

**ILUKA**

Australian Securities Exchange Notice

28 January 2011

ADDITIONAL EUCLA BASIN BROWNFIELD RESOURCE

Iluka Resources Limited ("Iluka") announces an Inferred Mineral Resource for the Atacama heavy mineral ("HM") deposit in the Eucla Basin, South Australia. Atacama is located approximately 9 kilometres north east of the company's Jacinth-Ambrosia mining and concentrating operations (Figure 1). The resource addition is an encouraging result in Iluka's brownfield exploration efforts in the Eucla Basin and represents a potential brownfield tie-in opportunity to the Jacinth-Ambrosia infrastructure.

The discovery provides an Inferred Resource of 3.3 million tonnes of HM, estimated in accordance with the guidelines outlined in the JORC Code (2004) for the reporting of Exploration Results, Mineral Resources and Ore Reserves.

The resource estimate will form part of Iluka's 2010 Mineral Resources inventory (planned for release in February 2011), as will the company's earlier Typhoon resource addition of 1.3 million tonnes of HM.¹ Compared to the mineral resource inventory at the end of 2009, this new Inferred Resource for Atacama and inclusive of Typhoon¹, represents an approximate 46 per cent increase in the total Mineral Resource position in the Eucla Basin, as at the end of 2010. Unlike the current resource base, dominated by the Jacinth and Ambrosia deposits which have a combined zircon assemblage of approximately 50 per cent, the new resource additions are ilmenite-dominated with an ilmenite assemblage of 75 per cent and a zircon assemblage of 15 per cent (refer Table 1).

Peter Benjamin, Iluka's General Manager of Exploration and Geology stated: "The brownfield component of Iluka's exploration effort in the Eucla Basin has now confirmed the presence of several moderate grade mineralised strands in close proximity to the company's Jacinth-Ambrosia operation. The outcomes to date provide further confirmation of the high level of regional prospectivity for mineral sands on Iluka's tenements. Work is planned in 2011 to further assess the Atacama deposit and potential extensions, including test work to determine the ability for ilmenite to be utilised as a feed source in the company's synthetic rutile production process. This work is in addition to an extensive greenfield exploration programme which includes a large radiometric and aeromagnetic survey over 8,200 square kilometres, which commenced in late 2010."

Information on the Atacama Deposit

The Atacama deposit is located approximately 200 kilometres north west of Ceduna and approximately 9 kilometres north east of Jacinth-Ambrosia, on EL 3742 (100 per cent Iluka owned).

At a 3 per cent HM cut-off grade, the Atacama deposit is approximately 7 kilometres long, 400 metres to 3 kilometres wide, 1.5 metres to 18 metres thick and is located beneath 5 metres to 42 metres of sedimentary overburden. The entire Atacama resource lies above the water table. The mineralisation narrows at either end of the drill grid and it remains open to the north and south.

¹ Refer Iluka ASX release - Typhoon Resource Estimate, 15 July 2010.

Grid based drilling conducted during 2010 has provided data for geological modelling of the deposit. From this an Inferred Mineral Resource estimate has been prepared, comprising 29.2 million tonnes of mineralised material including 3.3 million tonnes of HM above a cut-off grade of 5 per cent HM. The Atacama deposit has combined ilmenite and leucoxene of 75 per cent and zircon content of 15 per cent with the average sizing for the HM at approximately 105 microns. The clay content is low at 7 per cent. The summary resource estimate is presented in Table 1 below and a discussion of the resource modelling is presented in Attachment 1.

Table 1 May 2010 Atacama Mineral Resource (>5% HM cut-off grade)

Mineral Resource Category	Material Tonnes (Million)	In Situ HM Tonnes (Millions)	HM (%)	Clay (%)	HM Assemblage		
					Ilmenite * (%)	Zircon (%)	Rutile (%)
Inferred	29.2	3.3	11.3	7	75	15	2

* Includes leucoxene, which is a high grade titanium feedstock

The resource estimation was based on samples collected from infill drilling of the deposit. This was completed on eight drill sections spaced approximately every 1000 metres, using vertical holes at 100 metre to 400 metre spacing across the width of the deposit. All samples used in the resource estimate were collected at 1.5 metre intervals down hole.

Further details on the preparation of the resource estimate are presented in Attachment 1.

Investment market and media inquiries:

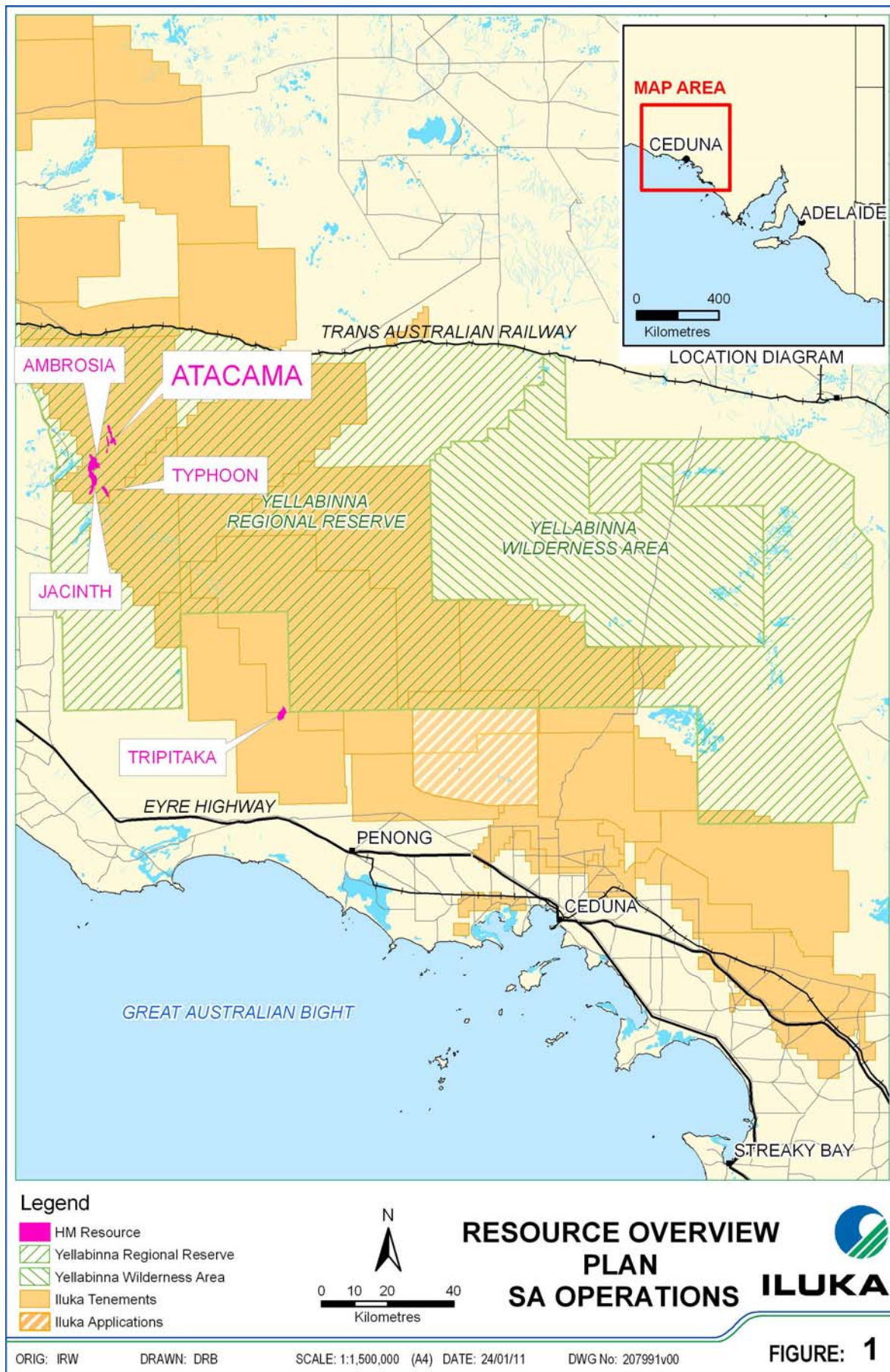
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Figure 1 Location of the Atacama Resource, Eucla Basin, South Australia



Attachment 1 – Atacama Inferred Mineral Resource

Background

The Atacama deposit is located from 9 kilometres to approximately 17 kilometres north east of Iluka's Jacinth-Ambrosia mineral sands mining and concentrating operations in South Australia. Atacama was discovered during Iluka's brownfield exploration programme in 2010 (Figures 1 and 2). The programme targets mineral sands deposits that may be able to utilise existing infrastructure and potentially extend the current life of mine.

The Atacama deposit is hosted in unconsolidated aeolian dune and underlying beach sands within the Ooldea Range. The geological character of Atacama is similar to the nearby Jacinth and Ambrosia deposits, containing no significant clay or rock and situated above the water table.

Two drill sections are presented in Figure 3 and 4; showing 1 per cent, 3 per cent and 5 per cent mineralised boundaries and a summary of significant drill intersections greater than 5 per cent HM appear in Table 2.

Work was conducted during 2010 to prepare a Mineral Resource estimate in accordance with the JORC Code (2004). The current resource estimate will be included as part of Iluka's Mineral Resource inventory as of 2011.

The infill drilling of the deposit was undertaken using vertical NQ diameter air core drilling, with holes from 100 metres to 400 metres apart across strike, drilled on 8 lines approximately 1000 metres apart along strike. Down hole sampling was conducted at 1.5 metre intervals and samples were selected for assay on the basis of visual estimates of greater than 0.5 per cent HM.

Drill hole collar co-ordinates at Atacama have been recorded utilising hand held GPS equipment. The QA/QC data from 2010 drilling and sampling programmes was assessed as part of the resource estimation process, and this included exploration blind standards, laboratory standards and field and laboratory duplicate analyses. Samples collected in the field were transported to Iluka's Hamilton laboratory where they were analysed using company standard heavy media separation (Lithium Heteropolytungstate) at a density of 2.85 grams per cubic centimetre) for HM. Clay and oversize fractions were screened at sizes of minus 53 micron and plus 2.0 millimetre respectively.

Mineral assemblage data was obtained by compositing the sand fraction (plus 53 micron to minus 2.0 millimetre) of samples from similar geological horizons, recovering the HM over a Wiffley table and then conducting a magnetic separation (Permroll Magnet), heavy media fractionation (Thallium Malonate Formate 3.85 to +4.38 grams per cubic centimetre) and X-ray Fluorescence analysis.

Geological Modelling

A geological resource model has been prepared for the Atacama deposit using Datamine Studio mining software. Geological interpretations used to constrain the modelling were prepared by company geologists. The resource estimate was derived from a 3 dimensional block model constructed using geological and mineralogical domain constraints as per normal company practice. Industry standard block estimation techniques (Inverse Distance weighting) were used to interpolate grades into the model. The bulk density for the resource was estimated using the Iluka standard bulk density formula based on operational experience gained from mining this style of mineralisation.

Model cells were sized appropriately to provide a balance between representative geological and grade continuity and geostatistical volume variance.

The estimation of the mineral resource tonnes and grade was undertaken using a cut-off of 5 per cent HM and based on:

- statistical evaluation of the HM strand sample data;
- current operational practices for dry mining and concentrating HM strand mineralisation;
- consideration of mineralisation thickness vs. overburden ratios;
- the potential mining and extraction methodology; and
- the reasonable prospects for eventual economic extraction as determined by the Competent Person.

A conservative cut-off grade of 5 per cent HM was used for reporting the Atacama Mineral Resource estimate which takes into consideration the potential impact of the stripping ratio (low grade mineralised waste) and the ilmenite dominated assemblage. At a cut-off grade of 3 per cent HM, the resource estimate is considerably larger as indicated in Figure 2 and this represents potential upside to the resource.

The Atacama resource has been classified as Inferred, and reported in accordance with the JORC Code guidelines (2004), based on:

- drill hole spacing and sampling density;
- established geological continuity; and
- the level of confidence in the HM and mineralogical grade continuity established by the Competent Person

The description of the resource estimation is based on information compiled by Iluka staff under the review of Ian Warland who is a member of The Australasian Institute of Mining and Metallurgy and a full time employee of Iluka. Ian Warland has sufficient experience which is relevant to this style of mineralisation to qualify as a Competent Person as defined in the 2004 Edition of the JORC Code and consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

Figure 2 Atacama Resource Outline and Drill line Locations, Eucla Basin, South Australia

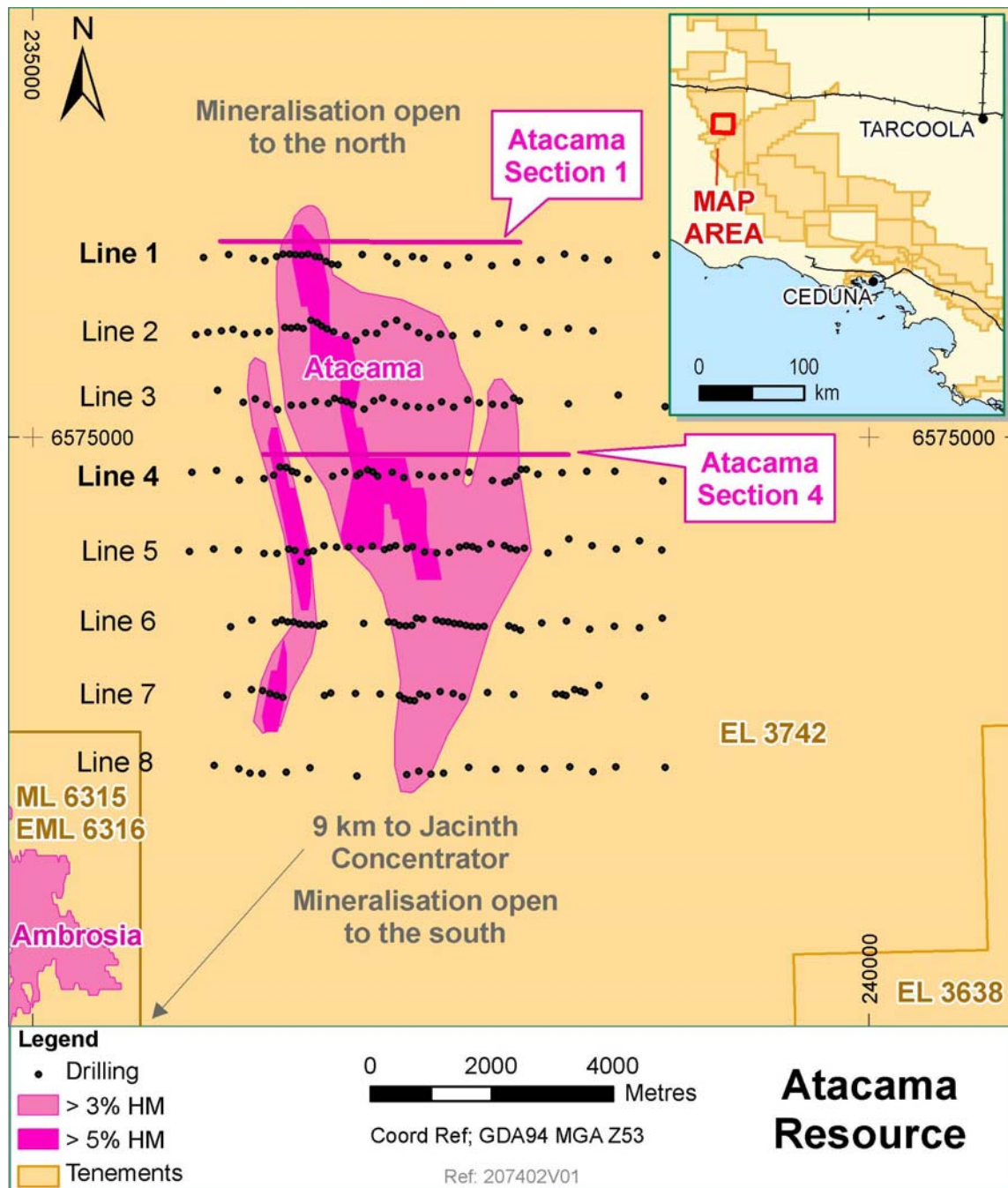


Table 2 Summary Results from Intersections with >5 per cent HM from Drilling on Lines 1 and 4

Hole ID	From (metres)	To (metres)	Interval (metres)	HM (%)	Clay (%)
Line 1					
AT0118	34.5	36.0	1.5	13.7	9
AT0119	34.5	36.0	1.5	5.3	7
AT0120	24.0	27.0	3.0	21	7
AT0120	39.0	40.5	1.5	6.5	7
AT0121	19.5	21.0	1.5	8.0	10
AT0128	22.5	27.0	4.5	17.4	10
AT0129	42.0	43.5	1.5	5.4	5
AT0130	33.0	36.0	3.0	22.0	9
Line 4					
AT0021	28.5	30.0	1.5	7.9	10
AT0026	34.5	40.5	6.0	6.3	6
AT0027	39.0	45.0	6.0	18.3	6
AT0028	43.5	46.5	3.0	6.3	7
AT0029	45.0	57.0	12.0	7.7	9
AT0030	49.5	51.0	1.5	18.9	9
AT0031	52.5	55.5	3.0	11.4	8
AT0032	49.5	52.5	3.0	6.3	10
AT0033	48.0	49.5	1.5	5.4	4
AT0037	49.5	52.5	3.0	9.2	10
AT0038	51.0	52.5	1.5	8.3	4
AT0139	54.0	60.0	6.0	21.4	9
AT0140	42.0	49.5	7.5	10.3	8
AT0141	34.5	40.5	6.0	9.3	5
AT0143	40.5	48.0	7.5	16.5	10

Figure 3 Summary Drill Section through the Atacama Prospect (Line 1)
Highlighting the >5 per cent HM core within the > 3 and >1 per cent HM deposit envelope

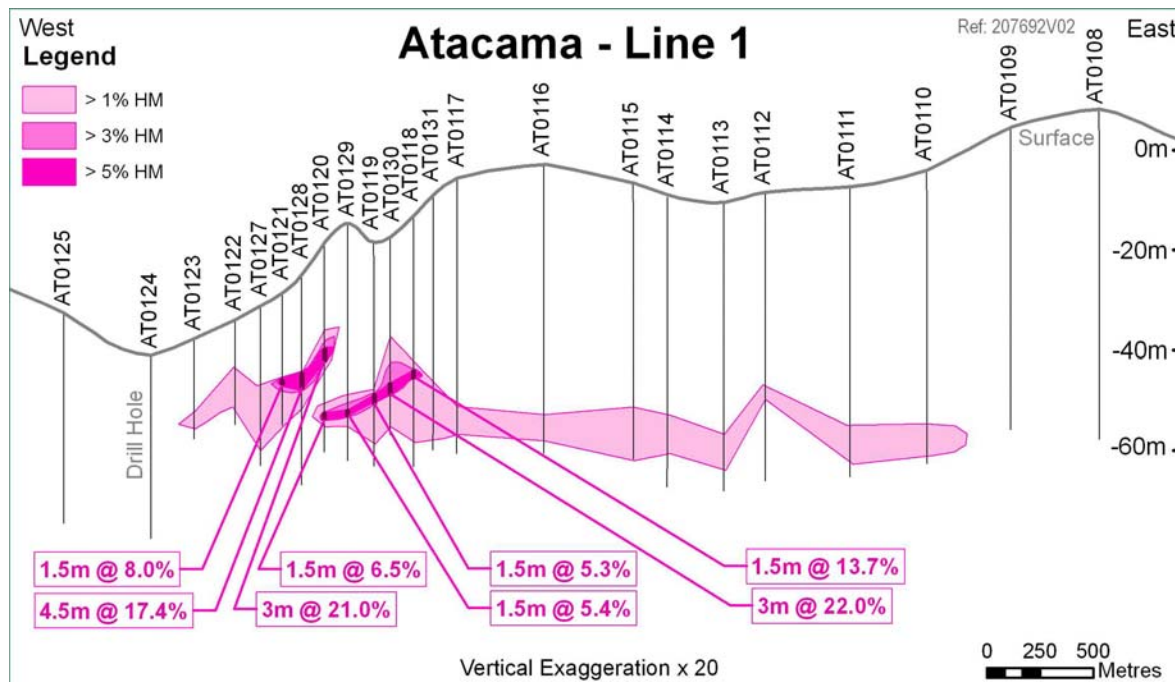


Figure 4 Summary drill section through the Atacama Prospect (Line 4)
Highlighting the >5 per cent HM core within the > 3 and >1 per cent HM deposit envelope

