



## Ponton Project: AEM Survey Identifies Deep Palaeochannel Uranium Targets

- Data from Ponton Airborne Electromagnetic (AEM) survey received.
- Late-time channels define deep broad palaeochannels below lake systems.
- Gold potential also identified in greenstone units north of Bombora.

Enterprise Metals Limited (“Enterprise” or “the Company”, ASX: “ENT”) wishes to announce that it has received AEM data from a survey flown over the Ponton Project on the SE margin of the Yilgarn Craton in WA. The data identifies broad, deep palaeochannels that the Company believes host uranium in a similar style to the nearby Double 8 Deposit held by Manhattan Corporation Ltd. (Refer Figure 1) Planning of an RC drilling program is in progress.

The Company’s Chairman, Dr Jingbin Wang, commenting on the results, said: *“the airborne survey has defined the deepest parts of the channels, which we expect to contain uranium mineralisation similar to Manhattan’s. The next step is to prove the existence of economic quantities of in-situ leachable uranium in these channels with RC drilling. I believe that the recently announced proposed demerger of the Company’s uranium projects into a uranium focussed company (Enterprise Uranium Ltd) and the public listing of this company will allow the market to properly value the uranium assets that Enterprise has assembled.”*

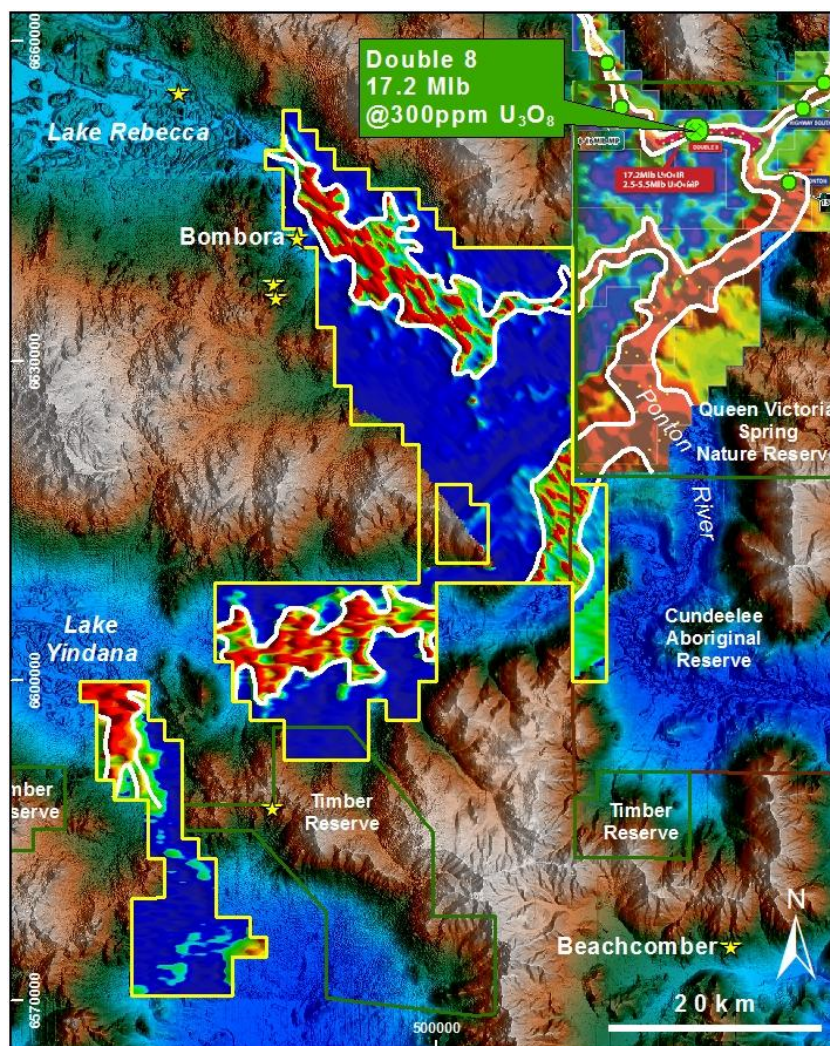


Figure 1. AEM Defined Paleochannels on DTM Image

NB. The areas in red define the deep channels prospective for uranium mineralisation.



## BACKGROUND

The Ponton Project is located approximately 130km east of Kalgoorlie and 680km east northeast of Perth. The Project covers the trunk drainage and tributaries of the Lake Rebecca and Lake Yindana drainage systems. Immediately east of Enterprise's Ponton Project tenements, these major drainages join to form the Ponton River, which empties into the western margin of the Eucla Basin. The Ponton Project comprises 5 exploration licence applications and covers an area of 1,216km<sup>2</sup>. The applications are anticipated to be granted in early September 2012.

Approximately 75% of the project area is covered by recent sediments of the lower reaches of the Lake Rebecca and Lake Yindana drainage systems. These salt lake systems are interpreted to overlie major palaeodrainages up to several kilometres wide and +100 metres deep, which have developed since the Cretaceous period over predominantly Archaean granitoid and greenstone basement. The basement greenstones comprise mafic and ultramafic rocks, with thin sediment units commonly within the stratigraphy.

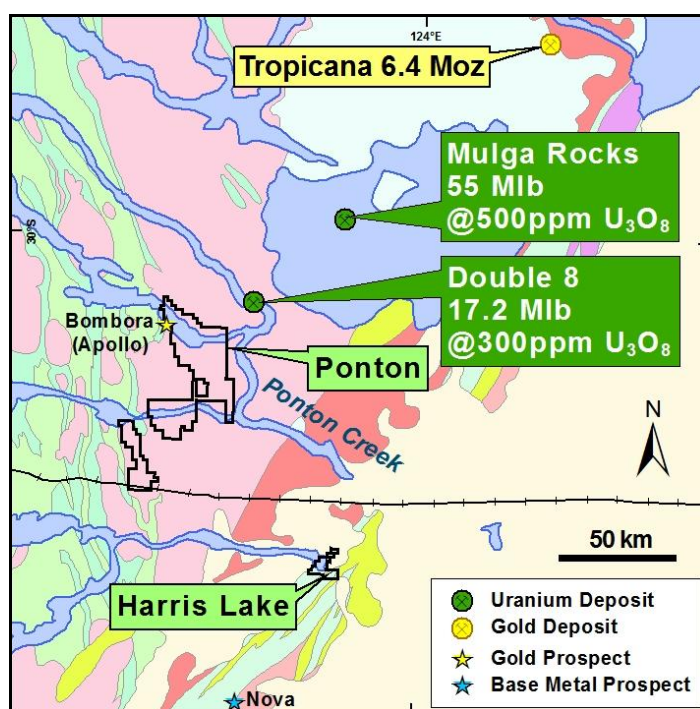


Figure 2: Enterprise's Ponton Project Tenements Over Geology

## URANIUM POTENTIAL

In SE Western Australia during the early 1970's, exploration for sandstone or roll front type uranium deposits within palaeochannels entering the Eucla Basin was undertaken by companies such as Uranerz and PNC. Using grid drilling, these companies discovered uranium deposits, including **Double 8** (now held by *Manhattan Corporation Ltd*) and **Mulga Rocks** (now held by *Energy and Minerals Australia Ltd*) at the base of the sedimentary profile, in contact with basement rocks. The uranium mineralisation was precipitated in areas where changes occurred from oxidizing to reducing conditions, and hosted in reduced channel sediments associated with carbonaceous trash or lignite.

Using airborne magnetic, radiometric and digital terrain data, Enterprise in 2011 identified a number of areas prospective for sand or sandstone hosted uranium deposits, occurring near the confluence of Lake Rebecca and Lake Yindana and the Ponton River.

In July 2012, Enterprise flew a 1,000m line spaced airborne electromagnetic (AEM) survey over the Project area, on the assumption that palaeodrainage systems within Enterprise's tenements were similar to those at Double 8 and Mulga Rocks, and airborne electromagnetics could pinpoint the base of these channels where uranium mineralisation had potentially accumulated.



# ENTERPRISE METALS LIMITED

Samples of several Conductivity Depth Images (CDI's) from the AEM data on the NW corner of the Company's tenement E28/2206 are shown below in Figure 3. The deepest channels are approximately 150m deep, and are targeted for RC drill testing.

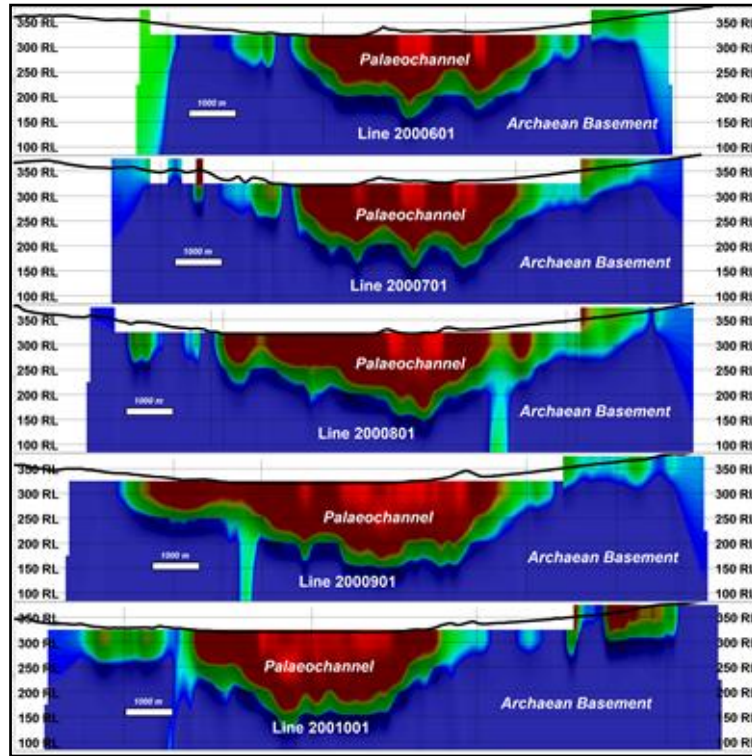


Figure 3: Ponton Project, Lake Rebecca, Sample of Conductivity Depth Images (CDI's).

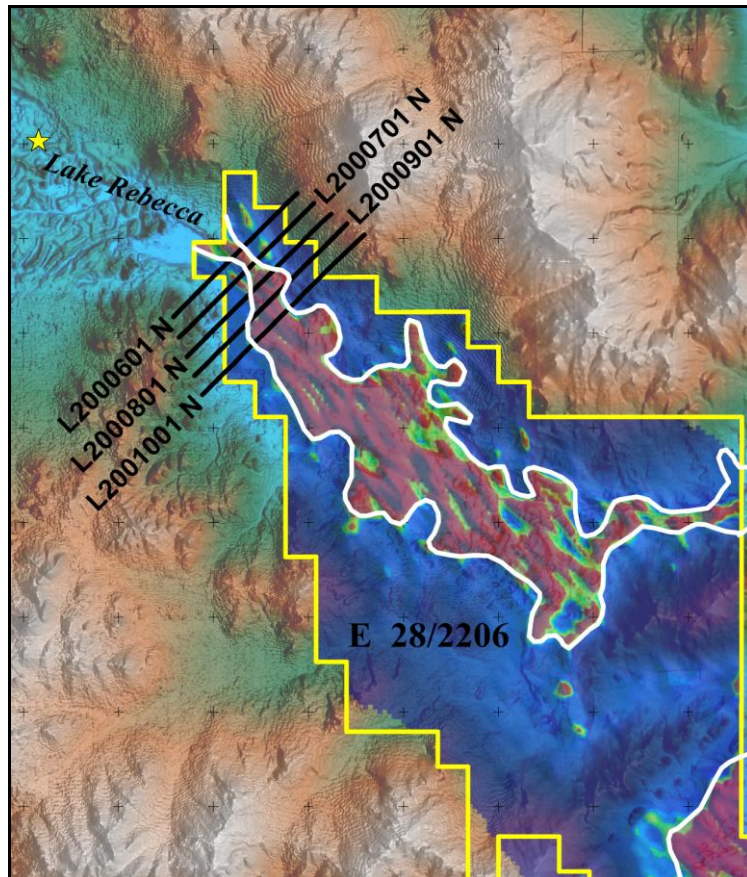


Figure 4: Ponton Project, Lake Rebecca E28/2206: Location of Sample CDI Lines



## GOLD POTENTIAL

During the period 1984 to 1990, BHP and Uranerz explored the Lake Rebecca chain of salt lakes. Shallow scout drilling across the channel by Uranerz intersected uranium values up to 150 ppm in thin carbonaceous clays and BHP intersected gold values of between 1 g/t and 2 g/t in the basal 1 to 2 metres of the channel.

A trial solution mining project was initiated by BHP to test the feasibility of recovering the gold without removal of the overburden, but was not scaled up due to problems with flooding on Lake Rebecca. Drill spoil was analysed by BHP for most economic metallic elements, but not for uranium. However, BHP's downhole gamma logs (no  $eU_3O_8$  calculations) showed distinct zones of radioactive anomalism typical of oxidised roll fronts within reduced sands (REDOX fronts).

The NW corner of Enterprise's E28/2206 contains the northern extensions of the greenstone belt hosting Apollo Consolidated Ltd's Bombora gold project. (Refer Figure 4 below) Enterprise will explore these greenstone units concurrently with its uranium exploration drilling program.

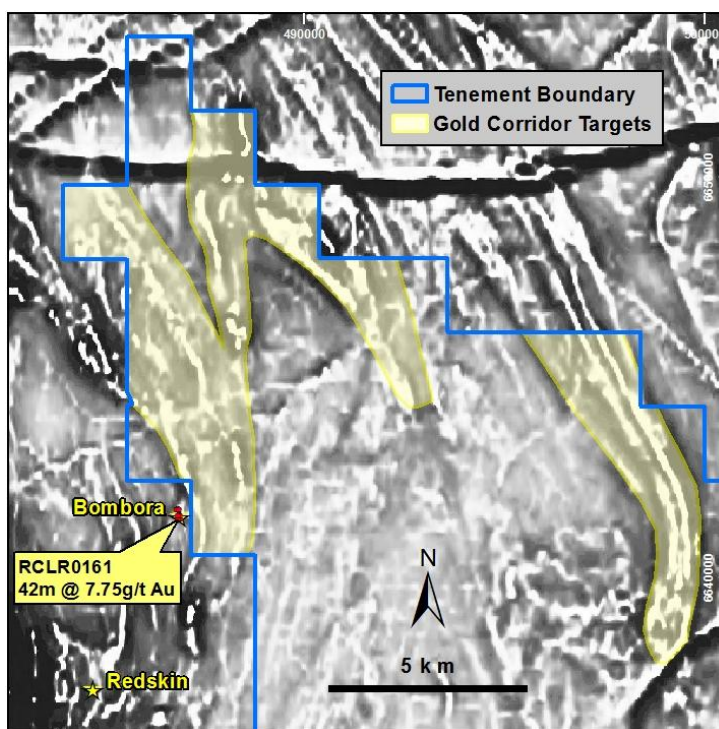


Figure 4: Ponton Project, Lake Rebecca E28/2206: Location of Greenstone Belts

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**Competent Persons statement**

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Trevor Saul, who is an employee of the Company. Mr Saul is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Saul consents to the inclusion in this report of the matters based on information in the form and context in which it appears.