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EL 4314

CALLABONNA

**ANNUAL AND FINAL REPORTS TO LICENCE
SURRENDER, FOR THE PERIOD 30/9/2009 TO 23/8/2011**

Submitted by
Callabonna Uranium Ltd
2011

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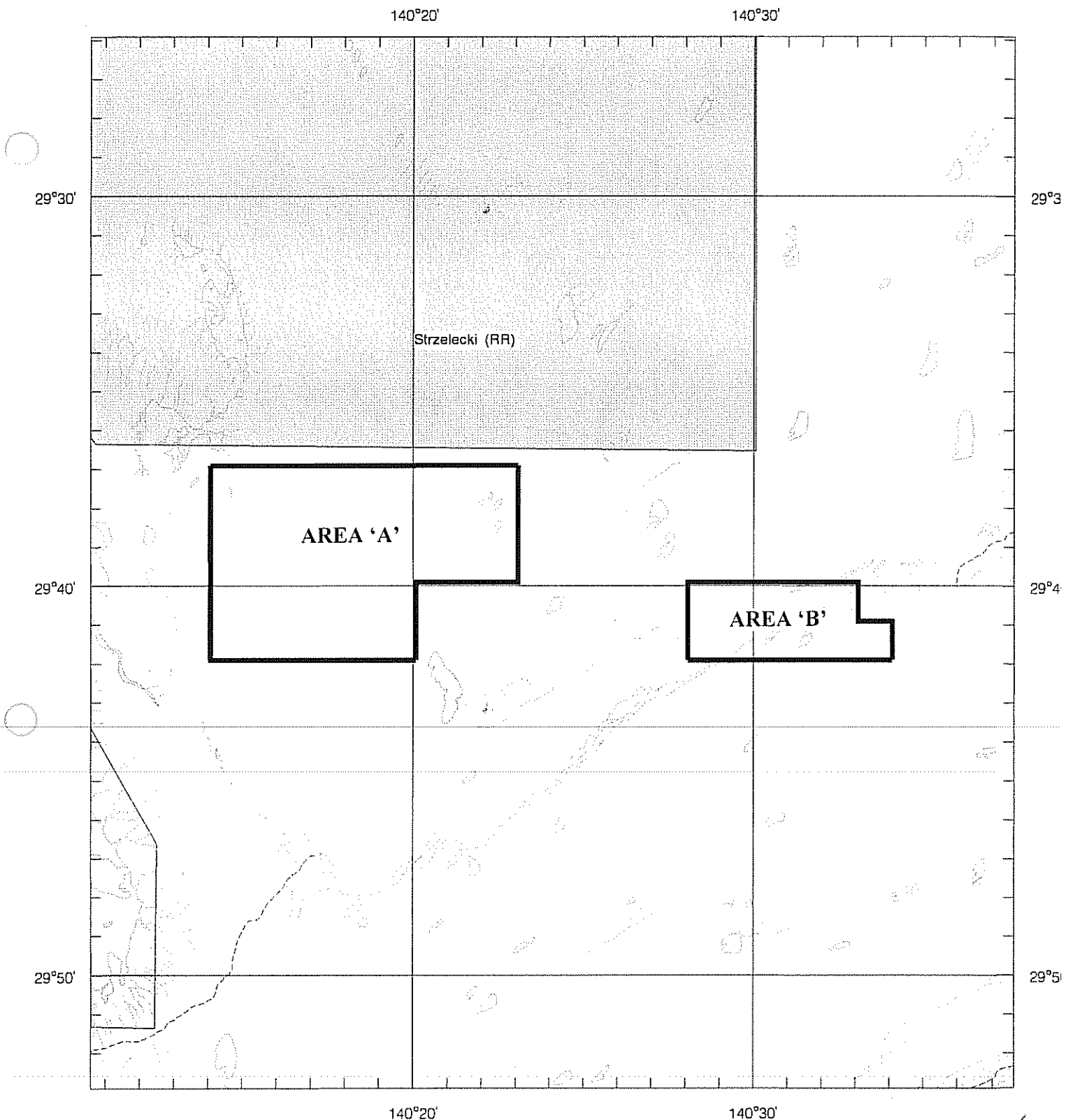
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Government of South Australia
Department for Manufacturing,
Innovation, Trade, Resources and Energy

SCHEDULE A



APPLICANT : FROME URANIUM PTY LTD

FILE REF : 82/09

TYPE : MINERAL ONLY

AREA : 149 km² (approx.)

1:250000 MAPSHEETS : CALLABONNA

LOCALITY : CALLABONNA AREA - Approximately 220 km east of Marree

DATE GRANTED : 30-Sep-2009

DATE EXPIRED : 29-Sep-2010

EL NO : 4314



ABN 19 127 106 665

Curnamona North Project

Exploration Licence 4314 'Callabonna Area'

Annual Report for the Period
30 September 2009 to 29 September 2010

Tenement Holders: Frome Uranium Pty Ltd

Submitted by: Callabonna Uranium Ltd

Prepared by M Dawson
23 December 2010

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BIBLIOGRAPHIC DATA

Report Title:	Curnamona North Project Exploration Licence 4314 Annual Report for the Period 30 September 2009 to 29 September 2010
Report Type:	Annual Report
Project:	Curnamona North
Holder:	Frome Uranium Pty Ltd
Submitter:	Callabonna Uranium Ltd
Author:	M Dawson
Date:	23 December 2010
Tenement:	Exploration Licence 4314
Tenement Year:	1
Period:	30 September 2009 – 29 September 2010
Map sheet 250K:	Callabonna SH5406
Map sheet 100K:	6938, 7038
Locality:	Callabonna Area
Local Description:	East of Lake Frome, Approximately 220 km east of Marree
Minerals Sought:	Uranium
Keywords:	Curnamona Province, Frome Embayment, Tertiary, Palaeochannel, Namba Formation, Eyre Formation, Bulldog Shale, Benagerie Ridge, Mt Painter Complex

EXPLORATION INDEX MAP

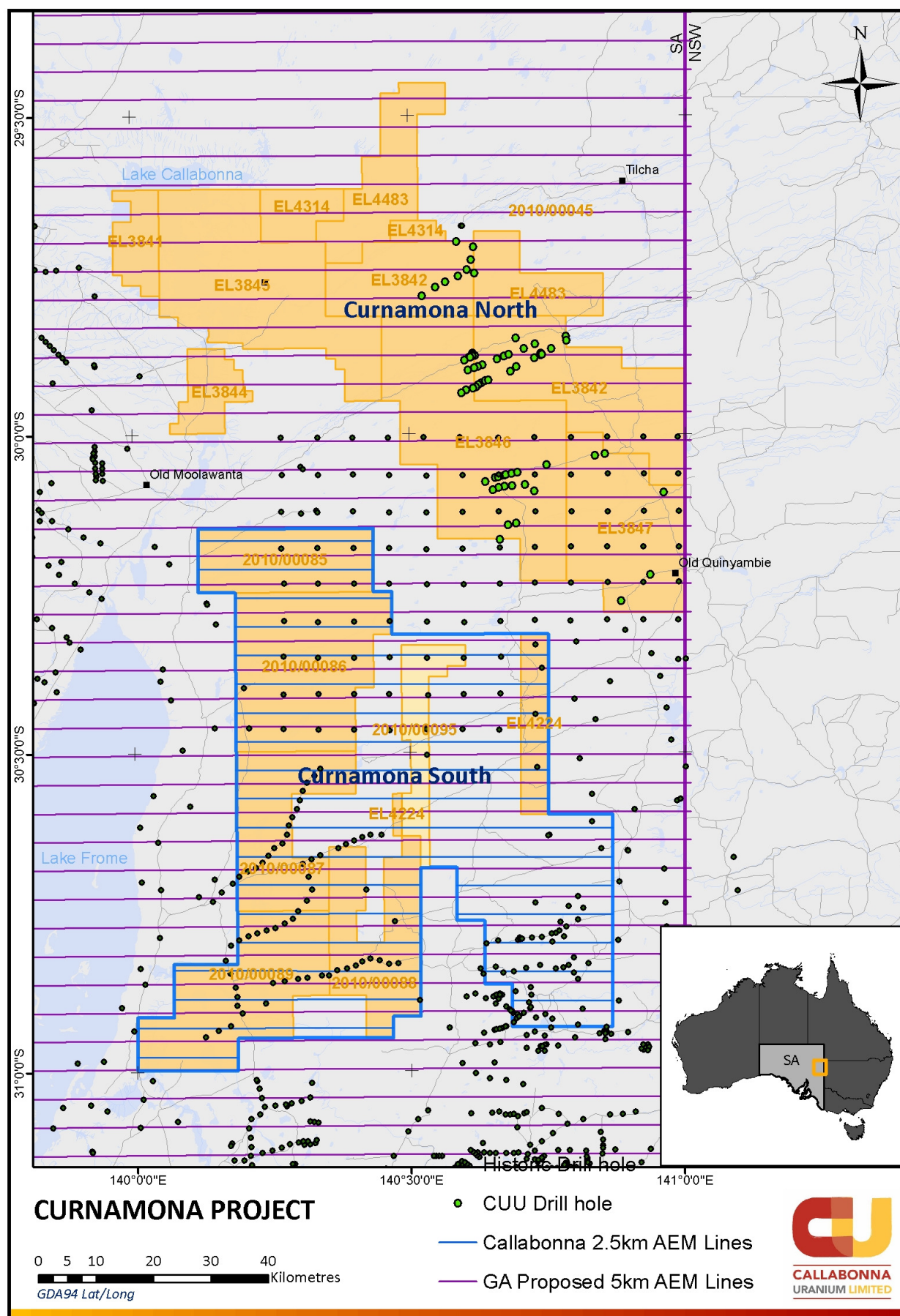


Figure 1. Exploration Index Map showing the expanded Curnamona Projects

EXECUTIVE SUMMARY

Exploration Licence 4314 located is in the prospective Curnamona Region to the east of Lake Frome. EL 4314 covers an area of 149 km². The tenement is held by Frome Uranium Pty Ltd, a wholly owned subsidiary of Callabonna Uranium Ltd ('Callabonna'). The exploration target is sedimentary style uranium hosted in near surface Tertiary palaeochannels that are likely controlled by basin structures.

This report summarises the exploration activities completed during Year 1 in EL 4314. EL 4314 is part of the Curnamona North Project along with ELs 3841, 3842, 3844, 3845, 3846, 3847 and 4483. In total the Curnamona North Project covers 4,046 km².

INTRODUCTION

Tenure

Exploration Licence 4314 is held by Frome Uranium Pty Ltd, a wholly owned subsidiary of Callabonna Uranium Ltd. The tenement was granted on 30 September 2009 for a period of one year. A renewal application has been lodged to extend the term of the licence for a second one year period, ending 29 September 2011.

Tenement	Name	Granted	Expiry	Area Km2
EL 4314	Callabonna Area	30-Sep-09	29-Sep-10	149

Location & Access

The tenement is located within the 1:250,000 CALLABONNA (SH_54_06) map sheet, on the following 1:100,000 map sheets: 7038 Tilcha and 6938 Callabonna. The entire tenement is located within the Quinyambie cattle station (PE2404, Plan 834000, Block 1252) held by S Kidman & Co Ltd.

Access utilised has been from Broken Hill via the Silver City Highway to Yanco Glen, then the gravelled road through Corona-Teilta to Quinyambie homestead, thence local station tracks to areas of interest.

Environment

The Curnamona North Project area predominantly comprises open sand dune country containing relatively small ephemeral lakes. Dunes are longitudinal in nature, aligned in a NE-SW orientation, and generally 2-7m in height, therefore vehicle access is restricted to interdunal corridors or limited station tracks. There is no permanent fresh surface water and cattle grazing is supported by bores and tanks tapping local aquifers of the Great Artesian Basin.

Exploration this year has resulted in very low impact with little to no on-ground activities; therefore there has been very minimal environmental disturbance. The only impact to date has been driving on existing

station tracks. No rehabilitation has been needed but as exploration activities increase, industry standards for rehabilitation will be followed.

Native Title

There are no current Native Claims overlapping EL 4314.

Aboriginal Heritage

Following the Aboriginal Heritage Act 1988, Callabonna will search the Register of Aboriginal Sites and Objects, administered by the Aboriginal Affairs and Reconciliation Division (AARD) before any ground exploration commences. For continued risk management procedures, the company will, if needed, liaise with regional Aboriginal Heritage experts and/or anthropologists to complete ground clearances.

Callabonna, has and will continue to follow best practice procedures and when exploration activities begin, all employees and contractors will also be trained to look for Aboriginal sites of significance (Following Information Sheet M29 'Aboriginal Site Avoidance Guidelines').

Exploration Rationale

Callabonna believes there remains a strong potential for finding sandstone-hosted uranium mineralisation within Tertiary palaeochannels on the northern margins of the Frome Embayment. Exploration in the region to date has been focused further south around Beverley and Honeymoon. However, Callabonna plans to test the extent of uranium bearing palaeochannels to the North.

GEOLOGY

The Curnamona North project covers the northern extensions of the major north-south trending Proterozoic basement high referred to as the Benagerie Ridge. Drilling information from the basement is sparse, but the 'Interpreted Solid Geology of the Curnamona Province' (Burt & Betts, 2004) indicates local geology to be comprised of Mesoproterozoic Benagerie Ridge Volcanics (~ 1580Ma), Benagerie Ridge Volcanic Breccia and variably magnetic granites and minor mafic intrusives of the Bimbowrie Supersuite, along with Strathearn Group pelitic lithologies of the Willyama Supergroup. The Bimbowrie Supersuite volcanics and granites are broadly considered to be similar in age and character to the Hiltaba Suite granites/Gawler Range Volcanics of the Gawler Craton which are closely associated with IOCG style of mineralisation.

Younger, cover sequences consist of Quarternary aeolian sand dunes and ferruginous sands, silts and clays of inter-dune corridors and flats. Below the Quarternary cover are the prospective Tertiary fluvial sediments of the Namba and Eyre Formations. The Namba Formation comprises green, grey plastic clays and silty sands with carbonaceous and dolomitic lenses near the base. The Eyre Formation contains pyritic quartz sandstones with interbedded clay and lignite units associated with pebbly sandstone and minor

conglomerate at the base. Unconformably below the Eyre Formation are the silty clays of the Bulldog Shale member of the Cretaceous Marree Subgroup. The cover sequence rocks are expected to increase in depth towards the north, and off the east and west flanks of the Benagerie Ridge.

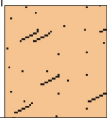

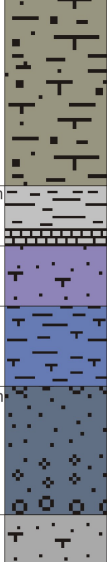
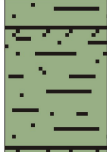
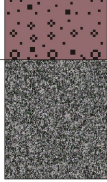
AGE	FORMATION	GRAPHIC	DESCRIPTION
Quaternary	Eurinilla Formation		Aeolian, ferruginous and oxidised sands; fluvio-lacustrine sediments, gypsum common, some vertebrate fossils; regolith materials.
	Willawortina Formation Miocene to Pleistocene		
Tertiary	Namba Formation Oligocene to Miocene		Fine to medium grained sand with plastic clays and siltstones; interfingering lenses of carbonaceous and dolomitic clay indicative of a lacustrine phase of sedimentation. May contain the Beverley Clay, Beverley Sands and Alpha Mudstone. Characteristic dolomite layer at the base. Lignitic and other carbonaceous material common near the top. Moderately sorted, laterally continuous quartz sandstones, and interbedded clay units are also present. Lignite, other organic accumulations and finely disseminated pyrite are characteristically associated with pebbly sandstone and minor conglomerate at the base, fining upwards braided stream deposit.
	Disconformity		
	Eyre Formation Paleocene to Eocene		
Early Cretaceous	Marree Subgroup		Claystone and siltstone, interbedded; with fine-grained sandstone, calcareous and ferruginous concretions; limestone. Sandstone, fine-grained, calcareous, clayey; sandy siltstone. Blue grey mudstone; bioturbated, fossiliferous and shaly; minor silt to very fine-grained sandstone intervals, impermeable confining layer. Fining upwards thickly laminated sand sequence with a pebbly bed, roughly marking the base of the Mesozoic; indicative of marginal and shelf marine conditions Sandstone, fine to coarse grained, with granule and pebble layers, and shale interclasts
	? Oodnadatta Formation		
	? Coorikiana Sandstone		
	Bulldog Shale Albian		
	Cadna-owie Formation		
Cambrian	Frome Embayment (Eromanga Basin)		Bedded limestones, shales and sandstones deposited within a regressive marginal marine, shelf/deltaic facies ie. Yalkalpo Syncline.
	? Arrowie Basin Sediments		
Proterozoic	Basement		Weathered basement sediments containing quartzite, conglomerate, limestone, siltstone, sandstone, and shale. Highly deformed metasedimentary and metavolcanic rocks intruded by various gneiss/granitoid bodies and dykes ie. Mt Painter Complex, Benagerie Ridge, Curnamona Craton basement rocks
	? Adelaidean Sequence Neoproterozoic		
	Willyama Supergroup Palaeo-Mesoproterozoic		

Figure 2. Typical Stratigraphy at the Curnamona Project

PREVIOUS EXPLORATION

The area around EL 4314 has largely remained unexplored. Chevron explored the area to the south in the 1970s but no historic drilling has occurred in EL 4314.

More recently Planet Minerals Ltd held the current area with ELs 4100 & 4101 from March 2008 to 2009 (Envelope 11873). They completed a geological review of the Frome Embayment but no field activities were completed.

YEAR 1 EXPLORATION

During the first year of tenure, an AEM survey was completed over EL 4314. The AEM survey was sponsored by Geoscience Australia and funded by the Australia Government's Onshore Energy Security Program. The survey covered the entire Frome Embayment as part of the Airborne Electromagnetic Acquisition and Interpretation project designed to acquire AEM data at broad line spacing over relatively large areas considered to have potential for uranium and thorium mineralisation. The survey commenced in May and finished in October. Results should be ready in March 2011.

In September of 2009, Callabonna merged with MKY Resources Ltd, an ASX listed public company, to form a new Callabonna Uranium Ltd (CUU). The new company brings together a large portfolio of exploration leases in South Australia, Northern Territory and Queensland. More importantly the merger has improved the Company's technical and financial support so that exploration activities can commence in EL 4314 during Year 2.

EXPENDITURE STATEMENT

Expenditure Statement for the period from 30 September 09 to 29 September 10

Logistics	\$0
Consultants	\$0
Rent	\$0
Desktop Studies	\$1,132.40
Native Title and Aboriginal Heritage	\$0
TOTAL	\$1,132.40

CONCLUSIONS & PROPOSED WORK PROGRAM FOR YEAR 2

The exploration technique of first flying a widespread airborne electro-magnetic (AEM) survey to define low-conductivity palaeochannels for follow up drilling targets has proved to be a successful strategy. As such, Frome Uranium Pty Ltd is pleased that Geoscience Australia has recently completed a regional AEM Survey over EL 4314 and the entire Frome Embayment as part of the Australia Government's Onshore Energy Security Program. The TEMPEST survey is being flown at a 5km line and the Company has signed a data agreement with GA so that results are received as soon as completed.

Once the AEM survey is completed, the data will need to be processed so that potential target features can be defined. Callabonna has in recent months used the specialist services of Dr Andrea Viezzoli from Aarhus Geophysics, Denmark, to reprocess our 2008 AEM data from the Curnamona North Project. This showed a remarkable amount of detail in the upper 120 meters, on which drilling can be designed. We believe the Aarhus workbench is the best available technology available in the world for processing channel and

aquifer data. To date it has been most widely used in groundwater geophysics, including by Geoscience Australia in the Broken Hill region. The TEMPEST data that will be derived from the proposed survey has a wave form well described and will therefore be suitable for such further processing.

REFERENCES

Callen R. A., Alley N. F. and Greenwood D. R. 1995. Lake Eyre Basin, in The Geology of South Australia, Vol. 2, The Phanerozoic, South Australia (Eds: J. F. Drexel and W. V. Preiss). Department of Primary Industries and Resources. Geological Survey Bulletin 54.

Kimber, P.B. 2009. Final Technical Report EL 4100 & EL4101 Callabonna – Tilcha South Australia (Planet Minerals Ltd), Open File Envelope No. 11873.

From: Kate Heath [<mailto:kheath@callabonna.com.au>]
Sent: Wednesday, 1 June 2011 4:16 PM
To: Petruzzella, Nella (PIRSA)
Cc: Mike Raetz
Subject: EL 4314, 4274

EL's 4314 and 4274 – (“No Work” Final Technical Report for EL 4314 & EL 4274)

There has been no work completed on these sites in the last year. These areas were held north of and adjoining to a high activity project (the Companies Curnamona North project), where a major airborne survey and drilling was being conducted. Subsequent results did not justify further work in the areas now being surrendered.

Please let me know if you require any further information regarding these EL's.

Regards,



Kate Heath

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