

13 September 2010

The Manager Companies
ASX Limited
20 Bridge Street
SYDNEY NSW 2000

(4 pages by email)

Dear Madam

Exploration Update at Curnamona Project

Curnamona North Uranium Drilling Program

The 2010 drilling program at Callabonna Uranium Limited's ('Callabonna' or 'the Company') Curnamona North Project has been drawn to a close with a total of 55 drillholes completed since late May. The decision to close the program has been taken in part due to the ongoing delays caused by recent rain and also to enable the Company to evaluate results to date.

Appended to this announcement are the results of holes CUN46 to 80. None of the values exceed 100 ppm eU₃O₈, and are therefore not indicating significant mineralisation. We plan to assay some samples to check values and test for uranium equilibrium conditions, however the early conclusions are that the recent drilling program has been in a part of the basin where the main aquifers are not showing strong lateral REDOX contrasts. Mostly the sandstones are reduced and contain significant amounts of lignite. Vertical changes from oxidising to reducing conditions have been intersected within sands and at sand clay boundaries and some of these do have elevated values.

The focus of exploration activity in the Frome Embayment will shift to the Curnamona South Project and the western portion of our Curnamona North Project closer to the Beverley Uranium Mine and interpreted palaeo-channels which drain the highly radioactive Mt Painter Block (see Figure 1).

Drilling in the western portion of the Company's licences will require access around the southern end of Lake Callabonna, which, due to the unusually wet winter, is not likely until next year. The record recent rains mean that the ground is near saturation and any further rain will immediately impact access.

Curnamona South Airborne Electromagnetic Survey

The Company is party to the large regional Frome Airborne Electro-Magnetic ('AEM') Survey by way of funding infill flying over an area of 5,142 km² covering our Curnamona South Project. This survey is approximately 40% complete and due to flying delays (some also caused by weather) delivery of results are expected to be delayed to after November this year.

Callabonna will work with this AEM data over the summer month to conduct a complete interpretation of the survey to delineate the Tertiary aged palaeo-channels. A drilling program will be planned and permitted ready for commencement as early as possible in 2011. Following the highly successful trial of the faster and cheaper Aircore drilling on the Curnamona North Project it is likely this program would also be Aircore.

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Background

A large regional AEM survey covering the eastern half of the Frome Embayment is being funded as part of the Australian Government's Onshore Energy Security Program. AEM data are being acquired in areas considered to have potential for uranium or thorium mineralisation. The survey is part of the Airborne Electromagnetic Acquisition and Interpretation project designed to reveal new information about regions by acquiring the AEM data at broad line spacing over relatively large areas. The improved understanding of the regional geology resulting from the surveys will be of considerable benefit to mining and mineral exploration companies and Callabonna in particular which has the largest lease position in the survey area. This largely government funded survey is 35,000 line kilometres in total with line spacings of 5 kilometres.

Callabonna has agreed to contribute to the cost of infill flying over an area of 5,142 km² covering our Curnamona South Project areas. The line spacing over this area will be 2.5 kilometres and Callabonna will cover part of the cost of infill flying this area along with other lease holders in the area. The total survey is some 34,980 line kilometres of which Callabonna is funding 1,164 line kilometers of infill. Callabonna will have exclusive access to infill flying data over its projects for the first 12 months. Data was anticipated to be released to Callabonna in November following completion of quality assurance and control procedures.

AEM has been used extensively by Callabonna on its Curnamona North Project where it has been very successful in delineating palaeo-channels. These palaeo-channels are prospective for sandstone hosted uranium mineralisation of the type being exploited at Beverley and currently in development at Beverley Four Mile. This government funded regional survey offers Callabonna the chance to acquire detailed AEM data coverage over its extensive Curnamona South Project at very low cost. AEM offers the best regional targeting tool currently available for locating Tertiary aged sand filled channels which host the known uranium deposits within the highly prospective Frome Embayment.

Background information on the Frome Embayment (Callabonna Sub-Basin)

The Frome Embayment (or Callabonna Sub-Basin), is one of Australia's premier uranium provinces and host to the Beverley Uranium Mine and the 4 Mile, Oban, Honeymoon and Gould's Dam uranium deposits. Callabonna is the largest single lease holder in the Frome Embayment area with over 7,000 km² of lease area currently within both the Curnamona North and South Projects.

Yours sincerely



Stephen McCaughey
Managing Director

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The information in this report that relates to Exploration Results, Mineral Resources, or Ore Reserves is based on information compiled by Stephen McCaughey. Mr McCaughey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking. This qualifies Mr McCaughey 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 McCaughey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Equivalent uranium values presented here were calculated by David Wilson of 3D Exploration Pty Ltd. Mr Wilson is a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. All holes were logged with an Auslog A75 total count gamma tool. The gamma tool was calibrated in Adelaide at the Department of Water, Land and Biodiversity Conservation in calibration pits constructed under the supervision of the CSIRO. These calibration pits have been shown to provide calibration standards for drill hole logging tools that are comparable to those at the DOE facility in Grand Junction, Colorado USA. The gamma tool measures the total gamma ray flux in the drill hole. Readings are averaged over 2 or 5 centimetre intervals and the reading and depth recorded on a portable computer. The gamma ray readings are then converted to equivalent U₃O₈ readings by using the calibration factors derived in the Adelaide calibration pits. These factors also take into account differences in hole size and water content. The gamma radiation used to calculate the equivalent U₃O₈ is predominately from the daughter products in the uranium decay chain. When a deposit is in equilibrium, the measurement of the gamma radiation from the daughter products is representative of the uranium present. It takes approximately 2.4M years for the uranium decay series to reach equilibrium. Thus, it is possible that these daughter products, such as radium, may have moved away from the uranium or not yet have achieved equilibrium if the deposit is younger than 2.4M years. In these cases the measured gamma radiation will over or under estimate the amount of uranium present. The gamma radiation from the uranium daughter products measured at Curnamona Nth may not be in equilibrium due to one of the above factors. Callabonna Uranium Limited will be conducting further studies in subsequent drilling programs to determine if disequilibrium is present.

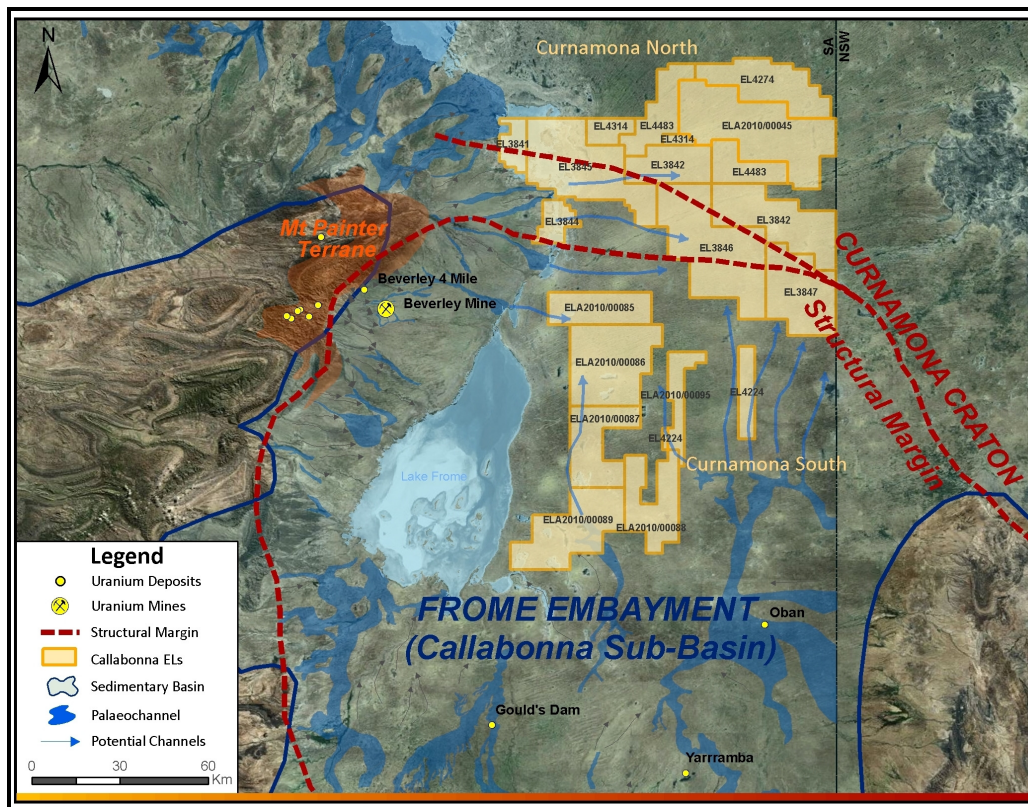


Figure 1: Location Map showing Callabonna's Curnamona North and South Projects in the Frome Embayment

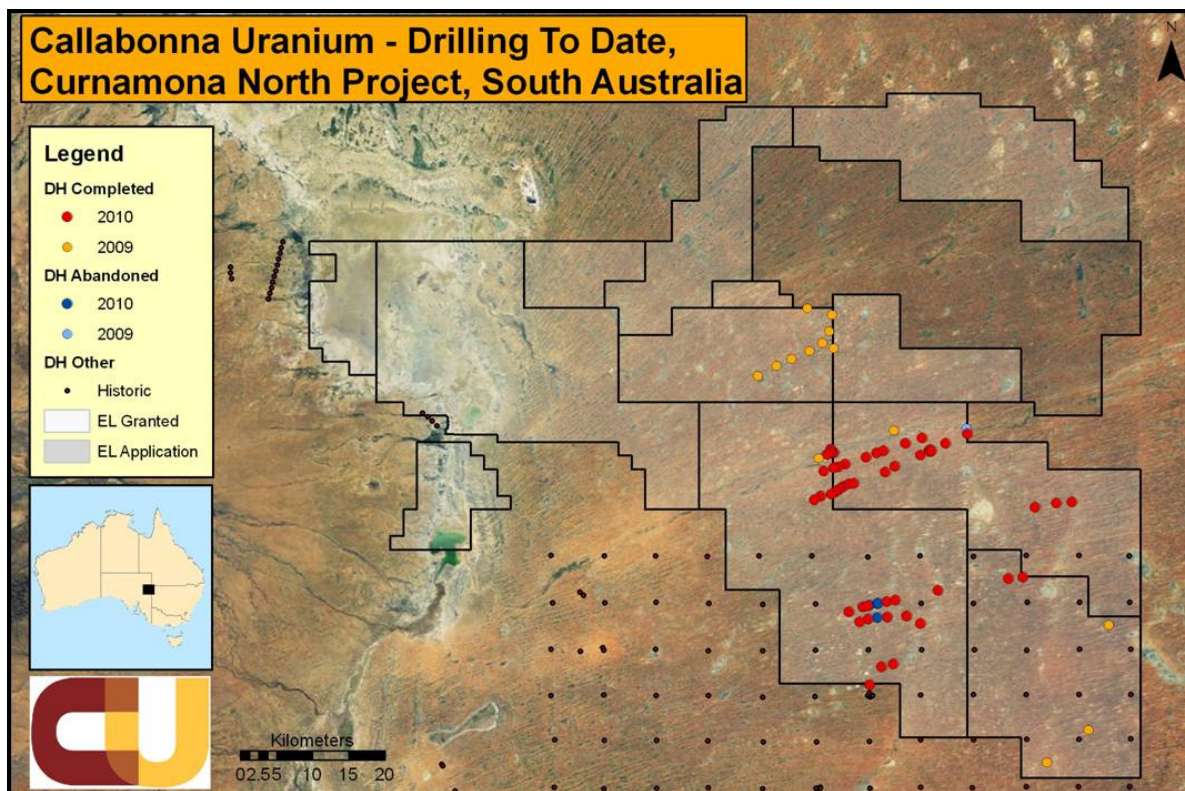


Figure 2: Curnamona North Project - Drill Hole Location Plan showing all holes drilled to date

Table 1: Peak eU3O8 results for Curnamona North Drilling

DHNAME	FROM_M	TO_M	eU3O8	eU3O8_Decon
CUN046	115.5	115.55	47	50
CUN046	115.55	115.6	51	50
CUN047	114.9	114.95	42	38
CUN047	114.95	115	36	38
CUN048	115.8	115.85	43	42
CUN049	48.6	48.65	38	32
CUN050	93.14	93.19	28	26
CUN050	93.19	93.24	25	26
CUN051	101.03	101.08	26	28
CUN052	27.53	27.58	26	24
CUN052	27.58	27.63	21	24
CUN064	40.97	41.02	25	24
CUN064	41.02	41.07	22	24
CUN065			(All Results Below 15ppm Deconvolved eU3O8 ppm)	
CUN066			(All Results Below 15ppm Deconvolved eU3O8 ppm)	
CUN067			(All Results Below 15ppm Deconvolved eU3O8 ppm)	
CUN068	112.24	112.29	48	49
CUN069	31.32	31.37	25	25
CUN071	111.14	111.19	25	28
CUN071	111.19	111.24	30	28
CUN071	111.24	111.29	25	28
CUN071	111.29	111.34	30	28
CUN071	111.34	111.39	23	28
CUN071	111.39	111.44	27	28
CUN071	111.44	111.49	29	28
CUN071	112.99	113.04	27	28
CUN072	108.82	108.87	19	18
CUN073			(All Results Below 15ppm Deconvolved eU3O8 ppm)	
CUN074			(All Results Below 15ppm Deconvolved eU3O8 ppm)	
CUN075	17.99	18.04	18	19
CUN075	18.04	18.09	22	19
CUN075	18.09	18.14	14	19
CUN075	18.14	18.19	13	19
CUN076	115.61	115.66	16	17
CUN076	115.66	115.71	18	17
CUN077	59.51	59.56	25	25
CUN078	123.12	123.17	22	20
CUN078	123.17	123.22	18	20
CUN078	123.22	123.27	14	20
CUN079	150.44	150.49	23	19
CUN079	150.49	150.54	15	19
CUN079	150.54	150.59	23	19
CUN080	84.27	84.32	22	17
CUN080	84.32	84.37	11	17
CUN080	84.37	84.42	18	17
CUN080	87.07	87.12	13	17