



Jabiru Metals LIMITED

6 September 2004

The Manager
Company Announcements Office
Australian Stock Exchange Limited
PO Box H224 Australia Square
SYDNEY NSW 2000

Dear Sir

JAGUAR HIGH GRADE DRILL RESULTS

The Directors of Jabiru Metals Limited (formerly Pilbara Mines Limited) are pleased to report on follow-up drilling of the massive sulphide mineralisation intersected at the Jaguar Project previously reported on 5 August 2004 and to provide definition of a new upgraded resource model for the Bankable Feasibility Study.

Highlights

- Follow-up drilling of the two high grade metallurgical holes has encountered further high grade copper/zinc intersections.
- Hole TBD254A has intersected **6.6 metres downhole of 5.54% copper, 10.51% Zinc, 0.81% lead, 190g/t silver.**
- Hole TBD254A also intersected 23.73 metres downhole stringer mineralisation with **8 metres of 4.13% copper including 1 metre of 11.2% copper.**
- Holes TBD253 and TBD256 have intersected narrow high grade massive sulphide confirming the continuity of the interpreted resource model and position of the multiple footwall lenses.
- The drilling has confirmed that the footwall lenses are much more extensive than originally proposed.
- High grade resource extension at the top of the orebody will improve early cash flows for the Project.
- Two additional holes are planned for completion by October 2004 to provide definition of the multiple lense boundaries and calculation of a new resource incorporating the reinterpreted model, assays and specific gravities.

Resource Definition Drilling Details

Hole TBD254A was designed to test the postulated position of the post mineralisation fault and the northern extent of the significant massive sulphide mineralisation intersected in the metallurgical holes TBD252 and TBD252W. A 6.6 metre interval of high grade (5.54% Cu) massive sulphide was intersected. This appears to be a continuation of the footwall lens which also appears in TBD223. A partial re-log and re-interpretation of the core in this area of the Jaguar deposit has shown that the footwall lenses could be more extensive than originally inferred. Further drilling is being undertaken to test this interpretation.

The re-assessment of the Jaguar mineralisation as a result of the significant intersections encountered in the metallurgical holes TBD252 and TBD252W has resulted in a further program of diamond drilling. The intent of this drilling is to define the extent of the thick intersections around TBD252, to test an improved geological/mineralisation model, and to complete some infilling to upgrade the resource by converting inferred resources to indicated resources.

Hole TBD253 was designed to infill a gap in the drilling of the upper portion of the southern block of the Jaguar orebody. It was expected to be a relatively thin intersection if the new interpretation of the intersection was correct. The intersection of 1.54 metres of massive sulphides confirmed the geological interpretation.

Hole TBD255 was drilled to define the lower extent of the southern portion of the Jaguar orebody. This hole intersected a thin chert horizon at the expected plane of the orebody better defining the location of the southern block of Jaguar.

Hole TBD256 was drilled to help determine the extent of the postulated footwall lenses in the vicinity of TBD0254A. It intersected an upper high grade zone (estimated at 5-8% Cu and 12-15% Zn) and a second lower grade massive sulphide zone. Results for assays of the massive sulphide zones are awaited.

Details of the intersections are as follows:

Hole No	East*	North*	Dip	Az*	From	To	Width**	Cu %	Zn %	Pb %	Ag g/t
TBD253	9582	55946	-61.5	089	429.37	431.03	1.66	2.41	14.1	0.26	85
TBD254A	9570	56053	-52	091	411.00	417.60	6.60	5.54	10.51	0.81	190
TBD255	9579	55898	-77	088							
TBD256	9570	56094	-57	090	448.18	449.61	1.43				
					470.70	472.70	2.00				

Note: *Local Grid
**Core Length

The current program has demonstrated that the footwall lenses are much more extensive than originally proposed and the updated geological/mineralisation model provides a clearer interpretation of the features noted in the drilling.

As well as the massive sulphide main and footwall lenses in these upper level holes, a strong copper-rich stringer zone has been intersected. In TBD254A the stringer zone occurred from 440.85 to 464.58 metres with copper grades peaking at 11.2% Cu over 1 metre. From 441 to 449 metres the average grade is 4.13% Cu. Zones of high grade zinc are also evident. Further evaluation of this potential resource is required.

A new resource will be calculated after completion of the current drilling program. The drilling and assaying of the core should be completed in October 2004 allowing a new resource, incorporating the reinterpreted model, assays and specific gravities, to be calculated.

Yours faithfully
Jabiru Metals Limited



Gary Comb
Managing Director

Attachment: Jaguar Long Section

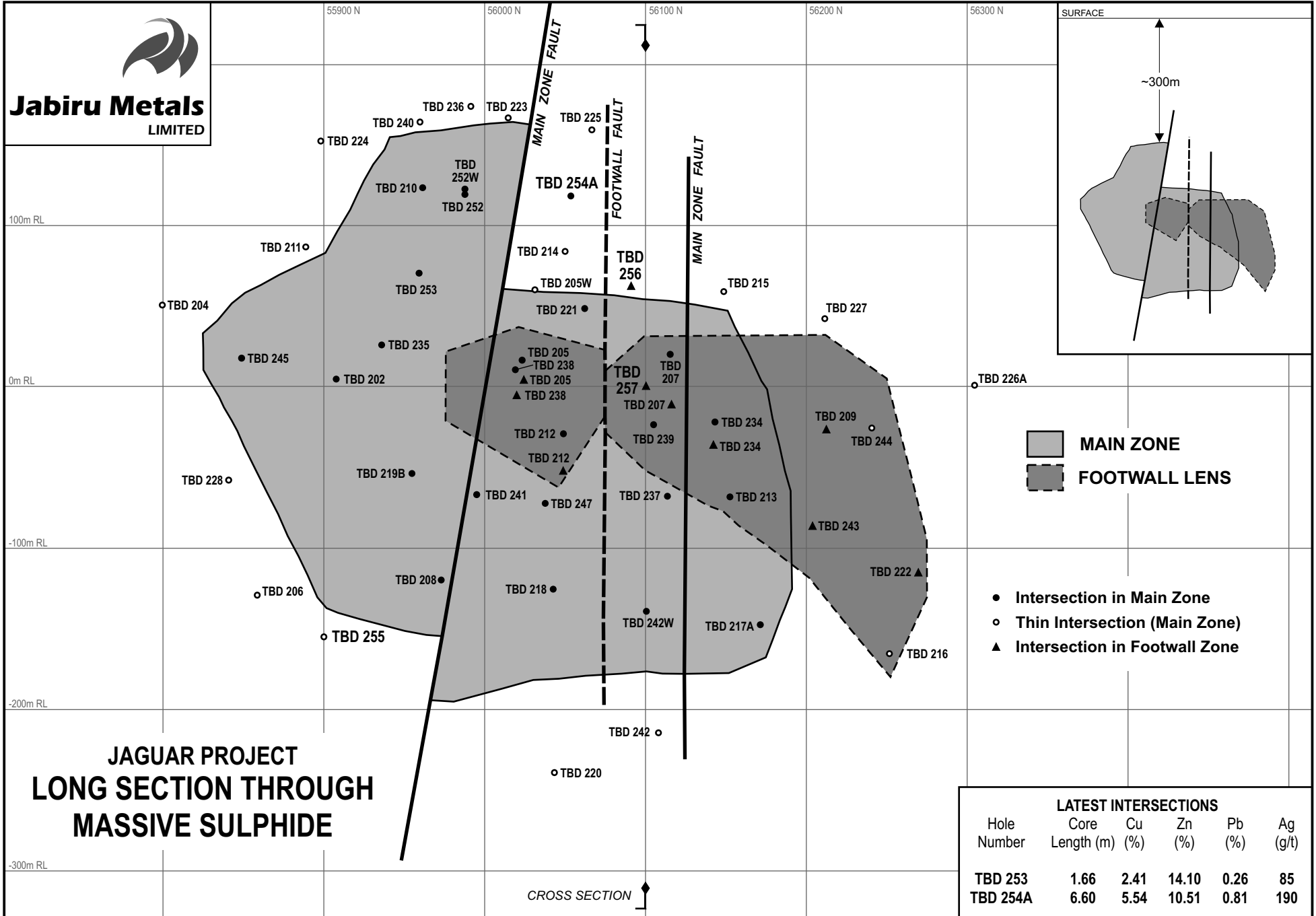
ASX_JML_6Sept2004

Note:

This information, so far as it pertains to Ore Reserves or Identified Mineral Resources is based on and accurately reflects, information compiled by members of the Australasian Institute of Mining and Metallurgy and/or the Australian Institute of Geoscientists, each of whom has had at least five years relevant experience in relation to the mineralisation being reported on to qualify as a Competent Person as defined in the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves.



Jabiru Metals
LIMITED



**JAGUAR PROJECT
LONG SECTION THROUGH
MASSIVE SULPHIDE**

- Intersection in Main Zone
- Thin Intersection (Main Zone)
- ▲ Intersection in Footwall Zone

Hole Number	LATEST INTERSECTIONS				
	Core Length (m)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)
TBD 253	1.66	2.41	14.10	0.26	85
TBD 254A	6.60	5.54	10.51	0.81	190

FIGURE 1