Queensland Mining Corporation Limited

Technical Report
No. 1093

Exploration Permit for Minerals No 15897
'White Range Consolidated', Queensland
Partial Relinquishment Report
For the Period Ended 22 October 2012

QUEENSLAND MINING CORPORATION LTD

TECHNICAL REPORT
No. 1093

TITLE:	EXPLORATION PERMIT FOR MINERALS No.15897 'WHITE RANGE CONSOLIDATED' , QUEENSLAND PARTIAL RELINQUISHMENT REPORT FOR THE PERIOD ENDING 22 OCTOBER 2012
HOLDER:	SIERRA LINE PTY LTD
OPERATOR:	QUEENSLAND MINING CORPORATION LTD
1:250,000 SHEET:	SF54-02 CLONCURRY
1:100,000 SHEET:	7056 CLONCURRY, 7055 MOUNT ANGELAY, 6956 MARRABA AND 6955 MALBON
INVESTIGATIONS CONDUCTED BY:	QUEENSLAND MINING CORPORATION LTD
AUTHORS:	G. XU
SUBMITTED BY:	T. R MARTIN
DATE:	FEBRUARY 2013
COPY:	3

DISTRIBUTION

1. Queensland Mining Corporation Ltd, Exploration Office Cloncurry
2. Queensland Mining Corporation Ltd, Sydney
3. Department of Minerals and Energy, Brisbane

LIST OF CONTENTS

LIST OF FIGURES

SUMMARY

Aim of Project
EPM 15897 'White Range Consolidated' was acquired to undertake exploration for bulk tonnage Greenmount and Mount McCabe-style copper oxide and iron oxide copper gold (IOCG) deposits within the marginal zone of the Marimo Basin.

Object of Report
To document the results of exploration on the 5 sub-blocks relinquished from EPM 15897 'White Range Consolidated' on 22 October 2012.

Location

EPM 15897 'White Range Consolidated' is located in the Mount Isa region of northwest Queensland, and lies between latitudes 20˚56'S and 21˚05'S, and longitudes 140˚22'E and 140˚35'E. The tenement, which is centred on a point approximately 33 km south of Cloncurry, lies within the central eastern group of sub-blocks to the west of and partially surrounding the QMC Mining Leases ML 2519 ("Vulcan"), ML 90082 ("Mount McCabe"), ML 90161 ("Phil's Find") and ML 90134 ("Greenmount"), as well as the Company's Mineral Development Licences MDL 205 ("Greenmount") and MDL 204 ("Copper Canyon").

Tenure
EPM 15897, consisting of 24 sub-blocks, was granted to Matrix Metals on 23 October 2008 for a term of five years ending on 22 October 2013. The tenement originated from the Conditional Surrender of three earlier Matrix Metals tenements, EPM 4317, EPM 11035, and EPM 14772. Five sub-blocks were relinquished from the EPM on 22 October 2012.

Summary
Work completed during the current term within the 5 relinquished sub-blocks comprised drilling of 5 RC holes for a total depth of 594m at the Robur prospect located in one of the group of three sub-blocks situated in the northeast.

Conclusions
The 5 relinquished sub-blocks are regarded as less prospective. Sub-blocks covering features of interest were retained.

1 INTRODUCTION

This report documents exploration work conducted during the period of tenure on the 5 sub-blocks relinquished from Exploration Permit for Minerals No. 15897 'White Range Consolidated' in November 2008. Exploration activities were carried out by Deep Yellow Limited, a joint venture partner to Matrix Metals Limited, the original tenement holder in search of uranium mineralization prior to the purchase by Queensland Mining Corporation Limited. The area covers the prospective middle Proterozoic Mary Kathleen Group rocks, in particular the Overhang Jaspilite, Corella Formation, Stavely Formation and Marimo Slate units which are transected by N-S, NW and NE trending faults and shear zones.

2 LOCATION AND ACCESS

EPM 15897 'White Range Consolidated' is located in the Mount Isa region of northwest Queensland, and lies between latitudes 20˚56'S and 21˚05'S, and longitudes 140˚22'E and 140˚35'E. The tenement, which is centred on a point approximately 33 km south of Cloncurry, lies within the central eastern group of sub-blocks to the west of and partially surrounding the QMC Mining Leases ML 2519 ("Vulcan"), ML 90082 ("Mount McCabe"), ML 90161 ("Phil's Find") and ML 90134 ("Greenmount"), as well as the Company's Mineral Development Licences MDL 205 ("Greenmount") and MDL 204 ("Copper Canyon").

The tenement can be reached from Cloncurry by taking the Barkly Highway and Cloncurry-Dajarra road for some 31 km to a turn-off (near the first railroad crossing) to the east, from which graded station tracks give access to the eastern parts of the tenements before reaching the Cloncurry River after a distance of 24 km. An alternative access is by traversing a track turning off the Dajarra Road approximately 38 km from Cloncurry (7 km past the first turn-off), and this reaches the Cloncurry River after some 20 km.

The eastern group of sub-blocks can be accessed from Cloncurry leading south via Powerhouse Road, and thence via a gravel road and station tracks through the Roxmere Station following the eastern side of the Cloncurry River. The distance to the eastern part of the northern block is about 33 km, whereas the southern block is reached after some 42 km (Fig. 1).

3 TENURE

EPM 15897, consisting of 24 sub-blocks, was granted to Matrix Metals on the 23rd October 2008 for a term of five years ending on the 22nd October 2013. The tenement originated from the Conditional Surrender of three earlier Matrix tenements, EPM 4317, EPM 11035, and EPM 14772.

Prior to the current reduction, EPM 15897 comprised 24 sub-blocks and covers a total area of approximately 77 km^2. A listing of the retained 19 sub-blocks is shown below (Fig. 2).

BIM	Block	Sub Blocks
CLON	821	j, n, o, p, s, t, u, y, z
CLON	822	c, q, v
CLON	823	q, r
CLON	824	a, h
CLON	895	f, l, q, y

The 5 sub-blocks relinquished from EPM 15879 in November 2012 were:

BIM	Block	Sub Blocks
CLON	822	u
CLON	823	n, o, s
CLON	895	k

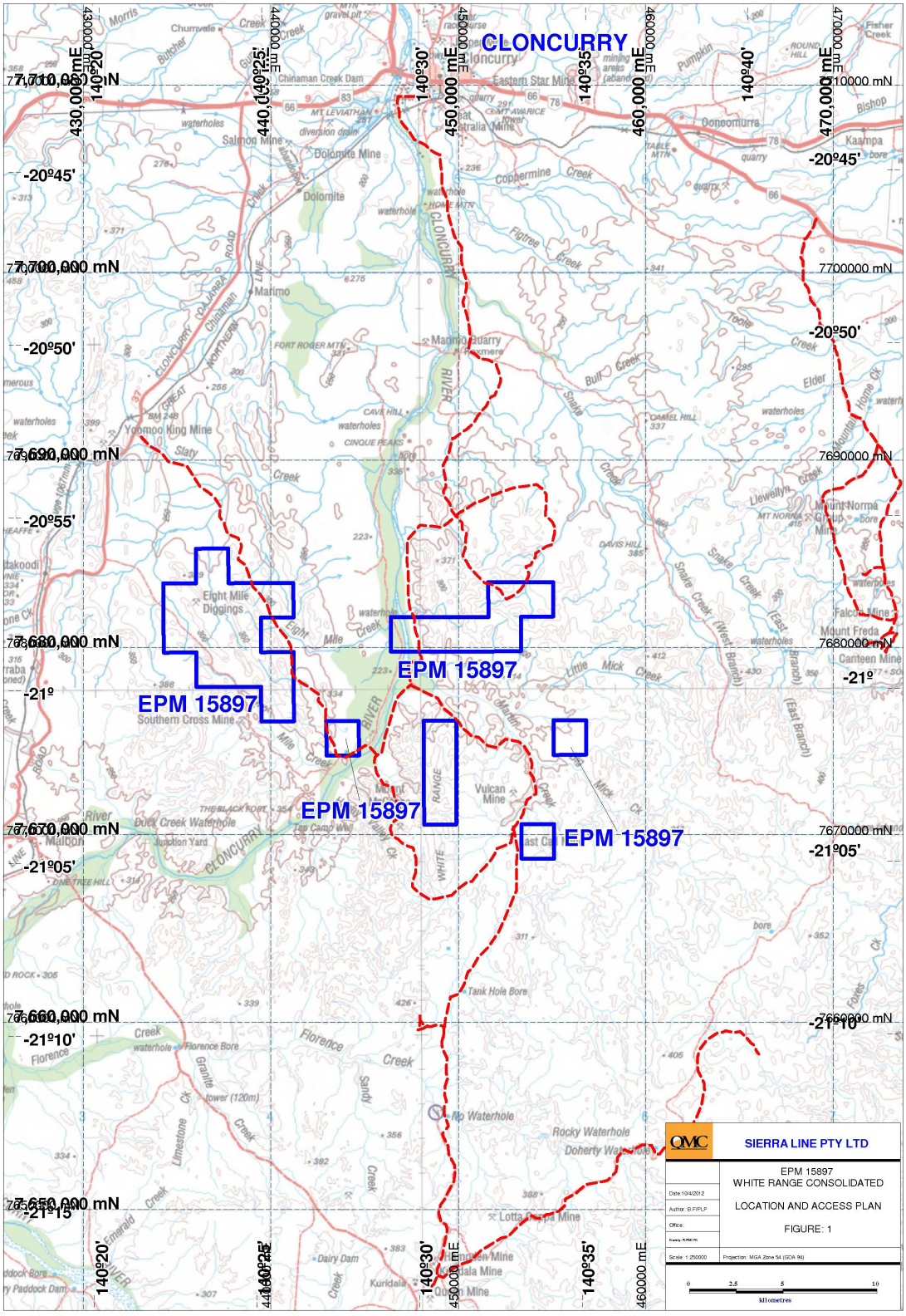

Fig. 1 EPM15897 location and access plan

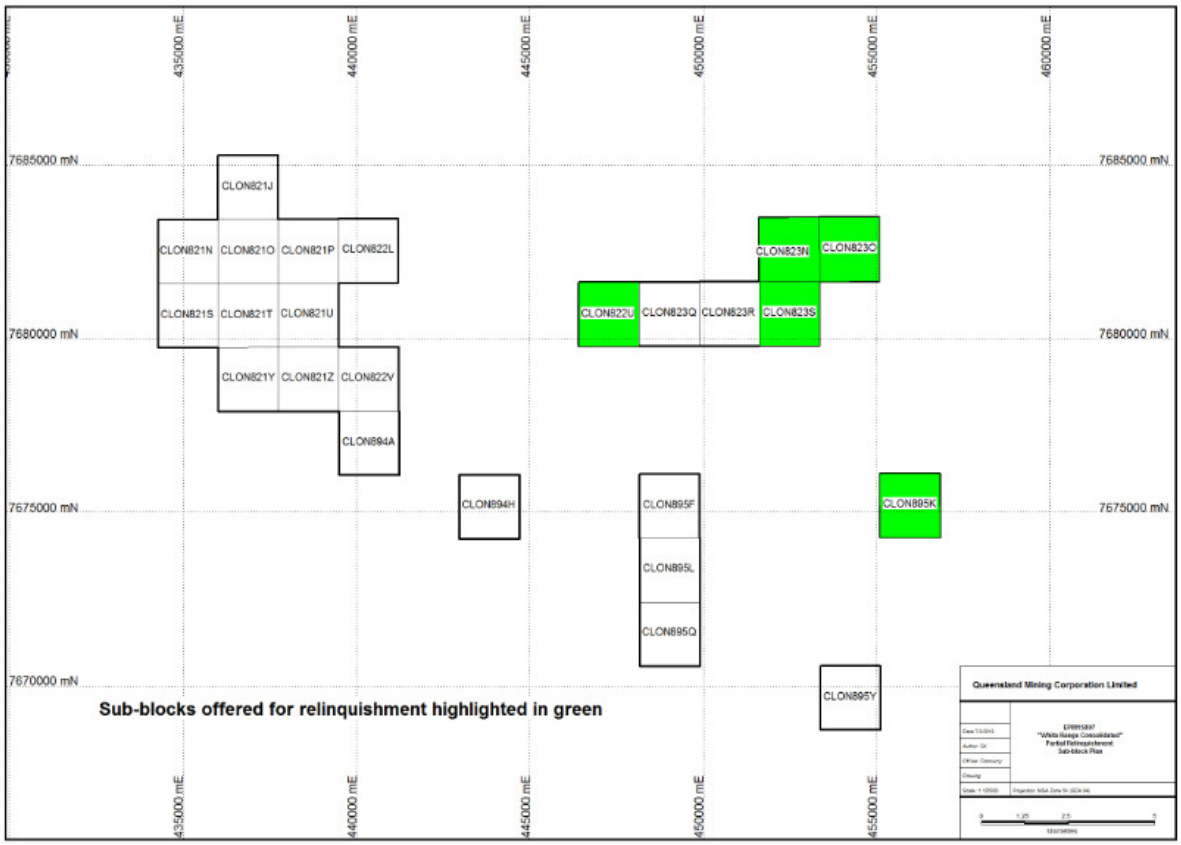

Fig. 2 EPM15897 partial relinquishment sub-block plan

4 EXPLORATION RATIONALE

EPM 15897 'White Range Consolidated' was acquired to undertake exploration for bulk tonnage Greenmount-style vein stockwork/disseminated and Mount McCabe-style breccia/vein stockwork copper oxide deposits and iron oxide copper gold (IOCG) deposits within the marginal zone of the Marimo Basin. The tenement is also prospective for uranium mineralization.

QMC intends to fully investigate the oxide copper potential of the known prospects for vein stockwork and disseminated copper oxide hosted in the slates in the marginal zone of the Marimo Basin and breccia-hosted mineralisation of the Mount McCabe-style.

The vein stockwork/disseminated-style mineralisation is known to occur at the following prospects; Sierra, Toby Barty, Mount Cyril and Chopper Ridge prospects, whereas breccia-style mineralisation is present at Sierra and the relatively unexplored Sierra South Prospect. Also stockwork veining/joint fill copper oxide in extremely silicified Marimo slates remains to be explored at the SiPa Prospect and the Sierra West zone.

5 PREVIOUS EXPLORATION

Most of the known mineral occurrences and historic workings of the tenement are located in the western group of sub-blocks, but there are numerous occurrences scattered throughout the surrounding areas, as shown in Fig 3. This figure also illustrates the presence of other small

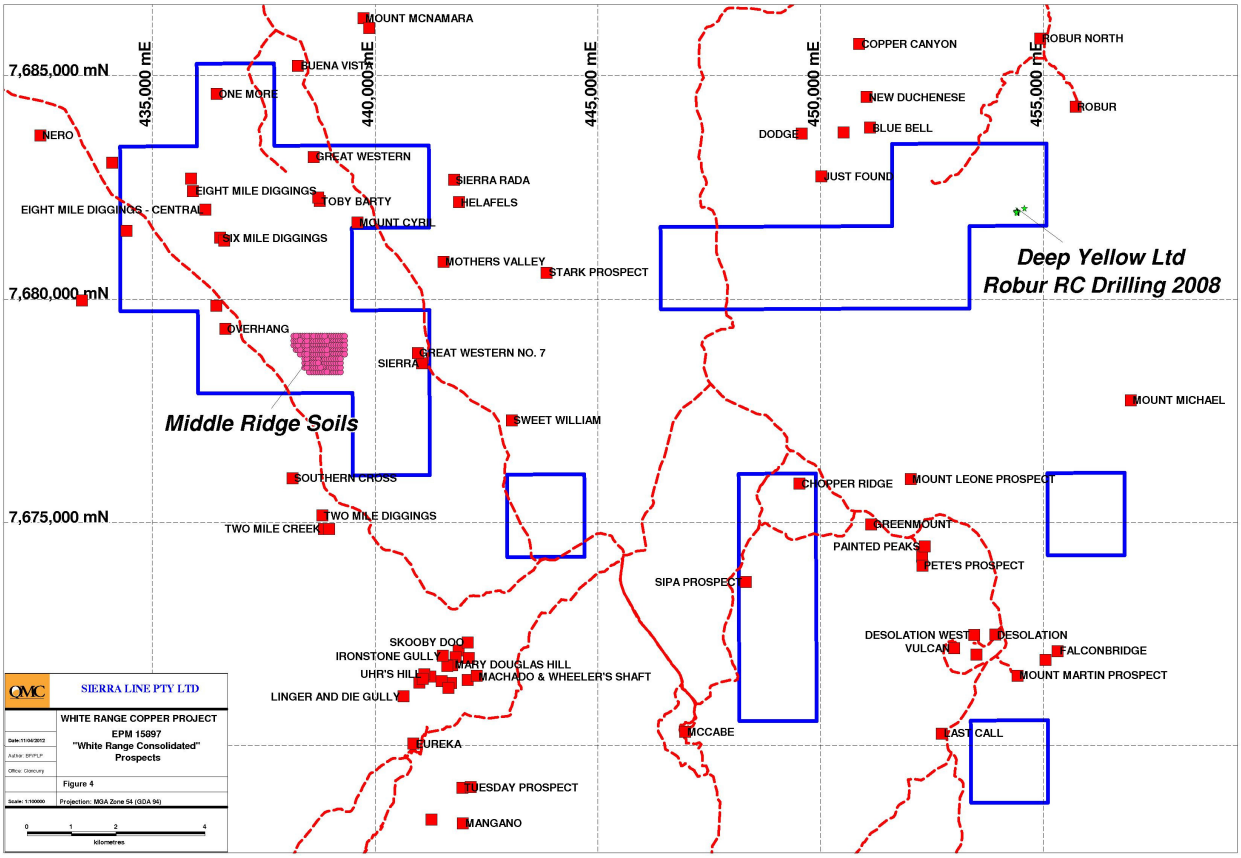

Fig. 3 EPM15897 prospect location plan

unnamed occurrences, mostly small copper shows. Currently active prospects are also contained within the northeastern group (DYL's Robur Prospect), and the central south group (Matrix's SiPa Prospect & Chopper Ridge).

5.1 Previous Exploration by Other Companies

Exploration work on the areas covered by the EPM 4317 "Toby Barty" and EPM 11035 "Overhang" tenements prior to 1 July 1986 (when EPM 4317 was granted) and 29 May 1996 (starting date of EPM 11035) has been completed by a number of companies, including Mount Isa Mines/Carpentaria Exploration, Rio Tinto, Australian Selection, Kennecott, Western Nuclear, Pegmin, Anaconda and BHP. This work, as well as that carried out by the various tenement holders of both EPM's (and EPM 14772) together with their respective joint-venturers, viz. Valdora Minerals, Homestake Australia, Majestic Resources, William Resources, BHP, and Matrix Metals, has been reviewed in detail in previous Annual Reports dating back as far as the late 1980s, and the reader is referred to these for further information (see summary by Paull, 2010).

5.2 Previous Exploration by Matrix (DYL JV) and QMC (2007–2011)

2006–2007

An aerial magnetic/radiometric survey was flown by the JV partner Deep Yellow Limited (DYL). The survey, conducted by UTS Geophysics, covered the entire EPM 4317 area and 5 western sub-blocks of EPM 11035 (Fig. 3).

2007–2008

Outlined uranium anomalies from the previous year's programme were followed-up by DYL with a helicopter-supported mapping and sampling programme. Most of the uranium anomalous samples, some of which recovered from sheared metasedimentary rocks, comprised leached ferruginous/gossanous material. One sample (WR-004) from Toby Barty Cu workings returned 1.14% U_3O_8 with visible torbenite (Rypkema, 2008).

A rock chip sampling survey was conducted within the westernmost block of EPM 11035. Results of 29 rock chip samples were insignificant with the best Cu value being 920 ppm from a quartzite sample with jasperoidal banding (no significant Au).

A sub-audio magnetic (SAM) survey was carried out by Gap Geophysics Australia along the Toby Barty–Sierra line (122.2 km; Figure 3). The SAM survey outlined few anomalous areas of high conductivity (Rypkema, 2008).

Air radiometrics were flown by DYL. A single anomaly (H131) was identified for more detailed investigation, and a ground radiometric survey was conducted over the anomaly in conjunction with geological mapping. This anomaly was later followed-up by rock chip sampling (16 samples).

2008–2009

In EPM 14772 area Matrix Metals and DYL conducted rock chip and soil sampling surveys during which a combined 48 soil and 98 rock chip samples were collected. All of the 48 soil samples were recovered from the area surrounding the collar of RC drill hole CRRCM#1 from the Chopper Ridge Block. Of these, 18 samples returned Au values >0.1 ppm with highest at 0.56 ppm Au. Of the 22 rock chips collected by Matrix Metals, the best result was 1.6 g/t Au, with another 4 reporting just over 0.5 g/t Au. Sixteen samples collected by DYL from the same area reported merely a best value of 195 ppm U, with the remainder considerably lower. Best values for U came from a location some 2 km to the SSW, with a best of 1200 ppm U (Rypkema, 2008).

Another 60 samples collected by DYL were from a prospect named as Robur in the Copper Canyon area. These 60 samples were followed-up by ground radiometrics and then by RC drilling of 5 holes (RBRC001 to RBRC005) with a total of 594 metres (Frew, 2010).

Matrix Metals conducted a lag soil sampling programme at the Middle Ridge prospect which lies in the original EPM 4317 tenement. A total of 182 samples (-1.6 mm) were collected on 100m spaced lines with 50 m sample intervals and sent to SGS Laboratories in Townsville. However, these samples were not assayed until 2010 due to Matrix Metals going into Voluntary Administration during the same period.

2009–2010

In August 2010, QMC initiated assaying of the collected samples from the Middle Ridge prospect for Au, Cu, Pb, Zn, Ag, As, Bi, Fe, Mn, Mo, Ni, P, U, and V. The assays indicated significant copper (≤0.83%), gold (≤136 ppb) and cobalt (≤195 ppm) in the soil (Paull, 2011).

2010–2011

Exploration conducted during the 2010–2011 reporting period focussed primarily of data review and analysis of the Surprise Gold prospect, the Chopper Ridge Cu-Au prospect, the southern portion of the Chopper Ridge prospect (including the SiPa prospect), the Toby Barty prospect and the Sierra prospect, with limited field reconnaissance being conducted in the locations mentioned.

6 REGIONAL GEOLOGY

The tenement is underlain by rocks of the Mary Kathleen Group and the Young Australian Group with the former being part of Cover Sequence 2, whereas the latter belonging to Cover Sequence 3 (Foster and Austin, 2006). The various rock units included in these two groups are listed in the legend in Fig. 4, which also shows the lithologies that make up the different units. As shown in Fig. 4, the majority of lithologies underlying the tenement are metasedimentary, and mainly include slate, quartzite, jaspilite, and calc-silicate rocks, with minor arenite, limestone, and siltstone.

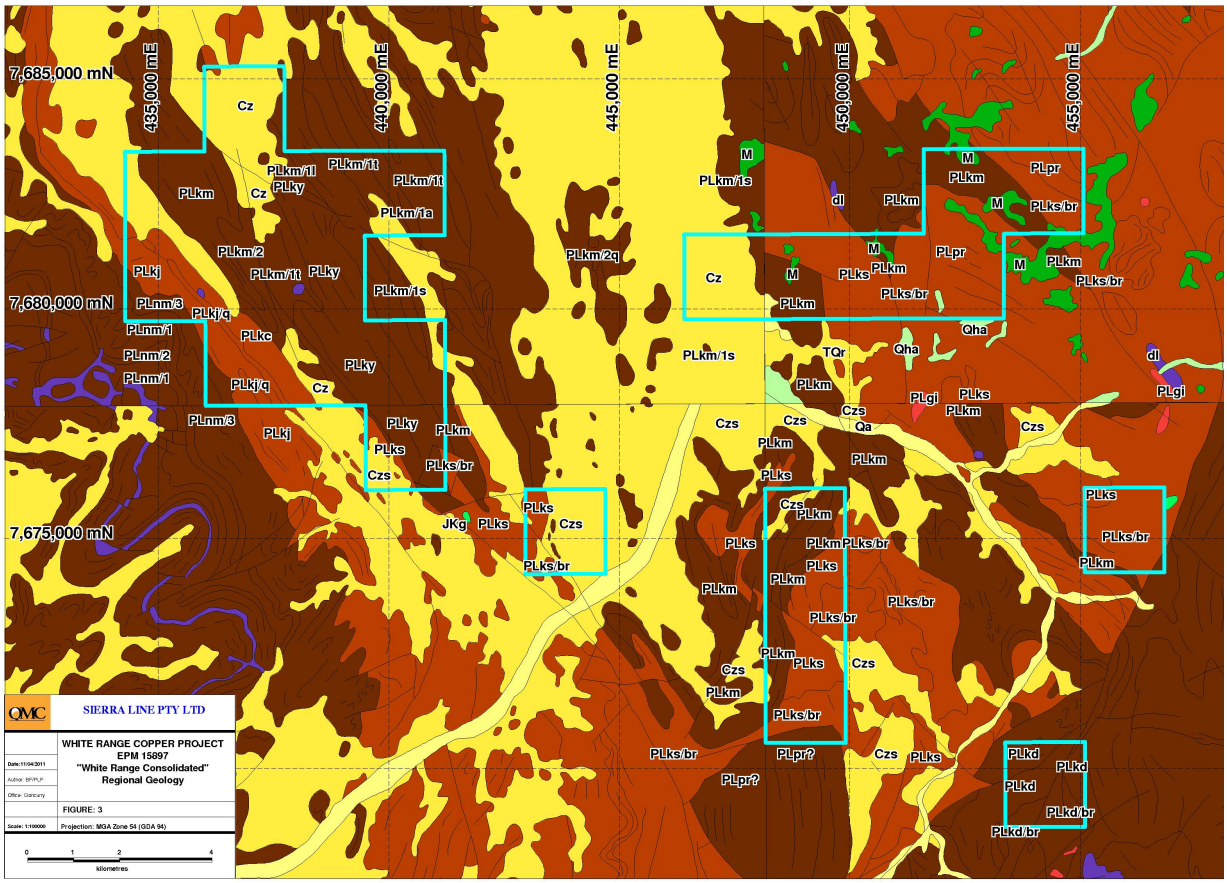

Fig.4 EPM15897 regional geology

The Mitakoodi Quartzite (PLnm/1 to PLnm/3) is the oldest unit of the Mary Kathleen Group, and crops out in the far southwestern corners of the larger west group of sub-blocks (Figure 3). This unit is overlain to the east by the Overhang Jaspilite (PLkj and PLkj/q), with minor amounts of Corella Formation (PLkc) occurring further east again. The youngest unit of the Mary Kathleen Group, the Doherty Formation (PLkd and PLkd/br) is only represented in the southeastern-most sub-block of EPM 15897.

The Young Australian Group comprises rock units formerly assigned to the Mary Kathleen Group, but which were subsequently found to be considerably younger (Foster and Austin, 2006), and are now assigned to Cover Sequence 3. Units cropping out in the original “Toby Barty” and “Overhang” areas belonging to this category are the Staveley Formation (PLks and PLks/br) and the overlying Marimo Slate (PLkm, PLkm/1a, PLkm/1l, PLkm/1s, PLkm/1t, and PLkm/2).

Structurally, the area occupied by most of the sub-blocks to the west shows a very strong southeast to northwesterly trend as shown in Fig. 4. This is, to some degree, also the case for the

far eastern sub-block, but in the sub-block to the south of this, which is underlain by Doherty Formation rocks and breccias, this trend is not apparent.

In the western areas a number of major faults have a similar orientation and appear to follow in many places the bedding and foliation trends of the metasediments.

Mineralization in the tenement consists of Cu, Au, Mn, Co, and U. Some old manganese workings (Overhang and two unnamed occurrences) are located in Overhang Jaspilite rocks within the most south-western corners of the larger west group of sub-blocks of EPM 15897.

Most of the old copper workings are located along a SE-NW-trending line along the northeastern side of the western most group of sub-blocks and are hosted by rocks of the Marimo Slate. These include One More, Red Sierra, Toby Barty, Mount Cyril, Great Western #7, Sierra and few other unnamed occurrences. Copper shows within these workings also contain cobalt, minor gold, and occasional uranium mineralization.

7 WORK COMPLETED WITHIN RELINQUISHED SUB-BLOCKS

7.1 Introduction

On 20 February 2007, Deep Yellow Limited (DYL) entered into a Joint Venture agreement with the former tenement holder Matrix Metals, whereby DYL could acquire an interest in uranium and uranium-related mineral potential within Matrix Metal's tenements in the Mt Isa region, which included the sub-blocks of EPM15897 "White Range Consolidated.

As follow-up to ground radiometric anomalies, a 5 hole RC (594m) programme was conducted by DYL at the Robur prospect located in the northeast corner of the EPM (see Fig. 3). On 11 November 2008, the Joint Venture partner Matrix Metals went into voluntary administration and DYL made a decision to immediately cease operations on the JV tenements. Therefore, the planned drilling at Robur was curtailed and drill samples were not assayed.

7.2 RC Drilling Program

Previous soil sampling performed by DYL at Robur has outlined a uranium anomalous area. This work was further followed up by ground radiometrics which defined several NW-SE trending anomalies generally parallel to the regional stratigraphy of the Marimo and Stavely formations (Fig. 5). To test these targets for economic uranium mineralization, 5 RC holes for a total of 594m were drilled from 9 to 12 November 2008. The drillhole details are presented in Table 1.

Table 1. Deep Yellow 2008 RC drillimng at Robur prospect

DRILL HOLE		Pad No	MGA Grid		AZI (True)	DIP		Depth of sampling		Sample numbers used	
Date	DH#	Proposed	East	North	Degrees		EOH (m)	Start samp	End samp	S numb start	S numb end
9/11/2008	RBRC001	RB30	454486	7682015	10	-60	102	na	na	na	na
9/11/2008	RBRC002	RB37	454394	7681925	10	-60	138	na	na	na	na
10/11/2008	RBRC003	RB9	454677	7682189	36	-50	102	na	na	na	na
11/11/2008	RBRC004	RB43	454555	7682010	007	-60	102	9-10	20-21	D047001	D047012
11/11/2008	RBRC005	RB46	454476	7682108	206	-50	150	na	na	na	na

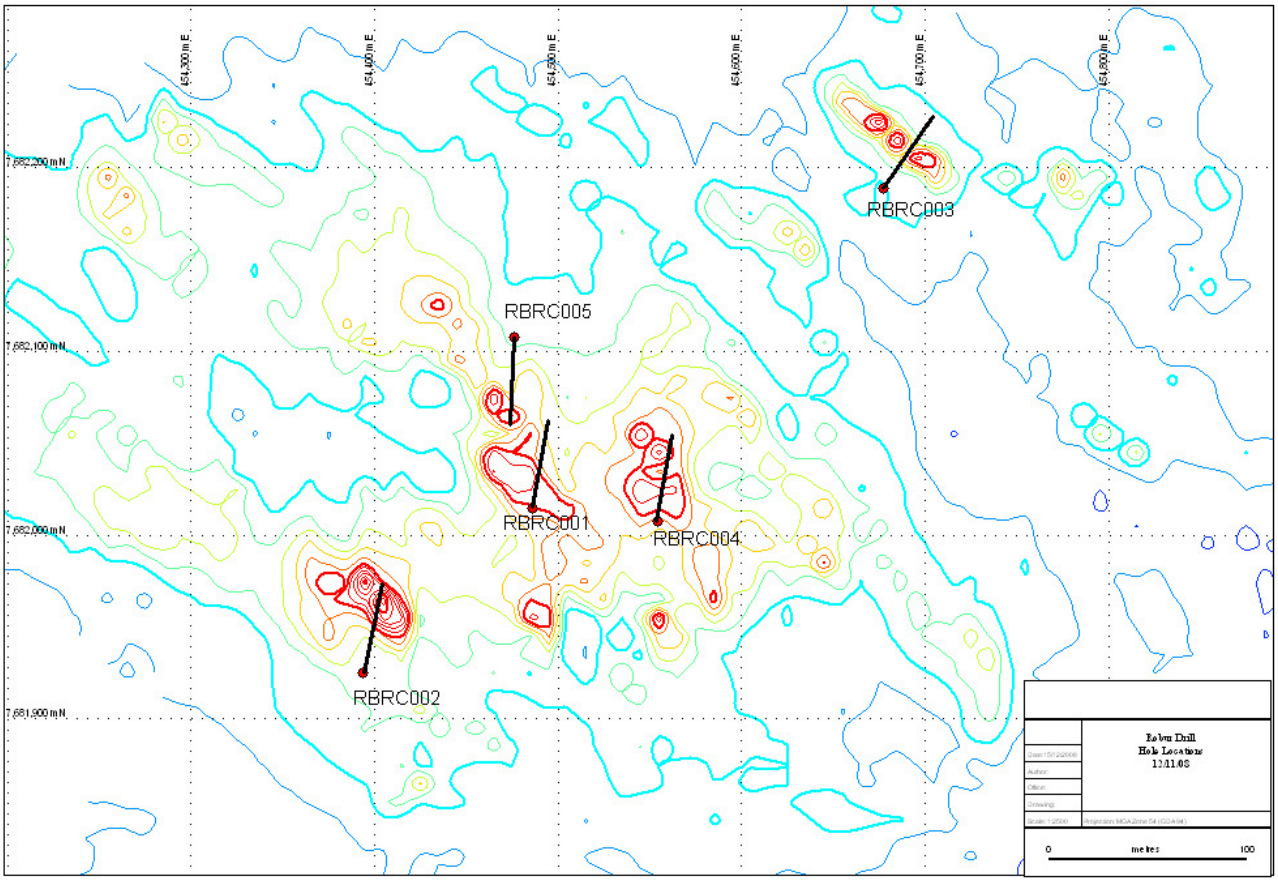

Fig. 5 EPM15897 Robur RC location

A total of 12 samples were collected from Hole RBRC004 for chemical analysis of U_3O_8. The results are not available due to the termination of the Joint Venture agreement. The other four holes in the programme were sampled. Downhole radiometrics from hole RBRC004 clearly shows the narrow intervals of uranium mineralization close to surface (Fig. 6). The geology intersected was heavily oxidised and consisted of interbedded shales, clays and thin beds of sandstone. The mineralized part of Hole RBRC004 is dominated by a breccia zone of siltstone.

8 CONCLUSIONS

The 5 relinquished sub-blocks are regarded as less prospective for copper-gold and uranium mineralization based on open file data review and previous exploration by the current tenement holder. Sub-blocks covering features of interest which include known mineralization, target stratigraphic units and soil anomalies were retained.

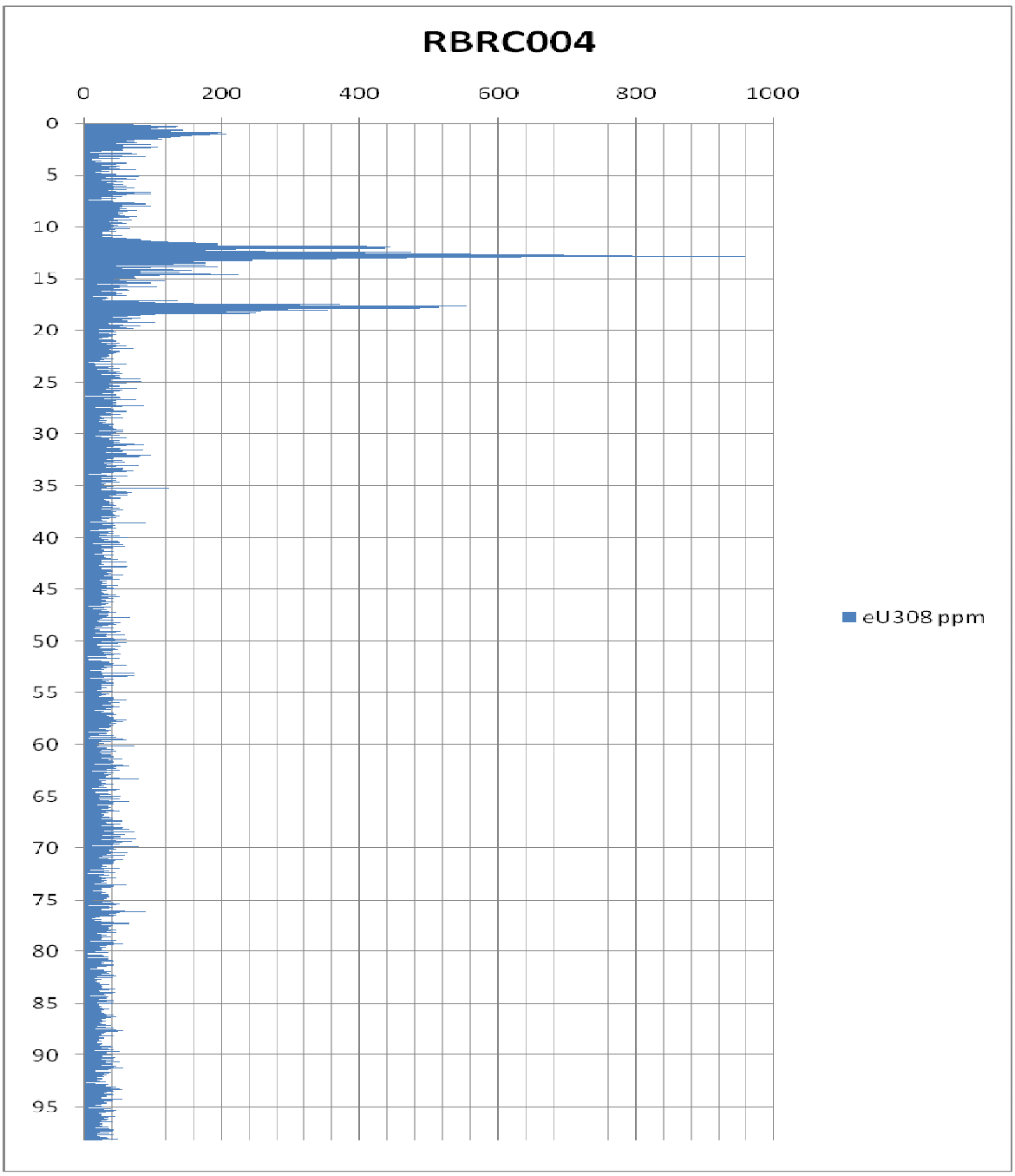

Fig. 6 Downhole radiometrics of RBRC004

9 REFERENCES

Foster, D., Austin, J., 2006 pmdCRC 12+3 Mt Isa Eastern Succession Project Final Report, School of Earth Sciences, James Cook University, Townsville QLD.

Frew, B.G., 2009 Annual Report for EPM 15897 'White Range Consolidated' for the period ending 22nd October 2010. Queensland Mining Corporation Ltd, Report to the Department of Mines and Energy.

Harvey, J., 2009 Annual report for EPM15897 "White Range Consolidated" for the period ending 22nd October 2008. Deep Yellow Ltd, Report to the Department of Mines and Energy.

Paull, P.L., 2010 Annual Report for EPM 15897 'White Range Consolidated' for the period ending 22nd October 2010. Queensland Mining Corporation Ltd, Report to the Department of Mines and Energy

Rypkema, H.A., 2008 Combined Annual Report for EPM 4317 'Toby Barty' and EPM 11035 'Overhang', for the period ending 28 May 2008. Matrix Metals Ltd, Report to Department of Mines and Energy.