

QUARTERLY ACTIVITY REPORT FOR THE QUARTER ENDING 31 MARCH 2004

HIGHLIGHTS

- Jaguar Bankable Feasibility Study results confirm scoping study projections.
 - Geotechnical studies – positive results indicate that extraction of up to 95% of the resource can be expected.
 - Metallurgical studies indicate good recoveries of Cu, Ag and Zn concentrate grades.
 - Title and environmental issues proceeding satisfactorily.
- Pilbara has purchased the Cadjebut treatment plant, powerhouse and camp for \$1.4 million.
- Joint Venture partner, Inmet, is returning to site during first week of May 2004 to begin a follow-up diamond drill program targeting strong downhole EM conductors.
- Pilbara sold 3.1 million PowerTel shares for \$2.93 million to fund the purchase of the Cadjebut plant and working capital.

JAGUAR BANKABLE FEASIBILITY STUDY (100% PILBARA)

The upgrade of the Jaguar Scoping Study to a full Bankable Feasibility Study (BFS) proceeded well during the quarter, with all scoping study projections to date being confirmed by the detailed analysis. The BFS is being managed by Pilbara using various specialist companies and expertise in each area of the study. Progress on each component of the study is as outlined below:

- **Geotechnical** - The geotechnical diamond drilling of the orebody was completed during the quarter. The resultant geotechnical investigation was also completed with numerical modelling of the proposed underground development and stoping blocks indicating minimal requirement for ground support, backfilling and pillars.

The geotechnical investigation has also indicated that due to a high rock quality, low stress environment and good visual control between mineralisation and waste rock, dilution in stopes is anticipated to be minimal and extraction of up to 95% of the orebody can be expected.

Four geotechnical diamond drill holes are now planned to be drilled in early May 2004 to confirm the decline portal position and decline support requirements.

Geotechnical studies will be completed in the June 2004 quarter.

- **Metallurgical Testwork** – Metallurgical testwork continued during the quarter, with the focus on optimising the zinc flotation circuit. Testwork completed to date indicates the following metallurgical performance can be achieved:

TABLE 1

▪ Copper Concentrates -	Conc. Grade	=	26% Cu
	Recovery	=	88%
	Silver grade	=	650g/t Ag
	Other	=	Will require regrind circuit
▪ Zinc Concentrates -	Conc. Grade	=	50% Zn
	Recovery	=	80%
	Iron grade	=	11% Fe (will incur penalty)
	Other	=	Will require regrind circuit

The following is an estimation of concentrate specifications for both the copper and zinc concentrates, based on metallurgical testwork completed to date:

TABLE 2
JAGUAR COPPER CONCENTRATE - TYPICAL ANALYSIS

ELEMENT	Units	RG5542 CuRCC Average Analysis
Cu	%	26.00
Fe	%	28.40
Pb	%	4.66
Zn	%	3.65
S	%	36.50
SiO₂	%	0.89
Au	g/t	0.4
Ag	g/t	650
As	ppm	540
Al₂O₃	ppm	1230
BaO	ppm	11
Bi	ppm	90
CaO	ppm	835
Cd	ppm	77
Cl	ppm	200
Co	ppm	141
Cr	ppm	54
F	ppm	<100
Ge	ppm	<20
In	ppm	128
MgO	ppm	660
Ni	ppm	57
Sb	ppm	208
Se	ppm	332
Sn	ppm	670
Te	ppm	0.4
Th	ppm	0.2
Hg	ppb	660

TABLE 3

JAGUAR ZINC CONCENTRATE - TYPICAL ANALYSIS

ELEMENT	Units	RG5567 ZnRCC Average Analysis
Zn	%	50.0
Cu	%	1.1
Fe	%	10.9
Pb	%	0.41
S	%	32.4
SiO ₂	%	3.26
Au	g/t	0.58
Ag	g/t	43
As	ppm	395
Al ₂ O ₃	ppm	990
BaO	ppm	<5
Bi	ppm	20
CaO	ppm	5,540
Cd	ppm	919
Cl	ppm	200
Co	ppm	85
Cr	ppm	45
F	ppm	<100
Ge	ppm	<20
In	ppm	100
MgO	%	0.2
Ni	ppm	27
Sb	ppm	40
Se	ppm	105
Sn	ppm	545
Te	ppm	<0.2
Th	ppm	0.2
Hg	ppb	1,700

Metallurgical testwork has indicated that both the copper and zinc flotation circuits will require regrind circuits to achieve the desired concentrate grades and recoveries.

Metallurgical testwork is scheduled for completion in the June 2004 quarter.

- **Process Design** – The process design portion of the Jaguar BFS was awarded to Metallurgical Design and Management (MDM) Pty Limited. MDM has extensive experience in the design and construction of processing plants both in Australia and overseas. Process design work commenced during the quarter and is scheduled for completion in the June 2004 quarter.

Pilbara announced on 21 April 2004 that it had purchased of the Cadjebut processing plant from Teck Cominco. The purchase will provide a flotation plant capable of processing up to 550,000 tonnes of ore per annum producing both copper and zinc concentrates, a 5.6Mw diesel power station, fuel farm, site offices and amenities, a 158 man camp and amenities and ancillary equipment.

The purchase of the plant will significantly reduce the capital requirements for the development of the Jaguar Project but will now need to be integrated into the process design required to suit the Jaguar ore, resulting in the scheduled completion time for the BFS now being July 2004.

- **Marketing** – Current commodity markets and high demand for copper and zinc concentrates has resulted in several approaches from third parties for the purchase of Jaguar concentrates. It is currently anticipated that concentrates will be trucked from Jaguar to the Leonora railhead, railed to the Port of Esperance and shipped to a third party vendor from the port.

Locked cycle metallurgical testwork, providing concentrate samples for prospective vendors, is anticipated to be completed in the June 2004 quarter.

- **Process Water** – Sampling undertaken from the old Teutonic Bore pit has indicated that water contained in the pit would be suitable for use as process water for the project. In addition hydrological studies are progressing to secure backup sources of processing water from regional palaeochannels contained within existing Pilbara leases.
- **Amenities** – Pilbara purchased the existing 40 man camp from Howard Springs Contracting, currently located at the old Teutonic Bore townsite. The camp includes accommodation units, mess, laundry facilities and satellite communications systems. This camp will be utilised during the construction phase of the project and will then be expanded using the Cadjebut camp units to accommodate the increased manning levels expected during the operational period of the project.
- **Environmental** – Keith Lindbeck and Associates was commissioned to undertake the environmental aspects of the Jaguar BFS during the quarter. Keith has extensive environmental experience in the mining industry, including six years as Manager – Environment and Rehabilitation Section with the Department of Minerals and Energy.
- **Native Title** – To enable the grant of the mining leases, agreements need to be completed with the Native Title claimant groups. Very good progress was made during the quarter with agreements being finalised with the two Native Title Claimant groups which have claims over the proposed mining area. Discussions are continuing with a third group which is appealing a claim application.
- **Financial Analysis** – Based on an update of the project's pre-feasibility study model, the Jaguar project has the following indicative statistics:

TABLE 4: Estimated diluted tonnage based on current Indicated and Inferred resource

Tonnes	Cu%	Zn%	Ag g/t	Pb %
1,873,472	3.19	10.96	114	0.75
Contained metal (‘000 tonnes)	59.8	205.3	6.87m ozs	14.1

TABLE 5: Summary Cash Flow Model

	Pre-Feasibility Study Assumptions	30 January 2004 Metal Prices/Exchange Rate
Plant capacity	350,000 tpa	350,000 tpa
Project life	6 years	6 years
Metallurgical Recovery	Cu 92.6%	Cu 92.6%
	Zn 82.6%	Zn 82.6%
	Ag 68.9%	Ag 68.9%
Metal Contained in Concentrate	Cu 55,400 tonnes	Cu 55,400 tonnes
	Zn 169,690 tonnes	Zn 169,690 tonnes
	Ag 4,734,000 ounces	Ag 4,734,000 ounces
Metal Prices (current spot)	Cu US\$1.14/lb	Cu US\$1.14/lb
	Zn US\$0.47/lb	Zn US\$0.47/lb
	Ag US\$6.23/oz	Ag US\$6.23/oz
Exchange Rate	A\$0.73 (project average)	A\$0.76
Capital Cost (A\$ million)	A\$43.4m	A\$43.4m
Project Cash Flow (A\$ million)	A\$99.9m	A\$87.7m
IRR	46.7%	41.1%
NPV @ 8%	A\$64.5m	A\$55.1m

A review by John Elkington of Southern Mining Consultants Pty Ltd has confirmed this estimate.

EXPLORATION

TEUTONIC BORE – REGIONAL GOLD POTENTIAL

Data for the evaluation of gold potential within the Teutonic Bore leases has been collected from a number of sources. Collation of the data is being undertaken with a view to establishing the structural and geological controls on gold mineralisation which will form the basis of a gold exploration program.

TEUTONIC BORE JOINT VENTURE (Inmet 65%, Pilbara 35%)

Inmet Mining Australia Pty Ltd (Inmet), manager of the Teutonic Bore Joint Venture applied Crone Geophysics and Exploration Limited's recently developed "STEP" response modelling to the EM data from six completed exploratory diamond holes. Crone advised that DeepEM targets with STEP signatures were likely to be associated with at least semi-massive and/or stringer sulphides while DeepEM conductors without a STEP response were most likely largely graphitic.

The application of STEP modelling to the downhole TEM data confirmed the response identified from surface and helped further delineate the conductive zones encountered in the drilling. Two of the holes which encountered significant sulphides (TBD-0301, 0302) have STEP indication that the mineralisation is probably of limited extent. STEP modelling on data from a third hole (TBD-0304), however, revealed that the sulphides intersected in this hole are probably connected to a sheet-like sulphide body of considerable size.

The STEP model for TBD-0304 suggests that the hole intersected the up-dip edge of a highly conductive, sub-vertical sheet with a dip length in excess of 200m and a strike length of between 200 and 700m, depending on its actual conductivity. The sheet has an interpreted plunge of 40° to the north.

There is a close similarity between the results of TBD-0304 and hole TBD-0225 that was drilled and surveyed late in 2002 at Jaguar. Hole TBD-0225 pierced the Jaguar sedimentary horizon immediately up-dip of the massive sulphides and intersected low-grade stringer sulphide mineralisation over narrow widths. Hole TBD-0304 intersected a similar graphitic sedimentary interval with low-grade stringer sulphide mineralisation over narrow widths. STEP modelling on both holes conclusively gives vectors down dip towards the centre of the strongest conductor. The size, areal shape and plunge of the conductor interpreted in hole TBD-0304 is remarkably similar to that of Jaguar.

In contrast to Jaguar, however, is the stratigraphy seen in hole TBD-0304. Whereas the Jaguar deposit is hosted by a thin sedimentary unit sandwiched between two mafic volcanic flow sequences, the target in 304 is located at the stratigraphic top of an altered felsic volcanic unit which is a classic setting for large VMS deposits in other districts. From an economic potential standpoint, felsic volcanics are thought to be more favourable than mafics as a setting due to their typical non-planar, 'dome-and-basin' architecture as well as being more amenable to hydrothermal and sulphide replacement. Both factors allow for potentially greater thickness of sulphide accumulation.

Canada based Inmet will return to site in the first week of May 2004.

A program of 3 holes for 1,800 metres will commence immediately upon Inmet's return. Two holes (1,200 metres) 100 metres apart will test the large STEP anomaly down dip of TBD-0304. One hole (600 metres) will test the STEP anomaly targeted by hole TBD-0306 last year which was abandoned before reaching target depth. This target is geophysically very similar to that tested by TBD-0304.

NEWMONT JOINT VENTURE

Pilbara Mines entered a joint venture with Newmont Yandal Operations over E37/553 and E37/556 on 6 January 2003. The past regional exploration data has been more fully evaluated and areas requiring further work have been outlined.

CORPORATE

INVESTMENTS

▪ **REQUEST BROADBAND PTY LTD (13.8% PILBARA, 85.7% TVG, 0.5% FOUNDERS)**

During the quarter all shareholders of Request Broadband Pty Ltd (Request) accepted PowerTel Limited's (PowerTel) offer to acquire 100% of Request. PowerTel also underwent a subsequent one for forty consolidation of its shares resulting in Pilbara being issued with approximately 3.6 million shares in PowerTel.

Pilbara has subsequently sold 3.1 million PowerTel shares raising \$2.93 million for working capital and feasibility.

CHANGE OF ADDRESS

The Company has relocated to:

Level 4, 50 Colin Street, West Perth, Western Australia, 6005

Telephone: +61 8 9322 9999

Facsimile: +61 8 9322 9930

GENERAL

Visit Pilbara's website at www.pilbaramines.com.au where up to date information on recent announcements and results of activities can be found.

For and on behalf of the Board



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Gary Comb
Managing Director

30 April 2004

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This information, so far as it pertains to Ore Reserves or Identified Mineral Resources is based on and accurately reflects, information compiled by Martin Kavanagh and other 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.