

21 February 2013



Major In-Situ Leach Uranium Province Identified at Yanrey. New Exploration Target* up to 115 Mlbs U₃O₈

HIGHLIGHTS

- Significant increase in Exploration Target* to 30 - 115 Mlbs U₃O₈ at a grade of 250 - 900 ppm U₃O₈
- Huge potential to identify additional resources at Yanrey with multiple prospects within the large under-explored tenement holding
- Reconnaissance exploration effective in identifying several new sandstone hosted roll-front uranium targets, potentially minable by In-situ Leach (ISL) methods
- Company to undertake focused exploration to grow its uranium resource base and test the potential of new areas.

Australian resources company, Cauldron Energy Limited (**ASX: CXU**) ("Cauldron" or "the Company") plans to accelerate exploration activities at its wholly owned Yanrey Project ("Yanrey") in Western Australia following confirmation of a significant Exploration Target* increase from 25 to 30 Mlbs to 30 to 115 Mlbs of U₃O₈ at a grade of 250 to 900ppm U₃O₈.

The significant upgrade in Exploration Target* follows the recent 300% increase in the inferred uranium resource at Bennet Well (from 4.8 Mlbs to 15.7 Mlbs, refer ASX announcement dated 7 February 2013).

In the Company's view, the Yanrey Project (figure 1), which is adjacent to Paladin Resources Ltd's Manyingee Deposit (24 Mlbs U₃O₈), and Energia Minerals Ltd's Nyang Deposit (12 Mlbs U₃O₈) is developing into a regionally, if not globally, significant uranium project with the potential to be a major uranium mining centre.

Commenting on these results, Cauldron head of operations, Mr Simon Youds, said, "It is pleasing to have just upgraded our resource 300% and know that we are likely, based on the extensive prospects yet to be tested, to have substantially more uranium mineralisation which may further grow the resource."

"While it is very early on in the exploration of this area of Western Australia, we believe the area is emerging as a significant uranium province", Mr Youds said.

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159,622,605 ordinary shares
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Board of Directors

Tony Sage
Executive Chairman

Brett Smith
Executive Director

Qiu Derong
Non-executive Director

Claire Tolcon
Company Secretary

The Company believes the style of mineralisation at Yanrey is similar to that of the Beverly and Honeymoon uranium deposits in South Australia's Lake Frome Basin, which are both currently operational in-situ leach style uranium mines.

"We've defined an updated resource of 15.7 Mlbs U_3O_8 in the palaeochannels in the Bennet Well region alone and have a revised minimum exploration target* of 23 Mlbs U_3O_8 and a maximum exploration target* size of 42 Mlbs U_3O_8 in this region at a grade above 250 ppm U_3O_8 ," Mr Youds said.

"This is just a small area which has been drilled and we can see from historical drilling and exploration reviews that we are likely to identify significant additional uranium resources elsewhere in our large tenement package," he added.

The immediate target for on-going exploration at Yanrey is the very prospective Barradale Channel. This prospect is a large target, with favourable geochemical and geophysical indicators and multiple opportunities for uranium mineralisation.

Subject to weather conditions, Cauldron expects to start this drilling in the first quarter of 2013.

End.

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Exploration Upside

Cauldron currently has 15 granted tenements totaling 3,200 square kilometres and three tenement applications (286 sq km) within the project area. The tenement package is 160 kilometres long and approximately 50 kilometres wide, highlighting the potential to identify further uranium resources in the project area.

Cauldron now owns most of the prospective ground located at the junction of the ancient coastline and the palaeochannels where conditions are ideal for the precipitation of uranium to occur.

At Yanrey, the Company currently has four JORC compliant uranium resources, two already identified uranium prospects, eight exploration targets with proven uranium and over ten exploration targets with insufficient work completed to date that have been identified. Further drilling is required on these prospects to determine the extent of the uranium mineralisation and the grades of these occurrences.

In the area explored by Cauldron, there are at least fifteen favourable palaeochannels targets, including extensions to the Paladin Energy Ltd owned Manyingee and Spinifex deposits where Cauldron owns the surrounding tenements. In addition to these targets, the Company believes it has over 150 km² of untested prime target areas which are favourable for uranium mineralisation.

Exploration Target*

The Exploration Target* at Yanrey is for sandstone hosted roll front uranium mineralisation within palaeochannels. It is based on recently completed work, which included reviewing historical and recent drillholes, detailed geophysical interpretation and geological modelling. This work has identified over 100 kilometres of redox front in the Yanrey area with associated palaeochannels that are potential sites for uranium precipitation. Figure 2 shows the location of some of exploration targets and palaeochannels identified by Cauldron.

There are many areas around Yanrey that contain potential uranium mineralisation, as shown by the Company's drilling program conducted in late 2012.

The revised Exploration Target* of 30 to 115 Mlbs U₃O₈ at a grade of 250 to 900 ppm U₃O₈ is based upon the following information:

- The recently discovered Bennet Well South and Bennet Well East resources were drilled on 200 to 400 metres spacing between drill lines and are both open at either end suggesting likely increases in the current resources. Bennet Well South in particular increased in grade and width on the most northern drill

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line, suggesting a large resource extension could exist to the north of where drilling ended.

- Bennet Well South is a narrow but long uranium zone and drilling completed here had inadequate numbers of drillholes across strike resulting in a lower resource size than expected. Further drilling across strike is needed to define the extents of the narrow but high grade uranium zone.
- Bennet Well East had high grade intersections including drillhole YNMR048 where 3.5m @ 1810ppm e U_3O_8 including a maximum value of 1.3% e U_3O_8 was identified. The drill line spacing on both sides of this drillhole was 400 metres. There is a potential high grade zone of uranium mineralisation within this area which has been underestimated in the current resource calculations.
- Bennet Well Deep South is currently a very small uranium resource based on a limited amount of drilling. The palaeochannel defined by drillhole reviews and geophysics appears to be over five kilometres long and has prospective sediments for uranium precipitation.
- There are likely extensions to the immediate Bennet Well Central resource based on geophysical interpretation, especially to the north and west of the current resource area.
- Geophysical interpretations have identified a likely side channel from the Bennet Well Channel that heads northwards to a zone of prospective sediments for uranium precipitation between the Bennet Well Deposits and the Manyingee Deposit.
- The Barradale channel was drilled in 2010 and in 2012 by Cauldron but all drillholes failed to penetrate the hard cemented bands at the top of the palaeochannel. These hard bands are known to be important markers seen in large uranium deposits including Paladins' Manyingee Deposit and the Beverley Four-Mile Deposit in South Australia. Cauldron believes that potential high grade uranium deposits could occur at the base of this channel. Historical drilling by CRAE on the side of the channel included 1.7 m at 290ppm e U_3O_8 .
- Cauldron owns the tenement that surrounds Paladin Energy's Manyingee Deposit. Historical drilling has shown extensions to the Manyingee Deposit that exists on Cauldrons' tenement. There are three historically identified palaeochannels with numerous historical holes drilled with grades up to 3000 cps identified. Further drilling is required to define potential extensions to the current Manyingee Deposit.
- Cauldron owns the tenements that surround Paladin Energy's Spinifex Deposit. Historical interpretations indicate likely palaeochannel extensions to the Spinifex Deposit to the north and an additional palaeochannel to the east

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of the deposit through Cauldron's tenement. Cauldron has not completed any drilling on these prospects yet.

- The South and North Ballard's have previous drill results of 1.3m at 580ppm and 3.7m at 107ppm eU₃O₈, respectively. Chemical analyses from the south Ballard channel produced a result of 2m at 700 ppm U₃O₈. Drilling by Cauldron in 2010 identified additional palaeochannels in this region and had a highest grade of 1.9m at 430 ppm e U₃O₈.
- The Main Road Channel produced a result of 1.05m at 566 ppm e U₃O₈ in historical drilling. Cauldron has not yet completed any additional drilling. A close spaced gravity survey completed in 2006 and the reprocessed Airborne EM survey completed in 2011 have more accurately defined the extents of the palaeochannel.
- The New Palaeochannel prospect was identified by Cauldron drilling in 2008 and included grades of 0.8m @ 420 ppm e U₃O₈. Further drilling is required to define the extents and uranium grades for this prospect.
- Cauldron has also identified additional uranium exploration targets on recently granted tenements where no drilling has taken place. Cauldron is expecting that drilling of these targets will lead to the identification of further uranium targets as our geological understanding of new exploration regions increases.

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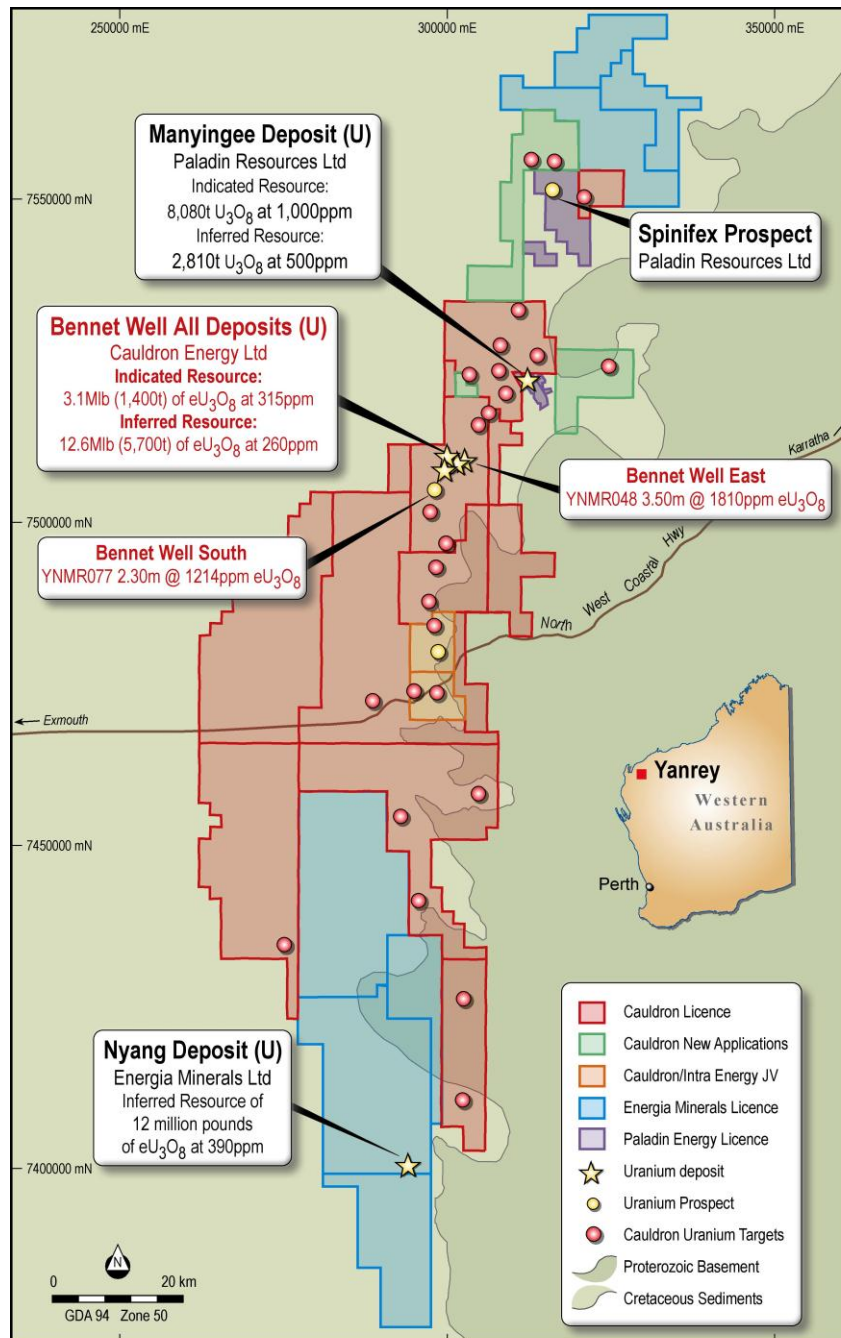


Figure 1 - Yanrey Project and Prospect Location Plan

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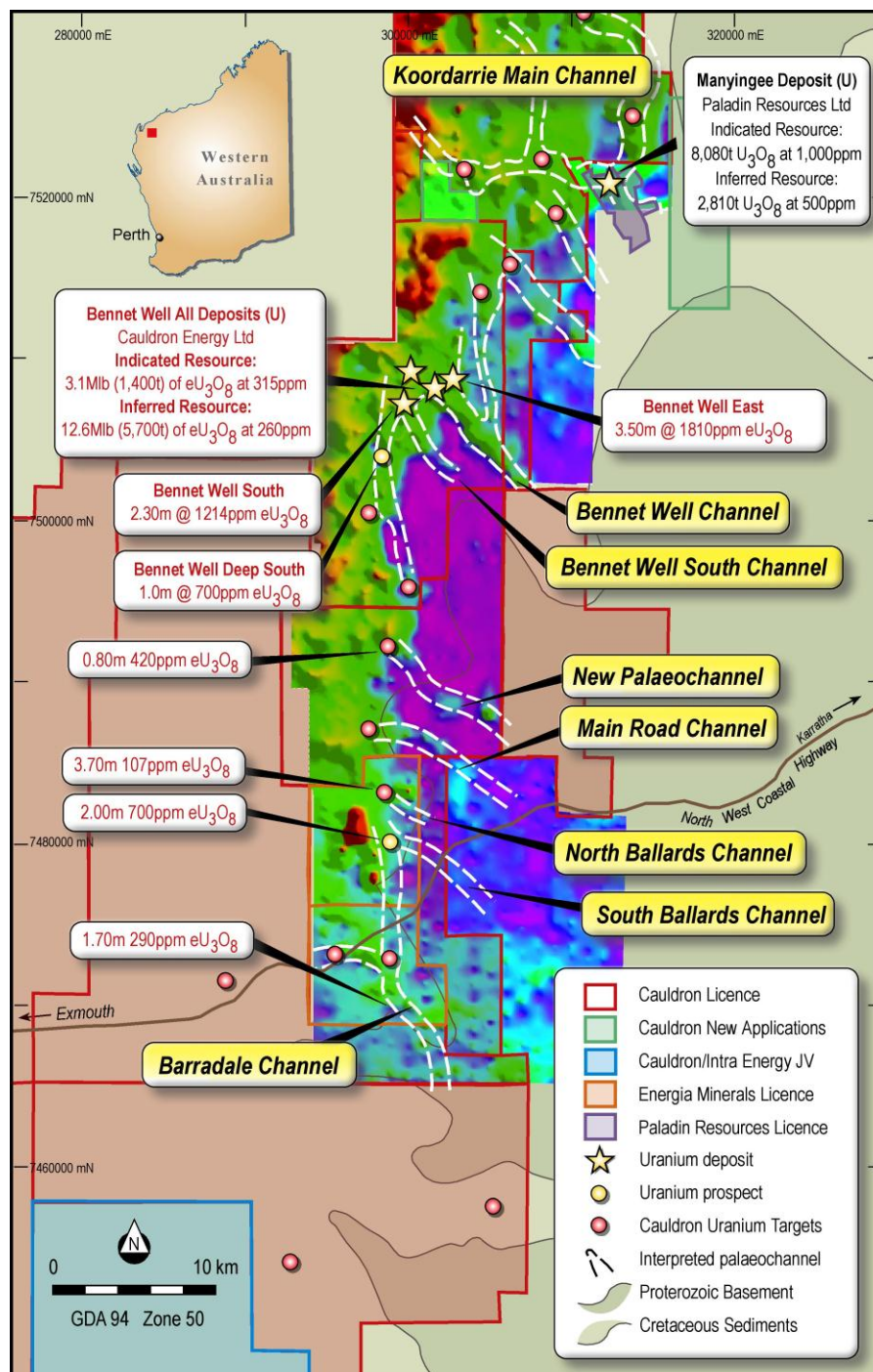


Figure 2 - Yanrey Project showing identified palaeochannels and Prospects with the 2011 Airborne EM in the background

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Disclosure Statements

Exploration Targets

Under clause 18 of the JORC code the exploration targets (excluding the portion already classified into JORC inferred resource) outlined in this announcement are conceptual in nature as there has been insufficient exploration to define additional mineral resources; it is uncertain if further exploration will result in the determination of any additional mineral resources.

Competent Person

The information in this announcement to which this statement is attached that relates to Cauldron Energy Limited's exploration results is based on information compiled by Mr Mark Couzens who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Couzens is a consultant at Cauldron Energy Limited and has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration. Mr Couzens is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Couzens consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.

The Bennet Well resource estimate was undertaken by Robert Spiers BSc Hons, MAIG (reviewed by Simon Gatehouse, MAIG), who are full-time employees of Hellman & Schofield Pty Limited. Mr Spiers has more than five years' experience in resource estimation and Mr Simon Gatehouse has more than five years' experience in uranium exploration and the assessment of uranium deposits. Mr Gatehouse has specific experience in the assessment of ISL uranium deposits. Together they are Competent Persons according to the JORC Code for Reporting of Mineral Resources and Ore Reserves (2004).

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