# MEDUSA MINING LIMITED

ABN: 60 099 377 849

Unit 7, 11 Preston Street Como WA 6152

PO Box 860 Canning Bridge WA 6153

Telephone: +618-9367 0601 Facsimile: +618-9367 0602

Email: admin@medusamining.com.au Internet: www.medusamining.com.au

MEDUSA

11 September 2007

The Manager Australian Stock Exchange Limited Level 4, 20 Bridge Street Sydney, NSW. 2000

Dear Sir/Madam

# **DISCOVERY OF BLANKET STYLE GOLD MINERALISATION**

Medusa Mining Limited ("Medusa" or the "Company") is pleased to advise that it has discovered sub-horizontal blanket style gold mineralisation along a sedimentary - volcanic contact in the Tambis Bananghilig area, including a horizontal drill hole intersection of **98.9 metres at 4.23 g/t gold**. The drilling has assisted the Company to make considerable progress with understanding the area's geology.

From surface and underground drilling, wide intersections of gold mineralisation have been located, (holes TUG are horizontal underground and TDH are angle surface holes) including:

Hole	Intercepts (metres)	Grade (g/t gold)	
TUG 002	20.00	1.07	
TUG 003	8.30	2.80	
TUG 004	23.70	1.70	
TUG 005	98.90	4.23	
- including	33.90	10.13	
- including	22.00	1.43	
- including	36.50	1.12	
TUG 007	12.00	1.47	
TDH 002	13.90	4.85	
TDH 005	14.00	2.25	
TDH 008	30.00	1.15	
TDH 009	18.60	1.87	

At a regional scale, a truncated caldera has been identified measuring approximately 10 by 6 kilometres, within which a sizeable body of intensely altered and variously mineralised diatreme breccia (and other breccia types) measuring at least 1,000 metres by 750 metres has been outlined. The caldera partly overlaps the previously reported 9.5 by 7.3 kilometres aero-magnetically defined intense alteration anomaly.

## Background

The Tambis Bananghilig Mine area (Fig. 1) is located approximately 35 km to the north of the Co-O Plant and is accessible by an all weather road. Small scale hard rock and alluvial mining have been carried out in this area for several hundred years.



Figure 1: Location diagram

The Company undertook underground exploration and trial mining of several "high grade" veins based on the previous explorers' drill hole data bases consisting of a total of 29,477 metres of drilling in 344 holes and comprising 117 diamond holes for 16,853 metres and 227 reverse circulation ("RC") holes for 12,624 metres. The underground exploration and follow-up underground drilling have shown that some interpreted high grade veins in RC holes may have been exaggerated by the RC drilling by several orders of magnitude through down hole smearing of narrow high grade veinlets, many of which are too narrow and too discontinuous to mine economically.

Subsequently a programme of geological mapping and assessment, surface and underground drilling was commenced to explore for other targets in combination with surface drilling as described below.

### Geology

The Bananghilig Mine area is located on the northern edge of a large aeromagnetically defined alteration zone measuring approximately 9.5 by 7.3 kilometres as shown on Figure 2. The Tambis region is generally underlain by fine to coarse-grained andesitic and dacitic flows of probable pre-Tertiary age that constitute the basement rocks. Locally, the basement rocks show agglomeratic features and in places, are cut by andesite to dacite porphyry dykes and bodies of hydrothermal breccias of various types, shapes and sizes.



Figure 2: Barobo - Tambis area geology

The southeastern part of the Tambis District is covered by a bedded sedimentary formation comprising of basal mudstone, sandy clastics and agglomerates with massive white limestone as the uppermost member. The limestone measures approximately 2.7 kilometres from southwest to northeast, bounding the Bananghilig area along the southeast and extends towards the southeast. The sedimentary contact is possibly dipping towards the southeast.

#### The Tambis Caldera and Diatreme

The Tambis caldera is manifested by geomorphologic signatures as deduced from subtle concentric drainage patterns and complemented by landsat imagery. These signatures suggest a northeast trending, truncated caldera system measuring approximately 10 kilometres along the northeast to southwest axis and 6 kilometres along the northwest to southeast axis. The caldera is located around the intersection of the regionally significant Barobo Fault (parallel to the Philippine Rift Fault) and the Lianga Bay Fault system and the Tambis diatreme is located in the central eastern portion of the caldera as shown on Figure 2.

A sizeable elliptical-shaped diatreme breccia body, measuring approximately 1,000 metres along the northeast axis and about 750 metres wide, has been outlined based on diamond drilling and mapping in the Bananghilig area. The geological features, various breccia materials and associated overprinted hydrothermal alteration and mineral assemblages, suggest that the diatreme developed and evolved in the roof portion of a still buried stock or a similar intrusive body or bodies.

The gold mineralisation styles correlated to the diatreme are in fractures and/ or breccia in-fill in milled/fluidised muddy matrix breccia bodies and coarsely brecciated/fractured andesitic-dacitic wallrock, and intra and post diatreme veins probably propagated from older fault systems and/or generated within and around the pipe-like breccia column during the diatreme's evolution.

In the Philippines, calderas and/or diatreme breccias are hosts to or associated with a number of porphyry copper deposits including the Tampakan Deposit (1.97 billion tonnes at 0.59% copper and 0.23 g/t gold containing 11.6 million tonnes of copper and 14.6 million ounces of gold: Indophil Annual Report, 2006), the Dizon Porphyry Copper Mine (closed prematurely due to pit wall collapse) and contained 140 million tonnes of ore 0.43% copper and 0.93 g/t gold: Benguet Consolidated Corp. website), and the Amacan Deposit with remaining resources of 110 million tonnes at 0.3% copper and 0.43 g/t gold (Mines and Geosciences Bureau website).

### Alteration

In the Bananghilig prospect area, widespread silica-clay-sericite-pyrite hydrothermal alteration affects the volcanic wallrocks, the various breccia bodies and the hypabbyssal intrusives associated with them. The alteration assemblage typifies that found in advanced argillic alteration zones. The outcropping alteration exhibits a strong potassium airborne radiometric anomaly.

#### **Mineralisation and Drill Results**

Figure 3 shows the location of a programme of underground drilling which has been completed from the underground development 50 metres below the L-170 shaft collar. The drilling was undertaken to confirm and explore the veins interpreted by previous explorers. A number of surface diamond drill holes were also completed at the time of the shaft sinking as well as recent additional drill holes. The early drill holes concentrated on identifying high grade veins. Recent re-logging and re-assaying of these holes has demonstrated that wide zones of disseminated mineralisation are associated with various diatreme and fault breccias and some of the subsequent intrusive rocks. Drill hole intersections at the 50 metre level below surface are shown in Figure 4.



Figure 3: Bananghilig area geology and drill hole locations.



Figure 4: Level plan showing drill holes 50 metres below the shaft collar, and projection of surface drill holes.

Table I summarises the drill results to date from surface drill holes (TDH holes) and underground drilling (TUG holes) as shown on Figure 4. Note that some of the higher copper values are also listed. Holes TDH 3, 4 and 7 were not drilled in this area.

<u>Hole</u>	East	<u>North</u>	Dip	Azimuth	<u>From</u>	Width	Grade (uncut)
			<u>()</u>	<u>()</u>	(metres)	(metres)	<u>(g/t goid)</u>
HTUG001	612708	945251	-1	338	53.50	20.55	0.94
Н					incl. 56.00	3.00	1.60
Н					incl. 62.00	4.60	1.25
Н					105.10	43.00	0.77
H					incl. 134.00	5.90	1.04
HTUG002	612704	945158	-1	185	44.90	9.10	1.20
Н					73.90	1.00	1.79
Н					80.00	1.00	1.26
Н					92.00	52.40	0.90
Н					incl. 92.00	20.00	1.07
Н					incl. 116.00	6.00	1.47
Н					incl. 134.40	7.00	1.06
Н					148.80	11.30	0.70
<b>H</b> TUG003	612820	945164	-1	153	8.00	1.30	1.37
Н					42.00	1.00	1.07
							0.63,
Н					45.80	0.20	0.21% Cu
Н					57.10	1.00	2.35
					· ·		9.65,
H					Incl. 57.30	0.20	0.69% Cu
H					68.10	8.00	0.76
Н					80.00	6.10	0.82
Н					106.10	3.00	2.87
H					112.10	7.00	0.88
H					148.50	4.00	1.26
H					173.70	8.30	2.80
						4.00	10.41,
	040000	045464	40	450	Incl. 178.10	1.00	0.11% Cu
HIUG004	612820	945164	-13	153	49.00	14.00	0.79
H					incl. 50.00	2.00	1.40
Н					71.60	22.70	1.19
						0.40	6.97,
H					incl. 71.60	0.40	0.13% Cu
H					111.00	12.00	0.88
H					140.00	17.20	0.86
H					165.00	23.70	1.70
H TUG005	612748	945180	-1	153	0.00	26.00	0.83
Н					incl. 3.00	4.00	1.70
Н					31.60	4.50	0.99
Н					42.10	3.15	1.27
H					87.10	8.20	0.73
Н					107.00	98.90	4.23
Н					incl. 107.00	22.00	1.43
Н					incl. 131.85	36.15	1.12
Н					incl. 172.00	33.90	10.13
<u> </u> H					incl. 179.50	9.00	26.52
H TUG006	612290	945187	-1	73	21.00	3.00	0.73
Н					45.00	4.00	1.27
H					55.00	5.00	1.08
Н					130.00	2.00	11.20
Н					143.00	3.00	0.80
H		<u> </u>		ļ	157.00	1.00	1.64
H TUG007	612748	945180	-1	170	4.00	5.00	1.07
Н					12.00	12.00	1.47
							10.15,
H					incl. 12.00	1.25	0.23% Cu

Table I: Drill hole intersections >1 metre using a 0.5 g/t gold cut-off and selected copper values

H TDH001	612778	945140	-55	340	86.20	3.37	0.77
Н					106.90	4.90	1.19
н					198.00	2.30	1.90
H TDH 002	612850	945189	-50	130	20.70	4.70	2.37
н					28.40	3.00	0.63
н					35.40	1.00	1.50
н					64.36	3.92	1.00
н					70.28	2.62	1.28
н					162.78	1.07	1.75
Н					240.40	13.90	4.85
H TDH005	612679	945119	-55	340	11.00	14.00	2.25
н					incl. 16.00	9.00	3.01
Н					31.00	1.00	1.07
Н					42.00	8.00	2.94
н					incl. 43.00	3.00	6.87
н					72.50	5.00	0.75
Н					191.00	1.00	1.09
H TDH008	612783	945027	-55	40	174.00	30.00	1.15
н					212.00	19.00	0.84
H TDH009	612763	945097	-45	140	75.80	18.60	1.87
н					198.50	1.00	1.71
н					232.00	1.00	0.95
н					322.00	2.00	1.40
							0.93,
H					incl. 322.00	1.00	0.31% Cu
H		-			339.10	1.00	1.79
H					372.10	3.60	0.86
Н					396.50	7.50	0.67
H					421.50	2.00	9.01
Н							

The TUG 005 horizontal intersection of 98.90 metres at 4.23 g/t gold appears to have drilled within the sub-horizontal mineralised horizon, which is supported by TDH 009 with an inclined intersection of 18.6 metres at 1.87 g/t gold and suggests that this sub-horizontal mineralised layer has a true thickness of approximately 15 to 18 metres. TDH 009 shows that the younger overlying limestone sequence may be acting as a cap on mineralisation with a blanket zone forming immediately under the sediments.TUG 002 (52.4 metres at 0.9 g/t gold horizontal) is also interpreted to have intersected the sub-horizontal mineralisation immediately under the limestone. In addition sporadic mineralisation in a similar sub-horizontal position in TUG 003 to 1.8 g/t gold also suggests that the mineralisation continues along strike.TDH 008 intersected 21 metres of anomalous gold from 0.13 to 0.70 g/t gold thereby also supporting the presence of a gold layer of similar 15 to 18 metre thickness immediately under the limestone sequence. If further drilling confirms this concept, then there is the potential to develop considerable tonnages of moderate grade mineralisation in this position.

Elevated gold mineralisation usually shows a close affinity with zinc mineralisation (and lesser lead) with values above 500 ppm zinc being relatively common, to over 1% zinc, and some higher grade veinlet style gold values have an association with copper.



Figure 5. Cross-section through the underground workings and under the limestone.

#### Summary

It is apparent that the very favourable volcanic and structural environment in the Bananghilig area is extensively mineralised. The diatreme, other hydrothermal breccia bodies and the intrusives present significant exploration targets.

Work is continuing with the aim of defining zones of coherent mineralisation.

Yours faithfully, Geoff Davis Managing Director

Information in this report relating to Exploration Results is based on information compiled by Mr Geoff Davis, who is a member of The Australian Institute of Geoscientists. Mr Davis is the Managing Director of Medusa Mining Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Davis consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.