



KARUMBA PROJECT ANNUAL MINERAL EXPLORATION REPORT

EPM 18884

29 NOVEMBER 2012 – 28 NOVEMBER 2013

LICENSEE: AREVA RESOURCES AUSTRALIA PTY LTD
OPERATOR: AREVA RESOURCES AUSTRALIA PTY LTD

NOVEMBER 2013

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SUMMARY

Project Name:	Karumba Project
Exploration Licence:	EPM 18884
Holder/Operator:	Areva Resources Australia Pty Ltd 68 Greenhill Road WAYVILLE SA 5034
Report Type:	Annual Report
Reporting Period:	29 November 2012 – 28 November 2013
Author:	Gregoire Andre 08 8292 9300 gregoire.andre@areva.com
Date of Report:	27 th November 2013
Sheet Name (250k):	Red River (SE54-08), Georgetown (SE54-12)
Sheet Name (100k):	Strathmore (7462), Gilbert River (7461)
Target Commodity:	Uranium

EXECUTIVE SUMMARY

Location:	EPM 18884 is part of the Karumba Project, and is located 90km north west of Georgetown, North Queensland.
Geology:	<p>The area is located in the Carpentaria Basin, and consists of Jurassic to Cenozoic sediments. Apart from minor uplift and subsidence, the region has been geologically stable since the Late Jurassic. Most of the area is covered by Mesozoic to Cenozoic sediments of the Carpentaria and Karumba Basins.</p> <p>The target sandstone is the fluvial/deltaic Lower Cretaceous Gilbert River Formation (GRF) of the Carpentaria Basin.</p>
Exploration Rationale:	AREVA Resources Australia Pty Ltd (AREVA) is exploring the Carpentaria Basin for sandstone hosted uranium deposits. The target horizon has been defined as the fluvatile member of the GRF.
Completed Work:	<p>AREVA undertook a regional and local historical review on tenement EPM 18884.</p> <p>During the past year field reconnaissance was conducted for road access identification and landowner meeting.</p> <p>In 2013 AREVA drilled 4 holes for a total of 301.5m.</p>
Results:	<p>The GRF comprises an upper part (Coffin-Hill Member) which is constituted of homolithic shallow marine sediments, and a lower part (Yappar Member) which is constituted of heterolithic sediments with high variability of facies.</p> <p>The Yappar Member is considered to be the best target for uranium exploration.</p>
Conclusions:	Future work must focus on the identified redox contrast area to evaluate the potential for uranium mineralisation.

CONTENTS

ACKNOWLEDGEMENT AND WARRANTY STATEMENT	2
SUMMARY	3
EXECUTIVE SUMMARY	4
CONTENTS	5
LIST OF FIGURES	6
LIST OF TABLES	6
DIGITAL DATA ACCOMPANYING THIS REPORT	7
Down-hole Geophysics	7
Drilling	7
SUMMARY OF ACTIVITIES	8
1. INTRODUCTION	10
1.1. Location and Access	10
1.2. Tenement Details	10
1.3. Exploration Rationale and Exploration Methods	11
1.4. Historical Exploration	11
1.4.1. <i>Regional Historical Exploration</i>	11
1.4.2. <i>Local Historical Exploration</i>	13
2. GEOLOGY	13
2.1. Regional Geology	13
2.2. Stratigraphy	15
3. WORK COMPLETED DURING REPORTING PERIOD	16
3.1. Field Reconnaissance	16
3.2. Drilling	16
3.2.1. <i>Mineralisation</i>	16
4. CONCLUSIONS	18
REFERENCES	19
APPENDIX	20

LIST OF FIGURES

Figure 1: QLD - Karumba Project - Location Map.	9
Figure 2: QLD - Karumba Project - Regional Geological Map.	14
Figure 3: QLD – Karumba Project - Regional Cretaceous Lithostratigraphic log (Carpentaria Basin).....	15
Figure 4: QLD – Karumba Project - Geological map of EPM (Queensland Geology 1:1,000,000) .	17

LIST OF TABLES

Table 1: QLD - Karumba Project - Tenement Summary	10
Table 2: QLD - Karumba Project -Tenement block details.....	10
Table 3: QLD - Karumba Project - Drilling activity.....	11
Table 4: QLD - Karumba Project - Historical regional uranium and gold or base metals exploration	12
Table 5 : QLD - Karumba Project – Collar information.....	16

DIGITAL DATA ACCOMPANYING THIS REPORT

DOWN-HOLE GEOPHYSICS

FILE NAME	DESCRIPTION	FILE TYPE	FILE SIZE
LAS	Downhole probing results for all drillholes	ZIP	166

DRILLING

FILE NAME	DESCRIPTION	FILE TYPE	FILE SIZE (KB)
EPM18884_Down_Hole_Geology	Geological logging for all drillholes	TXT	232
Geology_Codes	Geological logging codes	PDF	67
KASO_0018_1	Geological log	PDF	265
KASO_0020_1	Geological log	PDF	384
KASO_0021_1	Geological log	PDF	271
KASO_0023_1	Geological log	PDF	181

SUMMARY OF ACTIVITIES

AREVA Resources Australia is targeting Uranium roll-front deposit in the Cretaceous Gilbert River Formation sandstones.

During the reporting period, a historical review was conducted, along with a field reconnaissance to identify road access and meet landowners.

Further to this, AREVA conducted a drilling campaign consisting of four holes; three were reverse circulation and the forth was core (total 301.5m).

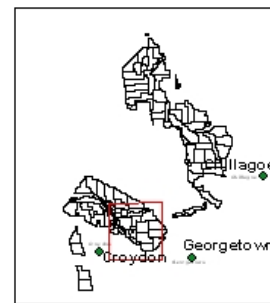
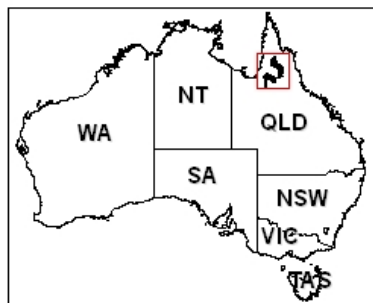
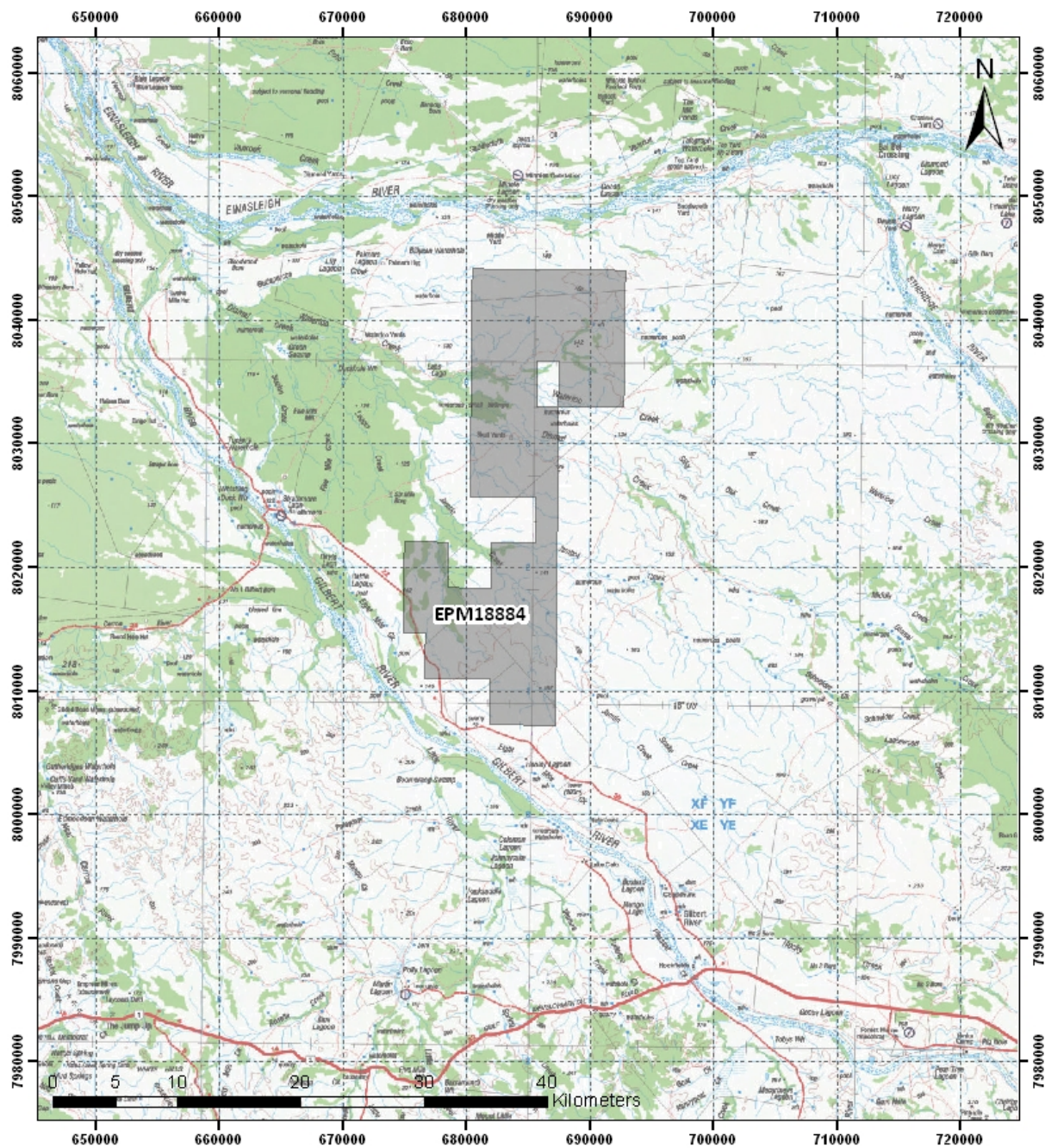


Figure 1: QLD - Karumba Project - Location Map.

1. INTRODUCTION

1.1. LOCATION AND ACCESS

EPM 18884 is located 300 km south west of Cairns and 90km north-west of Georgetown in the Carpentaria Basin in northern Queensland (Figure 1).

Access to the tenement from Cairns is south-west via the Kennedy Highway and Gulf Developmental Roads. Numerous pastoral tracks access the interior of the tenement.

The climate of the tenement area is dry tropical with seasonal rainfall. Over 80% of total rain falls between Mid-November and March and mean annual rainfall is around 800 mm in the study area. Most rivers are seasonal but the major rivers maintain some flow during the dry season. Temperatures are relatively high, between 15 and 35°C. Eucalyptus trees are mainly present within the area and grass-covered swamps are developed on clay soils.

1.2. TENEMENT DETAILS

Table 1: QLD - Karumba Project - Tenement Summary

TENEMENT	DATE GRANTED	AREA (km ²)	NO OF SUB BLOCKS	EXPENDITURE COMMITMENT (ANNUAL)
EPM 18884	29/11/12	325.91	100	See attached

Table 2: QLD - Karumba Project - Tenement block details

<u>BIM</u>	<u>Block</u>	<u>Sub-blocks</u>
NORM	1497	H J K N O P S T U X Y Z
NORM	1498	F G H J L M N O Q R S T V W X Y
NORM	1569	C D E H J K N O P S T U X Y Z
NORM	1570	B C D G H J L Q V
NORM	1640	U Z
NORM	1641	C D E Q T U V Y Z
NORM	1642	A F L Q V
NORM	1712	E K
NORM	1713	A B C D E F G H J K L M N O P Q R S T U Y Z
NORM	1714	A F L Q V
NORM	1785	D E
NORM	1786	A

Total: 100 Sub-Blocks

1.3. EXPLORATION RATIONALE AND EXPLORATION METHODS

Following project generation work completed by AREVA Resources Australia in 2010, the Carpentaria Basin was identified as a potential host to sedimentary-hosted roll front uranium deposits. The Carpentaria Basin holds a lot of critical qualities required for the creation of such type of uranium deposit.

The Carpentaria basin is filled with alternating sandstone and clay units, it is known for the presence of regional oil and gas field and Uranium rich basement (with known mineralisation) is neighbouring most part of this (Jaireth and al., 2008). Therefore, the Carpentaria basin appears to hold a good pedigree for roll front uranium deposits.

The uranium rich basement hosts numerous uranium occurrences within the Georgetown Inlier (Maureen).

Initially the entire GRF was targeted for uranium (McKay, 2001), but historical data analysis and core library reviews led to focus on the Lower Yappar Member as the best reservoir and trap. Previous exploration has demonstrated the presence of REDOX contrast and potential for uranium mineralisation in the Yappar Member (Davies, 1979).

Work completed during the reporting period consisted of a field reconnaissance, drilling program and a review of historical drilling.

The objectives of these activities were to identify:

- Characteristics of Yappar Member;
- Depth of the basement;
- REDOX state;
- Gamma signal;
- Whether REDOX and uranium could be detected by analysing surface soil.
- Whether REDOX and uranium could be detected by analysing water samples.

Table 3: QLD - Karumba Project - Drilling activity

ACTIVITY	DETAILS	TENEMENT
Drilling	4 Drill Holes. 3 x Reverse Circulation 1 Core. Total = 301.5m	EPM 18884

1.4. HISTORICAL EXPLORATION

1.4.1. Regional Historical Exploration

Historical uranium exploration within the Karumba Basin occurred primarily during the mid to late 1970's. The majority of this work was completed in the Eden Vale region, southward of the Karumba Project area (Table 4). Only stratigraphic BMR and GSQ drilling, or base metal and gold exploration drilling are located in the vicinity of the working area.

A majority of the Karumba Basin remains untested, with most historical uranium exploration focused downstream from the Edenvale deposit (Esso: Graveson, 1973); a small basement hosted uranium deposit. Australia and New Zealand Exploration located a REDOX front within a north east trending paleochannel with anomalies up to 8 times background (Davies, 1979). Attempts by exploration companies were unable to continually replicate results, indicating mineralisation was erratic and non-continuous. It was determined that further exploration was not feasible and the tenements were relinquished.

Table 4: QLD - Karumba Project - Historical regional uranium and gold or base metals exploration

COMPANY	YEAR	ACTIVITY	COMMENT
Esso Australia Ltd	1973	Uranium Exploration	<ul style="list-style-type: none"> • CR4612 (Graveson, 1973): limit of Yappar Member in the GRF was not obvious, and sediments were oxidised (14 drill holes). • CR4613: in Fiery Creek area, Limit of Yappar Member in the GRF was not obvious, and sediments were oxidised (15 drill holes). • CR4651: in Turtle Creek area, Limit of Yappar Member in the GRF was not obvious, and sediments were oxidised with minor gamma anomalies (6 drill holes).
Australia and New Zealand Exploration Company	1979	Uranium Exploration	CR7607 (Davies, 1979): in Eden Vale area, identification of Yappar Member paleochannel with REDOX front but no uranium associated (51 drill holes)
North Mining Ltd	1994	Gold and Copper Exploration	<ul style="list-style-type: none"> • CR26209 (McInnes, 1994): northward of Blackdown area, limit of Yappar Member in the GRF was not obvious, and sediments were reduced (4 drill holes).
Cyprus Gold Australia	1996	Base metals and Gold Exploration	<ul style="list-style-type: none"> • CR28622 (Wilkins, 1996): northward of Blackdown area, limit of Yappar Member in the GRF was not obvious, and sediments were reduced (5 drill

			holes).
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1.4.2. Local Historical Exploration

No historical exploration has been undertaken on the tenement.

2. GEOLOGY

2.1. REGIONAL GEOLOGY

The Carpentaria and Karumba Basins cover parts of northern Queensland and the Northern Territory, extending an area of 560,000 km². The Carpentaria Basin is Middle Jurassic to Late Cretaceous in age and divided into both onshore and offshore components. AREVA's tenements are located within the onshore component located in North Queensland.

The Carpentaria Basin is bounded to the east by the Paleozoic and Proterozoic Coen, Yambo and Georgetown Inliers (Figure 2). The western part is delimited by the Proterozoic Mount Isa Inlier and the McArthur Basin. The Eromanga Basin flanks the south part of these basins and the northern boundary is defined by latitude 11°S (Doutch, 1976). Sediments overlie a cratonic basement of Proterozoic and Paleozoic rocks of the inliers outcropping on edges of the basin. The Pascoe River Basin underlies the northern part of the Carpentaria Basin.

The central part of the onshore Carpentaria Basin is unconformably overlain by the Cainozoic Karumba Basin. These basins form a shallow oval depression that is around 1,000 meters thick in the onshore centre (Passmore, 1979; Bain and al., 1997). Sedimentation break of 80 Ma occurred between last deposits of the Carpentaria Basin and first deposition of the Karumba Basin (Smart and al., 1980).

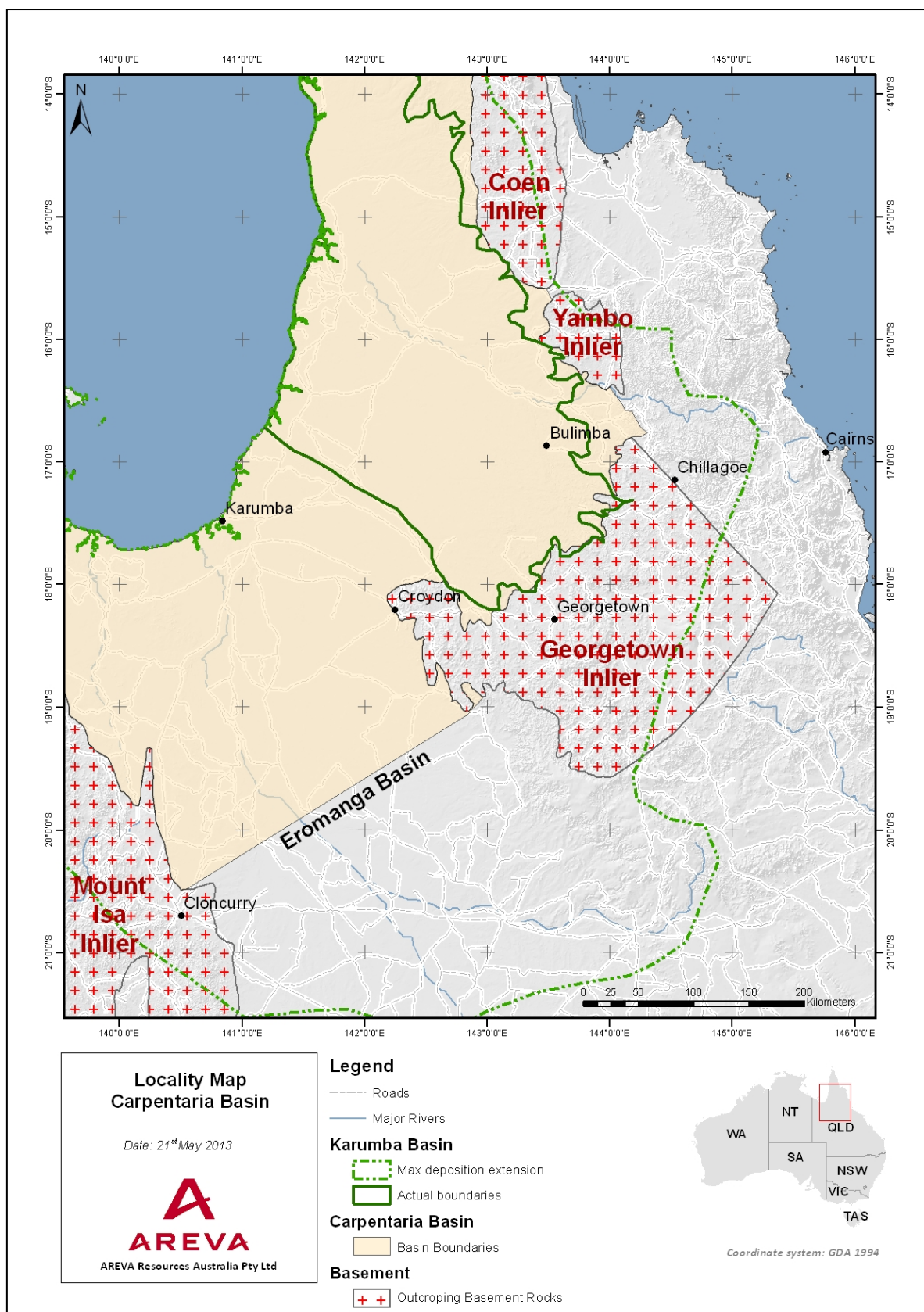


Figure 2: QLD - Karumba Project - Regional Geological Map.

2.2. STRATIGRAPHY

Ground surface geology of the border of the Carpentaria Basin is constituted by Carpentaria the following units, with from surface to basement (Figure 3):

- Quaternary alluvium, 0 to 20 m thick of sand, gravel to conglomerate;
- Late Cretaceous to Tertiary Karumba units:
 - Wayaaba Formation, 0 to 100 m thick of red claystone, sand and sandstone;
 - Bulimba Formation, 0 to 150 m thick of red sand, gravel and conglomerate;
- Cretaceous units:
 - Wallumbilla Formation, 0 to 200 m thick of marine shales;
 - Gilbert River Formation (GRF), 0 to 100 m thick of fluvial to shallow marine sandstones:
 - Upper Member: Coffin-Hill Member (0 to 70 m thick) is deltaic to marine, with shales and sands to sandstones, and characterized by glauconite;
 - Lower Member: Yappar Member (0 to 30 m) is fluvial to deltaic or lagoon, with sandstones.

The regional dip is approximately 0.05° to the NW. The basin tectonics are not well constrained; only the NW-SE trend of the Gilbert – Mitchell Trough influencing the shape of the basin limits.

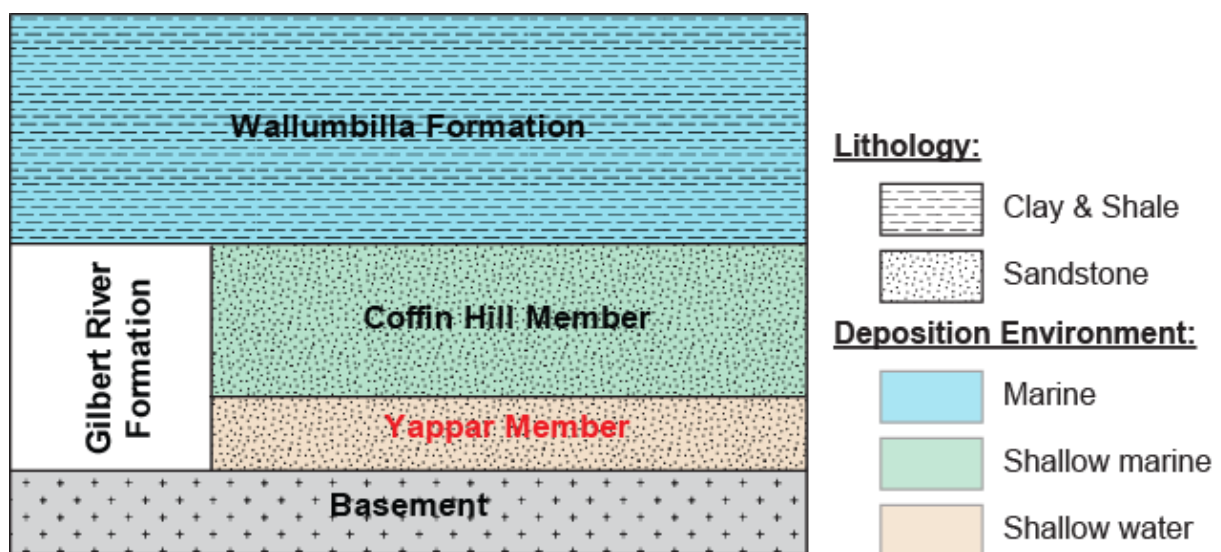


Figure 3: QLD – Karumba Project - Regional Cretaceous Lithostratigraphic log (Carpentaria Basin).

3. WORK COMPLETED DURING REPORTING PERIOD

Work completed during the reporting period consisted of a drilling campaign, desktop studies and reviews of historical drilling, along with a field reconnaissance visit.

3.1. FIELD RECONNAISSANCE

Field visit included a reconnaissance of access to EPM and meeting with landowners.

3.2. DRILLING

Drilling commenced on 16/10/2013 and terminated on 21/10/2013 (Table 5)

Four holes were drilled using reverse circulation and core techniques for a total of 301.5m (Table 5 and Figure 4). The drilling company was AED (Associated Exploration Drillers). Oxidised Yappar was intersected in two of the holes and was absent in the remaining.

All cuttings from the hole have been disposed of in the water sumps used for drilling, along with all holes being cemented from the maximum depth to the top.

Table 5 : QLD - Karumba Project – Collar information

TENEMENT NUMBER	DRILL HOLE NUMBER	DRILL METHOD	DATE DRILLED		HOLE DEPTH (m)	EASTING	NORTHING	ZONE	DATUM	GEOPHYSICAL LOGS
			START	END						
EPM 18884	KASO_0018_1	REVERSE CIRCULATION	16/10/2013	16/10/2013	84	687005	8018384	54	GDA94	DEVIATION CALIPER RESISTIVITY INDUCTION GAMMA SPONTANEOUS- POTENTIAL
EPM 18884	KASO_0020_1	CORE	17/10/2013	20/10/2013	72.5	675687	8015799	54	GDA94	DEVIATION CALIPER RESISTIVITY INDUCTION GAMMA SPONTANEOUS- POTENTIAL
EPM 18884	KASO_0021_1	REVERSE CIRCULATION	19/10/2013	20/10/2013	96	680963	8028912	54	GDA94	DEVIATION CALIPER RESISTIVITY INDUCTION GAMMA SPONTANEOUS- POTENTIAL
EPM 18884	KASO_0023_1	REVERSE CIRCULATION	21/10/2013	21/10/2013	49	675696	8015795	54	GDA94	DEVIATION CALIPER RESISTIVITY INDUCTION GAMMA SPONTANEOUS- POTENTIAL

3.2.1. Mineralisation

No significant anomaly was encountered.

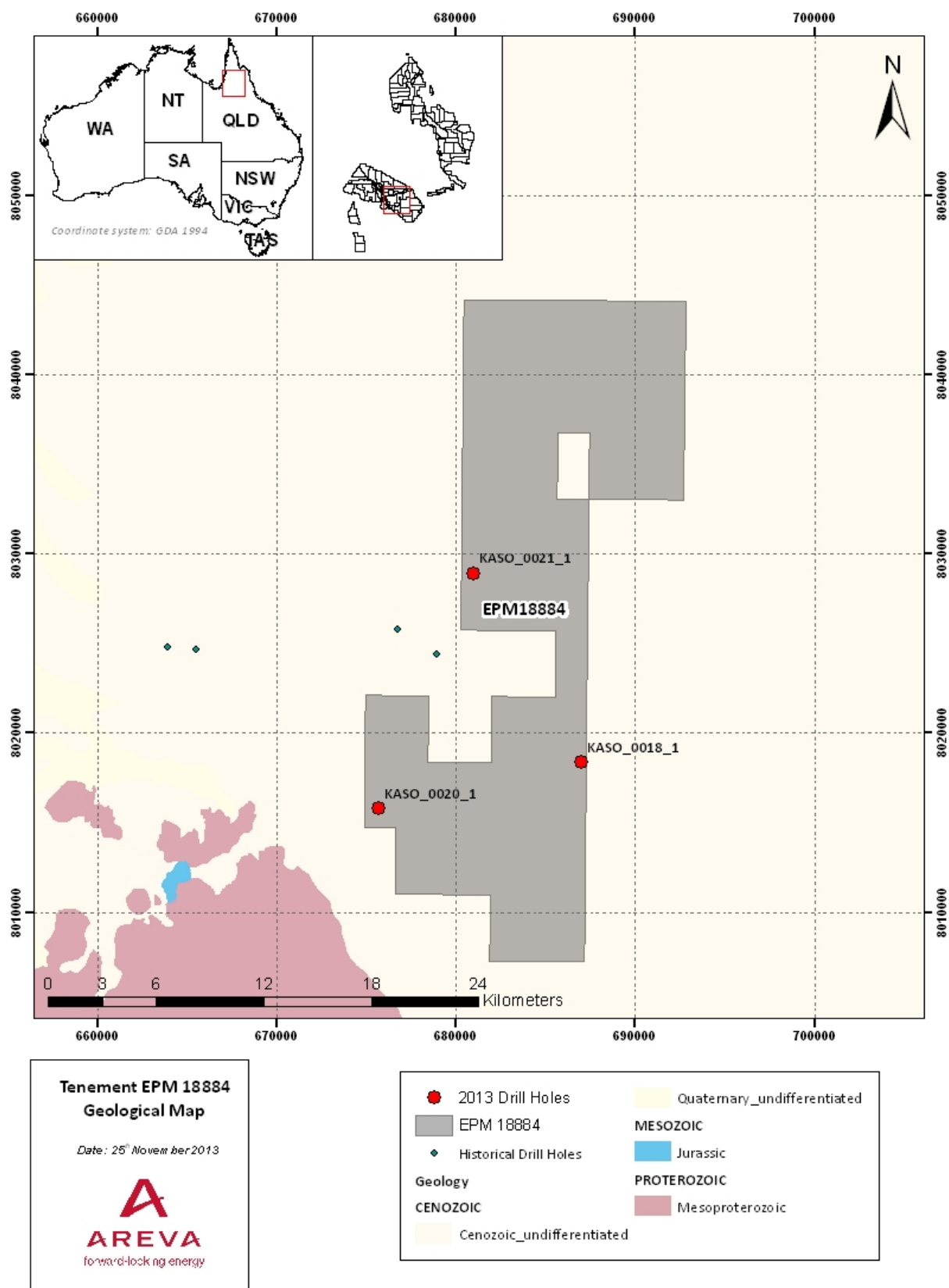


Figure 4: QLD – Karumba Project - Geological map of EPM (Queensland Geology 1:1,000,000)

4. CONCLUSIONS

Based on the results from the historical review and the field work completed during the reporting period, it was concluded that further drilling operations are required in an attempt to locate the REDOX front and potential uranium mineralisation within the Yappar Member along the basin margins.

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- Wilkins, N. (1996). EPM 10851 and EPM 10806 Report to August 1996. Cyprus Gold Australia.

APPENDIX

1. Drilling Logs
 - a. KASO_0018_1
 - b. KASO_0020_1
 - c. KASO_0021_1
 - d. KASO_0023_1
2. LAS Files for probing data
 - a. KASO_0018_1
 - b. KASO_0020_1
 - c. KASO_0021_1
 - d. KASO_0023_1