



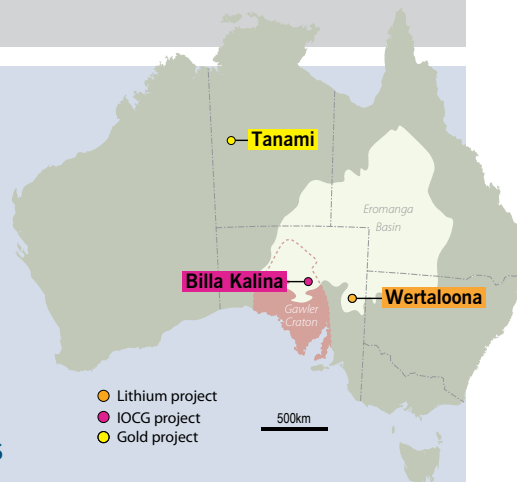
# ASX Announcement

20 JULY 2011

## EXPLORATION UPDATE

### Highlights

- Billa Kalina exploration status upgraded.
- Modelling depth of the Peeweena Dam IOCGU target is approximately 400 metres.
- Tanami field work strengthens gold, uranium and REE potential.
- Drilling at the Wertaloona Project encounters elevated levels of lithium.
- Chemical testing of shallow ground water distinguishes lithium pathfinder geochemistry.



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Sonic drilling at the Wertaloona Project, May 2011.



### BILLA KALINA PROJECT

*ERO earning 50% under the terms of the Billa Kalina JV from Maximus Resources Ltd in EL 4468 and ELAs 351/10, 350/10, 78/10 and 33/10*

*ERO Mining 100% in ELA 32/10*

ERO Mining Limited has upgraded the current status of the Billa Kalina Project as the joint venture partners anticipate the grant of a temporary Deed of Access (Exploration) from the WPA Coordination Office of the Department of Defence (Defence).

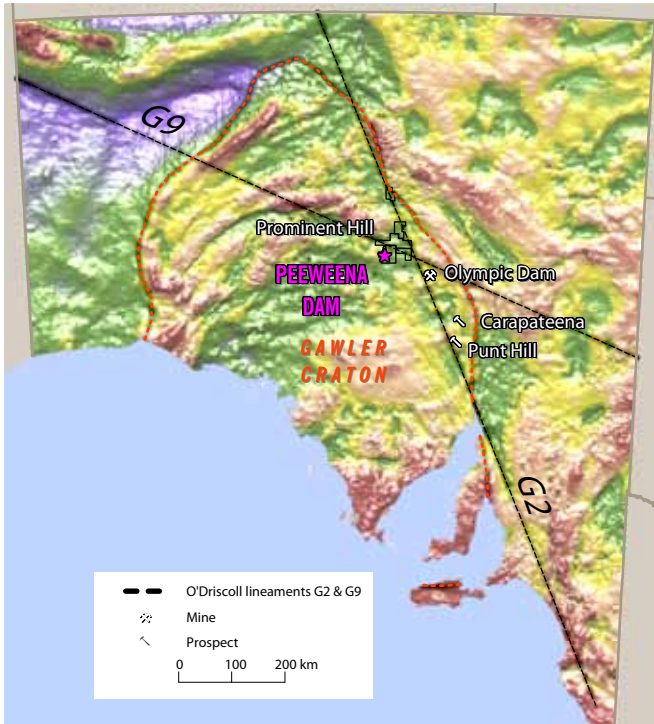
The temporary Access Deed shall be transitioned across to a new WPA permit system as soon as it is implemented.

The Peeweena Dam Gravity Anomaly (10 MGal) single point gravity anomaly was originally surveyed in 1969. This same survey identified the giant Olympic Dam deposits as a single point 14 Mgal anomaly, and the Prominent Hill as a 7 Mgal anomaly. Whilst the Peeweena Dam gravity anomaly had been identified by previous explorers access restrictions imposed by Defence prohibited further exploration of the anomaly until now. Modelling of the depth to the source of the gravity feature at a density within the range of other IOCGU mines in the region is approximately 400 metres deep.

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## Forward work

An initial gravity survey will be completed to confirm the single point gravity prior to the commitment to a drilling program.



Location of Peeweena Dam gravity anomaly in relation to IOCGU mines.

## TANAMI EXPLORATION

ERO Mining 100% in ELs 27806 and EL26625 and ELAs 27511, 27921, 27997, 27995 and 28493

### Talbot North

Field exploration activities within previously untested northern areas of the Talbot North tenement (EL26625) did not locate evidence for the presence of Tanami Complex rocks. The field team completed the collection of sixty Lag samples over areas mapped as prospective Tanami Complex.

Field exploration activities within the central and southern portions of the tenement confirmed the strike extensive ridge of Proterozoic Sandstone. The company considers as significant the discovery of a zone of discontinuous outcrop and subcrop of the basal portions of the Pargee Sandstone. The Pargee Formation had undergone significant brecciation and subsequent hematite dominated alteration. Surface mapping and sampling identified 600 metres of strike with widths of up to 2 metres. The company considers this zone and the Pargee Sandstone generally to be prospective for Rare Earth Elements and uranium.

Surface mapping and rockchip sampling (20 samples) over a known anomaly lying in the south of the tenement was conducted. The anomaly is considered prospective for uranium and occurs within the Cambrian overlying Antrim Plateau Volcanics. All surface rock chip and lag samples have been sent to be assayed for a suite of REEs, gold and uranium.



Brecciated and hematite in filled basal conglomerate of the Pargee Sandstone.



Ground traverse using a scintillometer.

## Forward work

The assay results from the field activities are expected to be received in late July 2011. Logistics planning has commenced for an initial regional drill test program. The aim of drilling is to identify areas of magnetite destructive zones indicative of gold mineralisation as occurs at the nearby 750,000 oz. Groundrush Gold Deposit in lenticular anastomosing zones of north–northeast-trending quartz veins associated with chloritic alteration.



## Suplejack

The recent field work confirmed the ease of access ahead of an airborne EM survey. The airborne EM survey has been designed to target uranium by locating areas of significant carbon bearing rocks in the Dead Bullock Formation within an unconformity related uranium deposit. A secondary target is gold of the Callie style beneath decarbonisation fronts.

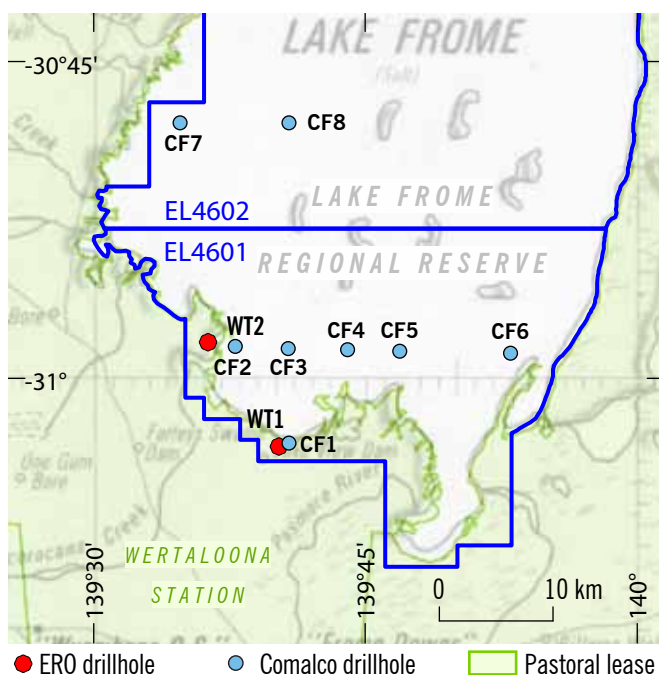
## WERTALOONA PROJECT

*ERO Mining 100% in ELs 4601 and 4602*

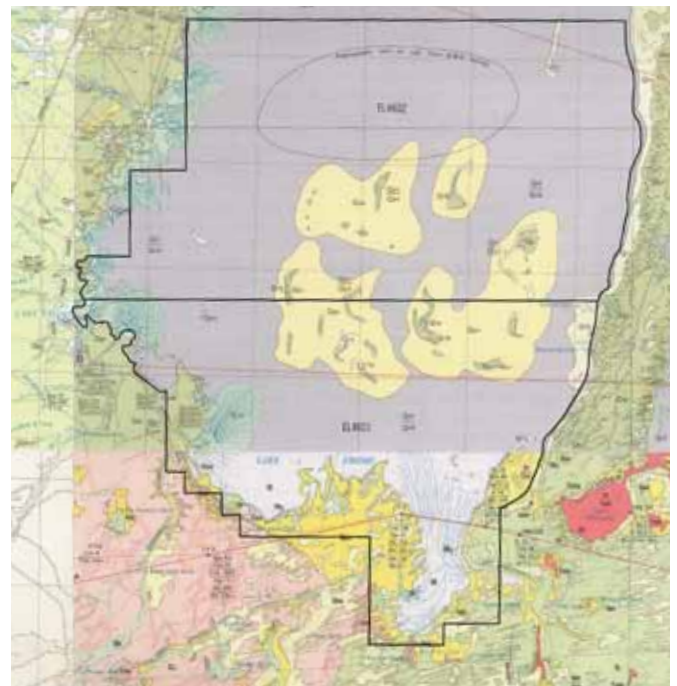
EL4601 is located at Lake Frome and covers an area of sediments eroded and leached from the exposed basement rocks in the nearby Flinders and Olary Ranges and transported to this major depositional basin. Past drilling in the lake in search of evaporite minerals intersected elevated lithium values in the southwest corner of Lake Frome. ERO concluded there was potential to further concentrate lithium within the lake's evaporites and brines. The first stage in evaluating this potential was to confirm the historic drilling results.

## COMALCO drillhole CF2

Previous exploration by COMALCO in the 1970s with nine reverse circulation drillholes (total 590m) returned lithium intercepts up to 250 ppm over 10 metre intervals. A number of cuttings samples from Comalco's original drillholes were located and retested for a range of other elements employing modern analytical techniques. Drillhole CF2 was recovered and retested drill cutting samples (depth 76 m) confirms anomalous lithium concentrations up to 100 ppm (see table, over). The company believes differences in a comparison between the results are due to the improvement in analytical techniques since the 1970s.



Location of ERO and Comalco drillholes on ERO Mining's project area.



BMR survey over Wertaloona Project.

## ERO drillhole WT2

Drillhole WT2 was sonic drilled to a depth of 150.3 m through 149 m of Cainozoic sediments and terminated in Cretaceous mudstone. Of this 149 m thick Cainozoic sediment, 114 m, from 35 m to 149 m is considered to be clay dominated Namba Formation with minor interbedded sand units acting as low flow aquifers. Only the top 3.2 m was mostly salt lake gypsiferous clayey sand sediments. This was underlain by a thin alluvial stream deposit of 0.6 m and 35 m of undifferentiated ferruginous clay.

The salt lake gypsiferous mixed clay sand sediments were not water bearing. The thin interbedded sand units within the Namba Formation were not brine bearing aquifers. No Eyre Formation units were noted within the drillhole with the Cretaceous basement palaeo-topographical high pinching out the Eyre Formation at this locality. Four acids digest analysis of the samples revealed lithium (Li) levels up to 69 ppm at 27 m. Uranium (U) test results did not go above background levels with a high of 6 ppm at 133 m.

## Shallow groundwater sampling Wertaloona Lowlands

The results from the groundwater sampling program completed have been received by the company and evaluated. A total of thirty one (31) shallow groundwater sources including established wells and water bores were sampled over Wertaloona Station to test for lithium (Li) including pathfinder geochemistry of potassium (K), magnesium (Mg), boron (B), calcium (Ca) and sodium (Na) to assist planning future exploration programs. This process is on-going however test results showed above background lithium (li greater than 0.17 ppm @ 3.5% salinity) and boron (B greater than 4.5 ppm @ 3.5% salinity) concentrations. The highest concentrations occurred within the aquifers

**Table of concentrations (ppm) for WT2 and CF2 samples**

ERO WT2		COMALCO CF2			
Depth (m)	Lithium (ppm)	Located CF2 Cuttings Depth (m)	Retested CF2 Cuttings Lithium (ppm)	Depth (m)	Lithium (ppm)
0-2	nr	0-2	14.6		
2-3	nr				
3-4	nr	2-4	29.3		
4-5	15.8				
5-6	10.6	4-6	48.8		
6-7	23.2				
7-8	23.1	6-8	45.3		
8-9	20.2				
9-10	23.9	8-10	62.6	0-10	250
10-11	27.4				
11-12	38.9	10-12	62.0		
12-13	40.3				
13-14	39.1	12-14	68.2		
14-15	34.1				
15-46	30.3	14-16	87.0		
16-17	43.8				
17-18	43.0	16-18	86.1		
18-19	33.6				
19-20	39.2	18-20	91.9	10-20	30
20-21	48.9				
21-22	55.6	20-22	83.6		
22-23	59.2				
23-24	58.7	22-24	80.3		
24-25	56.4				
25-26	61.8	24-26	99.4		
26-27	65.1				
27-28	69.2	26-28	86.6		
28-29	63.7				
29-30	65.0	28-30	88.1	20-30	100
30-31	64.3				
31-32	47.1	30-32	44.2		
32-33	55.3				
33-34	61.9	32-34	25.9		
34-35	54.1				
35-36	40.6	34-36	22.5		
36-37	38.3				
37-38	36.7	36-38	11.8		
38-39	34.6				
39-40	26.2	38-40	10.2	30-40	200
40-41	15.5				
41-42	20.8	40-42	15.0		
42-43	14.9				
43-44	17.6	42-44	16.4		
44-45	21.2				
45-46	14.3	44-46	16.6		
46-47	12.4				
47-48	17.7	46-48	19.9		
48-49	17.3				
49-50	17.9	48-50	22.6	40-50	100
50-51	16.5				
51-52	16.9	50-52	18.5		
52-53	19.5				
53-54	14.9	52-54	29.2		
54-55	13.6				
55-56	16.6	54-56	10.2		
56-57	17.8				
57-58	16.1	56-58	14.3		

ERO WT2		COMALCO CF2			
Depth (m)	Lithium (ppm)	Located CF2 Cuttings Depth (m)	Retested CF2 Cuttings Lithium (ppm)	Depth (m)	Lithium (ppm)
58-59	16.3				
59-60	25.9	58-60	23.9	50-60	250
60-61	26.7				
61-62	29.1	60-62	28.8		
62-63	15.0				
63-64	15.8	62-64	13.1		
64-65	16.1				
65-66	21.1	64-66	15.5		
66-67	19.9				
67-68	19.5	66-68	14.4		
68-69	14.4				
69-70	15.7	68-70	14.8	60-70	250
70-71	23.0				
71-72	21.2	70-72	19.7		
72-73	23.3				
73-74	22.9	72-74	22.6		
74-75	19.9				
75-76	24.9	74-76	6.6		
76-150	8.0 to 39.5	End of hole		70-80	200

recharging the depositional sink adjacent the lake margin. Whilst these were not brine bearing aquifers potassium levels of 50 to 60 ppm were obtained.

## Brines

A review of the geochemistry of Lake Frome reported by the Bureau of Mineral Resources in 1976 shows that the lake covers about 2,700 km<sup>2</sup> and at its lowest point in the south central part of the lake is approximately 2 m below sea level. At the time of that study it was noted that a salt crust up to 20 cm thick was present in the centre of the lake and that surface and subsurface water was hypersaline and characterised by high concentrations of sodium and chloride ions.

The BMR study showed in a broad based sampling of subsurface brines that absolute values of lithium ranged from 6.6 to 24 mg/l (approximately ppm). The study suggested lithium was concentrating in the brine.

## Forward work

The CF2 results analysed in combination with WT2 drill results and the Wertaloona Station water sampling program have considerably assisted strategic planning for future lithium, evaporites and uranium mineral exploration within the tenement areas. The company intends to broaden the search for brines from the lowlands where no brines have been encountered to the south central part of the lake (EL4602) where there is a well-developed evaporites crust and hypersaline near surface brines. Once access has been gained to the lake a program of drilling and trenching will be used to assess the quality (Li, K, B and Mg) and quantity of the brines.



**Shane Gale**  
Chief Executive Officer

20 July 2011

## Disclaimer

*This document may contain forward looking statements that are subject to risk factors associated with the exploration and mining industry.*

*It is believed that the expectations reflected in these statements are reasonable, but they may be affected by variables which could cause actual results or trends to differ materially.*

*The information in this document that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Stephen Hogan (who is a Member of the Australasian Institute of Mining and Metallurgy) and Mr Llyle Sawyer (who is a Member of Australian Institute of Geoscientists). Mr Hogan is Exploration Manager of the Company and Mr Sawyer is a geologist employed by Geos Mining, whom are independent consultants to the Company. Each has sufficient experience that is relevant to the style of mineralisation and types of deposits under consideration and for the activity he 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 (the JORC Code). Mr Hogan and Mr Sawyer consent to inclusion of the information in this document in the form and context in which it appears.*

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Further information relating to ERO Mining Limited and its various exploration projects can be found on its website: [www.eromining.com](http://www.eromining.com)