



ASX RELEASE

ASX CODE: MDL

QUARTERLY REPORT FOR THE PERIOD ENDED 31 DECEMBER 2006

HIGHLIGHTS

- ❑ **Sabodala Mining Convention (Operating Conditions for the Mine Lease) signed in January 2007**
- ❑ **Sabodala Gold Project - new east zone at Sabodala deposit**
 - On the Sabodala deposit, step-out drilling has reported a further encouraging high grade intersection of 36.6 metres grading 5.9g/t, representing a flat-lying structure some 50 metres east of the known mineralised gold zone and only 100 metres vertical from the surface. Other significant gold intersections include (all holes inclined at 60 degrees):

**36.6 metres grading 5.9 g/t from 120.5 metres;
14 metres grading 7.0g/t from 231 metres;
19 metres grading 5.7g/t from 120 metres; and
32 metres grading 5.1g/t from 165 metres (all downhole).**

Encouraging ore zone extensions at the Niakafiri deposit include:

**31 metres grading 3.0g/t from 101 metres;
18 metres grading 2.5g/t from 153 metres;
10 metres grading 3.4g/t from 113 metres; and
9.3 metres grading 4.2g/t from 109.7 metres (all downhole).**

- Since start-up of drilling on 30 June 2005, 99,268 metres were completed through to 31 December 2006. During the December 2006 quarter, 30,434 metres were completed.
- ❑ **Grande Côte Zircon Project**
 - Dredge construction site of some 10.5 hectares adjacent to the rear dune at Diogo leased for three years.
 - Siting and construction of three shafts for bulk samples at Diogo to enable a direct comparison of augur and RC drilling methods commenced late in the December quarter.
- ❑ **Corporate**

Cash at end of quarter, A\$105 million. No debt.



SABODALA GOLD PROJECT
100% (through MDL with Sabodala Mining Company SARL)

Sabodala Mining Convention Signed

During January 2007, MDL and the Government of the Republic of Senegal ("ROS") executed the supplementary deed to the existing Mining Convention for the development of the Sabodala Gold Project. The supplementary deed grants the company conversion of the existing Exploitation Permit to a Mining Concession (Mining Lease).

As a formality, MDL now awaits execution of the Presidential Decree and the final Notification Letter granting the mining title.

The key terms of the agreement from the date of the Notification Letter are:

- MDL will establish an exploitation company in which ROS will be issued a 10% non-contributory interest.
- Eight year tax exoneration from taxation including Value Added Tax and Company Tax.
- Ten year Mine Lease.
- No import duties on MDL-owned or rented equipment or on goods and services.
- As per the original tender of 25 October 2004, MDL committed to pay to ROS US\$6.50 per ounce bonus payment for mineable reserves exceeding 556,000 ounces. MDL also agreed to a one-off payment to ROS of US\$6.52 million.
- Exploitation company will pay a 3% gross production royalty.
- Invest US\$425,000 per annum on social development.
- Contribute US\$30,000 per annum to administration support for the district.
- ROS or a national Senegalese only has the right to acquire a further 30% interest in the exploitation company.

The conditions relating to this acquisition are detailed in the existing Mining Convention (June 2005), as below:

1. Purchase price of shares in the exploitation company based on independent evaluation of the project by an internationally recognised public accountancy firm or investment bank. The independent expert will be selected by MDL but subject to consent of the Minister of Energy and Mines.
2. All proposed buyers will have 30 days to pay for shares, calculated from the date on which MDL supplies the buyer with the final independent valuation report.
3. Simultaneously and conditionally on the payment of the shares and as a prior condition to the allocation of these shares, the buyer will be required to pay an amount proportional to its participation in the capital necessary for the development of the project as has been determined by the offer of bank finance.



New Easterly Flat Ore Zone

Further infill and step-out drilling at the Sabodala gold deposit has identified additional high grade mineralisation (see Attachment 1). The more significant intersections include:

- **19.5 metres grading 3.5g/t from 125 metres;**
- **36.6 metres grading 5.9g/t from 120.5 metres;**
- **14 metres grading 7.0g/t from 231 metres;**
- **13 metres grading 4.2g/t from 3 metres;**
- **19 metres grading 5.7g/t from 120 metres; and**
- **32 metres grading 5.1g/t from 165 metres (all downhole).**

MDL now recognises that the gold mineralisation also extends in a more easterly direction than believed, as exemplified by SBRC122D which intersected 36.6m @ 5.9g/t gold from 120.5m in an encouraging flat-lying structure. This hole is the furthest easterly step-out hole, 50 metres east of the company's area of infill drilling and only 100 metres vertical from the natural surface. Further follow-up drilling is planned.

Niakafiri Gold Deposit

The Niakafiri deposit is located 2.5 kilometres south of the planned Sabodala open pit.

The gold results from the 8,007 metre drilling programme completed prior to the end of 2006 demonstrate ore extensions both north and south and in a westerly direction. MDL plans to complete a further 3,700 metres of reverse circulation (RC) drilling during the March 2007 quarter (see Attachment 2). The most significant gold intersections include:

- **31 metres grading 3.0g/t from 101 metres;**
- **18 metres grading 2.5g/t from 153 metres;**
- **10 metres grading 3.4g/t from 113 metres; and**
- **9.3 metres grading 4.2g/t from 109.7 metres (all downhole).**

Regional Drilling

An extensive soil sampling programme over the Sabodala permit of 20.3 square kilometres identified anomalous gold-in-soil zones throughout the lease, including north and south along strike from the Sabodala deposit.

Regional RAB geochemical drilling commenced on 31 August 2006. This drilling programme is testing for new mineralisation along strike from the Sabodala deposit.

Total RAB drilling to date of 14,245 metres focused both north and south of the Sabodala deposit, with lines 160 metres apart and holes spaced every 20 metres across each line. The first pass reconnaissance drilling to a vertical depth of about 40 metres produced highly encouraging results. Drilling below the oxide zone confirmed gold mineralisation within the primary rock.

Several areas of highly anomalous gold values above 1g/t were encountered along the Sabodala strike.

The current drilling programme for the March 2007 quarter includes drill extension of existing holes, infill drilling and testing of new targets. The programme consists of 128 holes for 15,931 metres including 11,080 metres of RC and 4,851 of diamond drilling (DD).

It is considered possible that the Sabodala style of mineralisation can repeat at depth within the mineralised parts of this very large Shear Zone. Two deep DD holes beneath the known Sabodala system and the diamond tail extension of SBRC307 to test the depth continuation of the Sabodala mineralisation are planned. The two new DD holes will be drilled to 800 and 1,200 metres downhole respectively, and hole SBRC307 will be extended a further 284 metres (all holes drilled at 60 degrees).

Reconnaissance rotary air blast drilling and soil geochemistry over the past six months has identified a total of 18 targets within the Sabodala permit of 20.3 square kilometres. Initial drill testing will focus on Dinkokhono, Faloumbo and Sambaya Hill (see Attachment 3).

Project Development

Sterilisation drilling comprising 68 drill holes of 5,238 metres has identified suitable areas for the plant site, major water dam, the run-of-mine site, tailings dam, 560 person accommodation facilities and the proposed waste dumpsite.

Metallurgical and geotechnical drilling of some 850 metres has been completed. The metallurgical testwork demonstrates that 90% recoveries are likely. The initial geotechnical drilling shows that the geological structures located near the proposed pit wall perimeter are very competent.

The small dam now contains about 245,000 cubic metres (31% of maximum capacity). Rainfall for the year, at 715mm to date, is well below average.

A review of the project development schedule has identified an opportunity for substantial cost savings by demobilising Ausenco and supervising internally the construction of the two large dams. Demobilisation of the Ausenco personnel was completed in November. In the first half of calendar 2007, the construction programme will include a major water storage dam with planned capacity of some eight million cubic metres and tailings storage, as well as the construction of the permanent mine village and quarrying and crushing of diorite rock for construction purposes. Mining contractor BCM of Perth, Australia has been awarded the contract. The major dam will be completed prior to the start of the wet season around July.

The Ausenco team has completed indepth engineering drawings and now await issue of the Presidential Decree and the Notification Letter formally inviting MDL to commence full-scale plant construction.

MDL, with Ausenco, has identified critical lead items and MDL has ordered the ball and sag mills to treat two million tonnes per year. Considerable discussion with manufacturing companies for construction, delivery to Senegal and maintenance of electricity generating equipment is ongoing.

GRANDE CÔTE ZIRCON PROJECT

100% (through wholly-owned subsidiary MDL Senegal SARL ("MDLS"))

Background

The Grande Côte zircon deposit is located some 100 kilometres north of the capital city Dakar. The project lies within a granted 446 square kilometre Exploration Permit (100 kilometres by 4.5 kilometres). Access to the project area from the excellent deepwater Dakar port is via a good, all-weather, sealed road north to Mboro, then poorly sealed and laterite-surfaced roads to access the dunal system itself.

Social Programme

Regular monthly communication meetings have been established between MDLS and both the Local Administration and representatives of the local population. The kindergarten within the confines of the Diogo village was completed during January 2007.



Site Preparation

An agreement has been executed between MDLS and the owner of a relatively flat 10.9 hectare unused and uninhabited block of land adjacent to and abutting the rear dune at Diogo. The land will be utilised for the dredge/concentrator construction site. The company will have three years' access to the site, sufficient for all such construction activities to be completed. As previously reported, a small dredge purchased by MDLS and suitable to prepare construction of the main pond has arrived in Dakar.

Land acquisition of some 287 hectares for the main separation plant ("MSP") site at Darou Fall near the proposed sand treatment area adjacent to Diogo has been completed. The MSP site will be approximately three kilometres by road from the commencement of the proposed start-up of the 50 million tonne per year dredge/concentrator site.

Drilling Programme

Siting and construction of three two metre wide vertical shafts for bulk samples at Diogo to compare augur and RC drilling methods and the heavy mineral grades commenced late in the December 2006 quarter. The drilling on the three discrete locations has been completed.

MDLS now awaits a rotary sample splitter from Australia prior to testing the mineralised sand from each well to below the water table. Each well is likely to be excavated to at least 12 metres in depth below the surface.

Two hand-auger drilling crews are now operating on the Diogo tenement to close the drill hole spacing to 20 metres across each line. Along strike, each line is 200 metres apart.

Two RC drill rigs have been deployed on the Fass Boye deposit immediately south of Diogo. The rigs are initially drilling across each line on 80 metre centres.

Land/Asset Baseline Survey

MDL has given approval for Earth Systems of Melbourne to conduct a detailed baseline survey of land and assets in the project areas that are owned by the local communities, groups, families or individuals. The survey results will be useful in the detailed design process of both projects to minimise social impacts. The land/asset baseline survey will comply with Senegalese legislation, World Bank/IFC performance standards and guidelines and MDL policies. It is estimated that the survey will take about four months to complete for each project.

The information in this report that relates to Exploration Results is based on information compiled by Mineral Deposit Limited's Chief Geologist, Chris Young BSc, who is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Young has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity undertaken. He is qualified as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Young has consented to the inclusion of this information in the form and context in which it appears in this report.

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Mineralisation Intersections from the Sabodala Phase 2 Drilling Programme as at 30 January 2006. All holes azimuth grid east and @ -60 degrees inclination (except for SBRC471 which is at -45 degrees inclination)							
Hole ID	Easting	Northing		From (m)	To (m)	Width (m)	Grade (g/t Au)
SBRC113D	10270	20410		124.5	144	19.5	3.5
SBRC122D	10230	20450		120.5	157	36.6	5.9
SBRC274D	9970	20610		206	223	8	2.9
SBRC276D	10050	20610		186.1	199	13	2.5
SBRC291D	9931	20650		165.7	170	4.3	1.7
			and	260	266	6	1.4
			and	317	321	4	1.7
SBRC292D	9970	20650		206	223	17	5.2
			and	231	245	14	7.0
			and	253	259	6	1.1
SBRC293D	10010	20650		229	244.5	15.5	3.9
SBRC296D	9890	20690		302.6	306.1	3.6	6.2
			and	322	331	9	3.1
SBRC305D	10090	20730		250	255	5	3.2
			and	269.6	273	3.4	3.7
			and	285	301	16	3.7
SBRC327D	10210	20530		175.6	185	9.4	3.5
SBRC328D	10250	20530		179	183	4	2.1
SBRC330D	10210	20570		165	197	32	5.1
SBRC337D	10170	20650		275	283	8	2.0
SBRC349D	10130	20770		19	23	4	6.6
SBRC356D	10060	19970		34	38	4	2.0
SBRC357D	9980	19930		4	8	4	4.1
			and	17	21	4	2.6
			and	24	31	7	2.9
			and	165	171	6	1.7
SBRC361D	10020	19890		54	60	6	2.3
			and	120	139	19	5.7
SBRC365D	9980	19850		6	10	4	2.6
			and	42	46	4	3.5
SBRC375D	9980	20010		59	63	4	1.6
SBRC407D	10020	19490		3	7	4	3.0
SBRC471D	10280	20410		24	29	5	6.5
			and	109	115	6	2.1
SBRC476	10350	20090		54	60	6	3.0
SBRC477	10390	20090		32	39	7	1.3
SBRC478	10430	20090		3	16	13	4.2

The intervals are based on 1m composite assays, a minimum down-hole width of 4m, with a maximum internal dilution of 2m. The grade cut-off is 1.0g/t Au.

Mineralisation Intersections from the Niakafiri Phase 2 Drilling Programme as at 30 January 2006. All holes azimuth grid east and @ -60 degrees inclination								
Hole ID	Easting	Northing		From (m)	To (m)	Width (m)	Grade (g/t Au)	Comment
NKRC067D	11020	17970	and	93.5 167	102 174.9	8.5 7.9	1.4 1.9	
NKRC077D	10970	17930	and and	109.7 141 153	119 147 171	9.3 6 18	4.2 1.3 2.5	
NKRC081D	10970	17790		149	153.4	4.4	1.0	
NKRC082D	11010	17790		100	106	6	1.2	
NKRC085D	10970	17750	and and	119.1 131 162	127 141 167	7.9 10 5	2.0 2.0 2.6	
NKRC089D	10970	17710	and and	106 136 146	110 141.7 165	4 5.7 19	2.3 1.4 2.8	
NKRC093D	11090	17670	and	101 147	132 157	31 10	3.0 2.4	recalculated, including RC + DD
NKRC101D	10970	17450		169.3	174.8	5.5	1.2	
NKRC133D	10970	17870		113	123	10	3.4	
NKRC134D	11010	17869		82	93	11	1.3	recalculated, including RC + DD
NKRC135D	10930	17790	and	135.5 191	147 197	11.5 6	2.0 1.1	
NKRC137D	10930	17750	and and	160 168 192	165 178 196	5 10 4	1.6 1.8 1.6	

The intervals are based on 1m composite assays, a minimum down-hole width of 4m, with a maximum internal dilution of 2m. The grade cut-off is 1.0g/t Au.

