed interpretation of the airborne magnetics. The latter activity provided the basis for planning the year three (2006) exploration program.

Work during the third year of tenure (2006) included completing three sections with a total of 13 diamond drillholes. The drillholes targeted a linear, approximately north-south trending magnetic feature, interpreted to correlate with a regional trend representing the lower portion of the Upper Cahill Formation. Results of the drilling campaign proved significant. The predicted Cahill Formation was intersected in the majority of drillholes, confirming the presence of stratigraphy similar to that hosting several uranium deposits of the ARUF. It was demonstrated that gneissic terrane encloses the trend both to the east and west. Additionally, airborne gravity was completed over the northern part of the tenement.

Work for the fourth year of tenure (2007) consisted of 8 diamond drillholes targeting a magnetic trend associated with the Cahill Formation, 71 air core drillholes to further confirm lithological units in the area and acquire samples for geochemical analyses, and outcrop sampling. A ground EM survey was conducted along one line to target the graphitic unit interpreted on the tenement.

Work for the fifth year of tenure (2008) consisted of 12 diamond drillholes targeting northwest-trending interpreted structures that are thought to be of similar orientation to the Aurari Fault Zone located in the adjacent King River project. In the north part of the tenement, the target was an inferred basement high located to the east of the existing drillholes. Included in the 2008 exploration program were 120 air core drillholes, outcrop sampling/mapping, a ground EM survey and orientation airborne EM lines using VTEM.

Work for the sixth year of tenure (2009) consisted of 10 diamond drillholes, outcrop mapping/sampling, airborne magnetic/radiometric surveys, and ground based Dipole-Dipole Resistivity and IP (DDIP) surveys. The program was designed to target three main areas. The primary target, the Angularli prospect, has a structural environment that is similar to the Aurari Fault Zone, located in the King River project to the east. The second and third targets were based on the results of geophysical surveys. One of the targets was identified using the TEMPEST dataset and the last target was a conductor generated by the 2008 ground geophysics survey. Seven of the ten drillholes intersected uranium mineralisation either at the structural/sandstone contact or in the basal unit of the Kombolgie Subgroup (Mamadawerre Sandstone) at or in proximity to the unconformity.

Work for the seventh year of tenure (2010) consisted of 30 diamond drillholes, outcrop sampling, a ground gravity survey and physical property logging of select drillholes. The primary target for the program was the Angularli prospect. Twenty four drillholes intersected uranium mineralisation either at the silica flooded breccia/sandstone contact or in the basal unit of the Kombolgie Subgroup (Mamadawerre Sandstone) at or in proximity to the unconformity.

Work for the eighth year of exploration (2011) consisted of 26 drillholes and a ground gravity survey. The Angularli prospect was the main focus of exploration with 20 drillholes completed, 3 drillholes abandoned (WRD0076, WRD0080 and WRD0096) due to ground conditions and 1 drillhole started (WRD0100) but not completed due to logistical issues. In addition, WRD0099 at the Telstra prospect was started but not completed also due to logistical issues and was later re-entered in 2012. Twenty drillholes intersected uranium mineralisation (≥0.05% U3O8). The best uranium intersection of 27.83% U_3O_8 was intersected in WRD0084.

Work for the ninth year of exploration (2012) consisted of 20 drillholes and a ground gravity survey. Drilling programs were completed at Angularli, Angularli South and Telstra. Two drill holes; WRD0099 and WRD0100 were re-entered and completed. Three drill holes (WRD0100, WRD0104 & WRD0105) intersected uranium mineralisation at the Angularli Prospect. Angularli South revealed no mineralisation and the unconformity was not intersected. At the Telstra prospect thick gabbroic intrusive bodies were intersected, interpreted to be part of the Oenpelli Dolerite. No anomalous uranium results were reported from Telstra drilling.

5. 2013 Exploration Program

2013 exploration activities on the Wellington Range tenement consisted of a diamond drilling program, a ground based IP/resistivity survey and termitaria sampling (Table 1 and Figure 4).

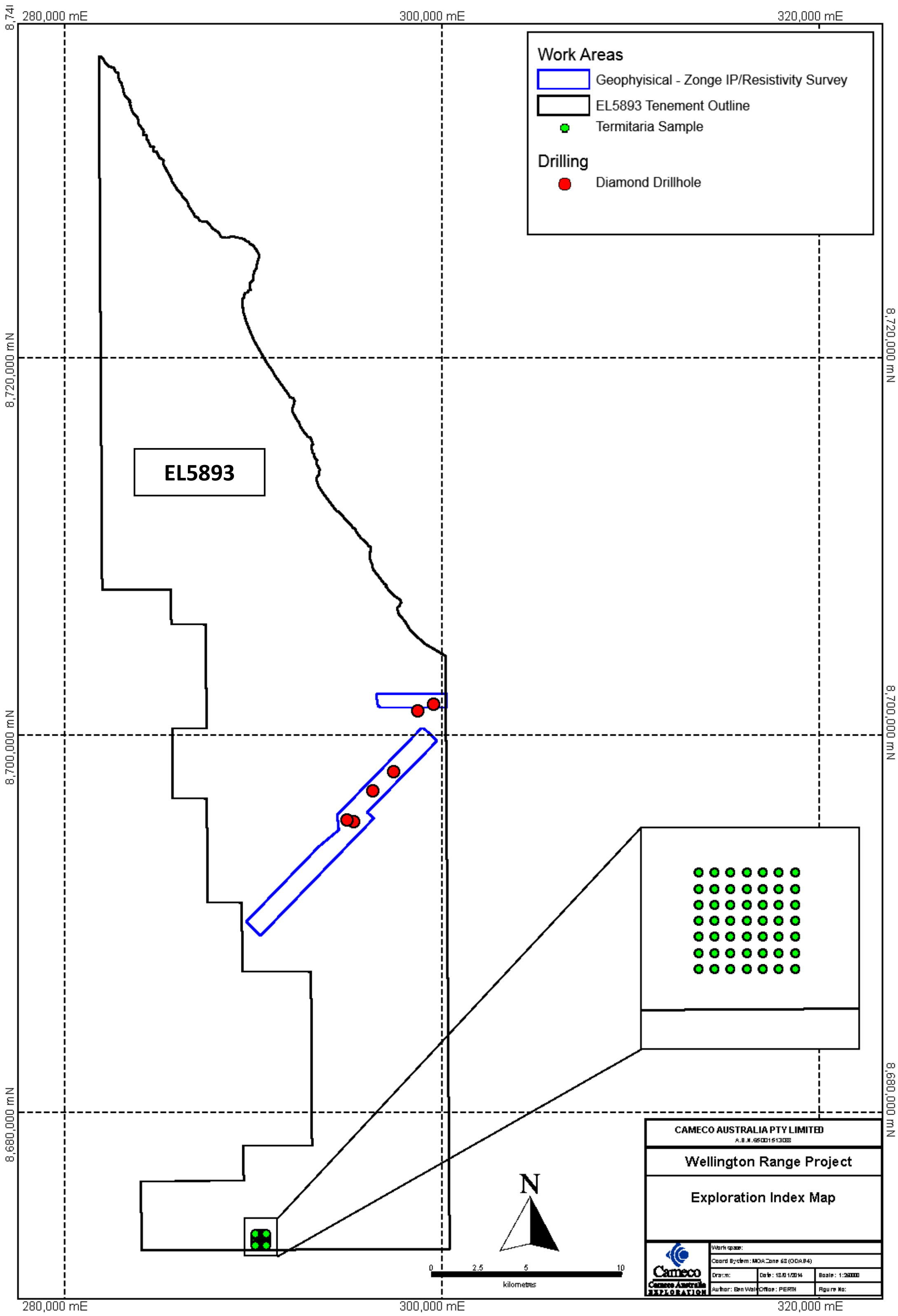

Figure 4: 2013 exploration index map

Activity	Drillholes	Drilling Metres	Assay Samples	Line Length (Km)
Diamond Drilling	7	2233.4	388	
IP/Resistivity Survey				60.1
Termitaria Sampling			48	

Table 1: Summary of exploration activities

5.1. Diamond Drilling

Diamond drilling commenced on the 27 August 2013, and was completed on the 7 October 2013. Seven drillholes were drilled for a total of 2,233.4 m. The drilling contractor used during 2013 was Mt Magnet Drilling Pty Ltd from Wangara, Western Australia.

Drilling was completed across two prospects: Angularli and Shadow Falcon.

Cretaceous marine sediments of the Bathurst Island Formation, varying in thickness from <20 m to >200 m, unconformably overlies the Mamadawerre Sandstone, Paleoproterozoic metasediments of the Cahill Formation and Nourlangie Schist, and intrusive igneous rocks of the Nimbuwah Complex. A zone of interpreted paleoweathering is visible in several basement lithologies, and extends to 15 m below the unconformity. The rock type determines the depth and degree of paleoweathering, i.e. competent quartzite exhibits negligible paleoweathering while pelitic or feldspathic units have a more extensive paleoweathering profile. All drillholes were pre-collared through the Cretaceous overburden with a PCD bit using drill mud additives.

Angularli Prospect

Drilling at Angularli (2 holes) was designed to test for further occurrences of mineralisation on interpreted parallel fault systems. Specifically, these drillholes were testing a gravity target identified in ground gravity data coincident with a NNW fault and the southern extent of a NNW striking reverse fault west of the Angularli Fault identified during the 2012 drilling campaign.

Uranium mineralisation was intersected in one drillhole, WRDD0119. This uranium was intersected within the Mamadawerre Sandstone and associated with a tabular-like redox boundary like that seen around the Angularli deposit (Table 2 & Table 3). The fault that was targeted was not intersected. Mineralisation was in the form of disseminated uraninite and has associated sulphides and the chromium-mica, fuchsite.

Shadow Falcon

Drilling at the Shadow Falcon prospect (4 holes + one re-drill) was designed to test a significant NE striking, south-westerly dipping reverse fault, which is hereafter known as the Shadow Fault. A large vertical offset on this fault was inferred by drilling in and around Angularli South area and indicated that metasediments of either Cahill Formation or Nourlangie Schist had been thrust over Mamadawerre Sandstone. This prospect was identified as a potential target due to the similarity in the structural setting to that observed at the Koongarra deposit. Analysis of ground gravity data indicated a potential dilational and/or compressional jog within the main fault and interpreted sympathetic fault strands developed in the hanging wall to the fault.

Three out of the four drillholes completed intersected the interpreted fault. The structure intersected was a dry brittle reverse fault that has in excess of 500m of apparent vertical offset. Paleoproterozoic stratigraphy was intersected in the hanging wall and Kombolgie Subgroup in the footwall. Uranium anomalism was intersected within the fault zone in one hole along the southern end of the fault zone.

All drillhole data collected is provided in digital format in Appendix 1. The core logging codes used are provided in Appendix 1. All collected samples were submitted to Northern Territory Environmental Laboratories (NTEL) in Darwin for geochemical analysis. The laboratory sample preparation, analytical methods and techniques and suite of analysed elements are detailed in Appendix 2. Details regarding reflectance spectroscopy measurement methodology and interpretation are also included in Appendix 2.

Drillhole ID	Prospect	Azimuth (°)	Dip (°)	Total Depth (m)	Date Started	Date Finished
WRDD0119	Angularli	255	-70	291.3	27/08/13	02/09/13
WRDD0120	Angularli	255	-70	384.9	03/09/13	14/09/13
WRDD0121	Shadow Falcon	304	-70	342.3	12/09/13	19/09/13
WRDD0122	Shadow Falcon	304	-70	325.1	20/09/13	24/09/13
WRDD0123	Shadow Falcon	304	-65	89.8	25/09/13	26/09/13
WRDD0124	Shadow Falcon	304	-70	515.6	26/09/13	04/10/13
WRDD0125	Shadow Falcon	304	-70	284.4	04/10/13	07/10/13

Table 2: Drillhole details for 18 holes completed in 2013

Drillhole Information			Location		Uranium Intercepts			
Drillhole ID	Dip (°)	Azimuth (°)	Easting	Northing	Interval Length (m)	Depth From	U ppm	GT (Grade Thickness)
WRDD0119	-70	255	299527	8701644	0.8	243.3	983	0.07

Table 3: Significant uranium intercepts from drillholes in 2013

5.2. Downhole Geophysics

Gamma

Downhole gamma logging was conducted within the drill rods for all diamond drillholes and this data is submitted in digital format in Appendix 1. In the sandstone, weakly elevated radiometric peaks commonly relate to heavy mineral bands with naturally elevated thorium, with the exception of redox boundaries that are related to the migration of uranium secondary minerals. Downhole probing data that correlates to the basal part of the Mamadawerre Sandstone in proximity to the unconformity also commonly returns weakly elevated radioactivity that is often associated with elevated thorium in this unit. During downhole probing all uranium intercepts are recorded as eU_3O_8% and later these intervals are sampled for geochemical analysis to produce values in U parts per million.

Self-Potential (SP) / Single Point Resistance (SPR)

SP and SPR data was collected from WRDD0119 and WRDD0125.

All SP/SPR probe data is available in Appendix 1.

5.3. Downhole Geochemistry

A total of 388 samples of drill core were collected for geochemistry analysis on the Wellington Range project in 2013. All samples collected for geochemistry were submitted to Intertek NTEL for analysis. All samples were prepared by crush, mill, digest and analysed at Intertek NTEL according to the methods described in Appendix 2.

Matrix matched standards were inserted at a rate of 1 in 20 samples. Laboratory repeat analyses were completed at a rate of 1 in 10 samples.

5.4. Downhole Reflectance Spectroscopy

Reflectance spectroscopy measurements were taken using an ASD Terraspec 3 spectrometer which captures data in the visible to near infrared (VNIR) and short-wave infrared (SWIR) spectral regions. The spectral data in digital format is provided in Appendix 1. ASD methodology and TSG definitions and procedures are included in Appendix 2.

5.5. Ground Geophysics

Between 9 June 2013 and 5 July 2013 an Induced Polarisation/Resistivity (IP/Resistivity) survey was completed on the Wellington Range project by Zonge Engineering and Research Organisation (Zonge) of Adelaide SA.

A GDD GRX-31 time series IP receiver was used to record all measurements for this survey. The raw data was downloaded daily from the receiver to a laptop computer and emailed to Zonge's Adelaide office where preliminary processing and quality control was completed. Transmitted electrical currents were generated by a 0.125 Hz bipolar square wave using a GDD TxII transmitter. Multi-core receiver cables (ZIP cables) developed by Zonge were used throughout this survey. Porous ceramic pots filled with a saturated copper sulphate solution were used as non-polarisable receiver electrodes. The IP decay was recorded using a semi-log gate time series. Successive gate windows were [40, 40, 40, 40, 40, 80, 80, 80, 80, 80, 80, 80, 160, 160, 160, 160, 160, 160, 160] ms following a 40 ms delay after transmitter turnoff.

The IP/Resistivity survey employed a modified pole-dipole array configuration as displayed in Figure 5. Two receiver lines offset from each transmitter line were designed to gain 3-dimensional information from each survey line. Initial readings were completed with a receiver dipole spacing of 100 m (a=100 m) for eight channels (n=1, 2, 3 … 8) for each receiver line. The number of channels was increased to 10 (n=1, 2, 3… 10) on the third day of production. Readings were taken at 100 m increments along each survey line.

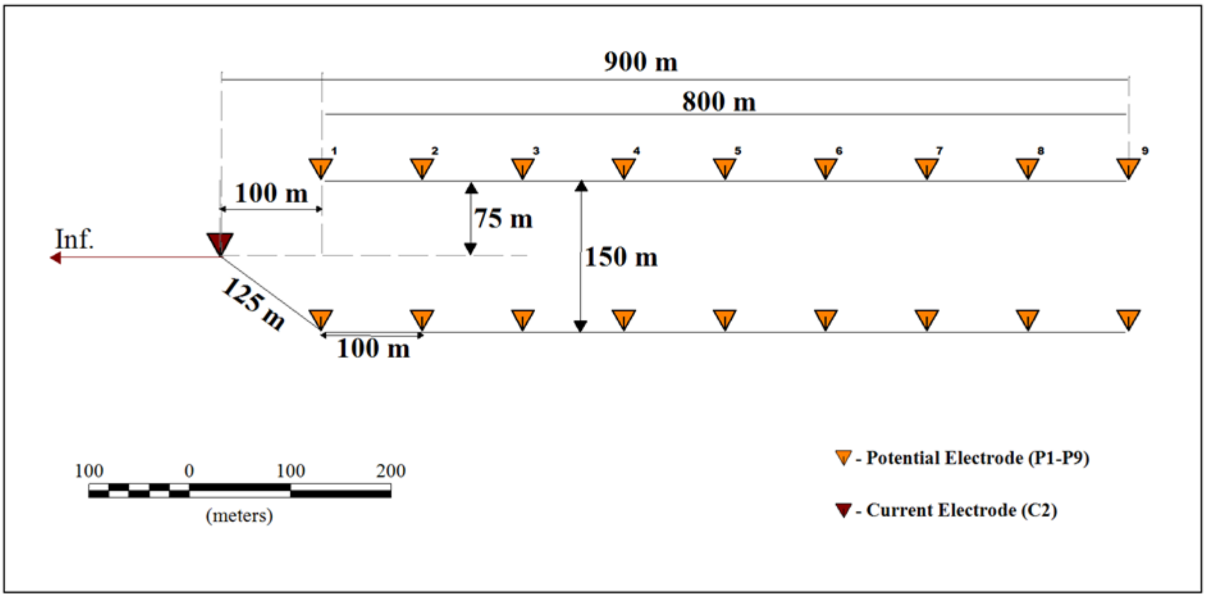

Figure 5: IP/resistivity array layout.

Six transmitter lines and twelve receiver lines were used in the survey and is displayed in Figure 6. The total distance surveyed was 60.1 km as measured along each receiver line from the position of the first electrode at the start of a survey line to the position of the last electrode at the end of a survey line. All data is included in Appendix 4. Data files are separated into three grids as summarised below along with the line locations. All coordinates are presented in GDA 94 / MGA zone 53.

Grid Number	Line	Line Type	First Electrode Location		Last Electrode Location		Line km
			x	y	x	y	
1	701450	Receiver	206705	8701450	300705	8701450	3.9
1	701525	Transmitter	296605	8701525	300005	8701525	3.4
1	701600	Receiver	206705	8701600	300705	8701600	3.9
1	701750	Receiver	296705	8701750	300705	8701750	3.9
1	701825	Transmitter	296605	8701825	300005	8701825	3.4
1	701900	Receiver	296705	8701900	300705	8701900	3.9
1	702050	Receiver	296705	8702050	300705	8702050	3.9
1	702125	Transmitter	296605	8702125	300005	8702125	3.4
1	702200	Receiver	296705	8702200	300705	8702200	3.9
2	300	Receiver	299364	8697228	294641	8694869	7.7
2	375	Transmitter	299449	8699957	294726	8695065	6.8
2	450	Receiver	299326	8699937	294533	8694974	6.8
2	600	Receiver	299218	8700041	294633	8695294	6.5
2	675	Transmitter	299233	8700165	294718	8695490	6.5
2	750	Receiver	299110	8700146	294525	8695398	6.5
3	000	Receiver	296107	8695956	292356	8692071	1.6
3	-75	Transmitter	295952	8695688	292271	8691875	6.9
3	-150	Receiver	296215	8695852	292463	8691967	1.6

Table 4: IP/resistivity survey location summary.

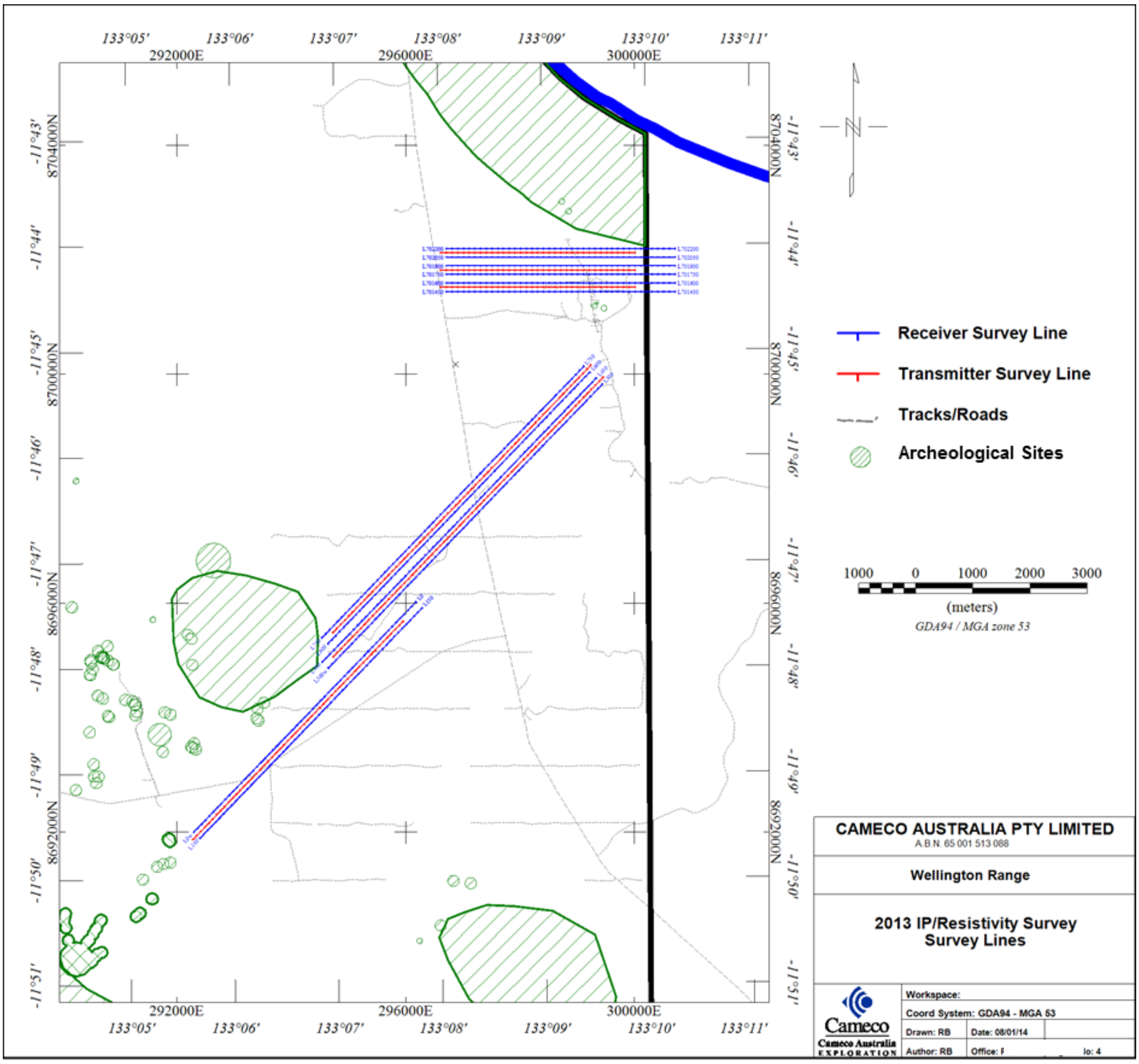

Figure 6: IP/resistivity survey lines.

5.6. Termitaria Sampling

A total of 48 samples were collected across a 100 x 100 m grid in the area marked in Figure 4.

Samples consisted of an approximately 8 x 8 x 8 cm sample, weighing approximately 500g, removed from the top of the respective termite mound. Organic material including termites and vegetative matter were removed prior to sample collection.

Samples were collected on a nominal grid pattern (Figure 4). Due to the random distribution of mounds, the nearest mound to any given point was taken. Mounds were not preferentially selected based on any quality except height, with the biggest taking preference.

Samples were prepared for analysis using an Aqua Regia digest with an ICP-OES and ICP-MS finish with low level detection limits. The analytical work was completed by Intertek NTEL. The analytical results are provided in Appendix 3.

Elements included in the analytical suite were: Ag, Al, As, Au, Ba, Be, Bi, Ca, Ce, Co, Cr, Cu, Dy, Er, Eu, Fe, Ga, Gd, Hf, Ho, K, La, Li, Lu, Mg, Mn, Mo, Na, Nd, Ni, P, Pb, Pr, Re, S, Sb, Sc, Se, Sm, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn and Zr.

6. Conclusions and Recommendations

The drilling completed in the Shadow Falcon area in 2013 confirmed the geological and geophysical interpretations and was successful in intersecting the targeted fault. The weak uranium anomalism in the dry brittle fault may indicate proximity to a mineralised system. Further work is recommended in the Shadow Falcon area including lineament analysis and additional IP survey coverage in the hanging wall and footwall.

The recommended work program for 2014 in this area includes the development of a detailed lineament interpretation, extension of the IP data coverage and if warranted, further drilling to evaluate the potential for mineralisation within hanging wall fault strands and/or interpreted NNW orientated lineaments (interpreted faults) in the footwall below Mesoproterozoic sandstone cover.

During 2012 and 2013 work completed on interpreted fault systems developed parallel to the Angularli fault have returned anomalous results. Further work to evaluate the potential for these parallel systems to host uranium mineralisation may potentially include drill testing of co-incident chargeability anomalies generated from the 2013 IP program.