Mineral Deposits

Quarterly Report

For the three months ended 30 June 2010

ASX: MDL
TSX: MDM

JUNE QUARTER HIGHLIGHTS

KEY POINTS

- **FY2010 Sabodala gold production of 172,140 ounces at a cash cost of US$495 per ounce**
- **June quarter gold production of 36,874 ounces at a cash cost of US$541 per ounce**
- **Highly encouraging Phase 1 RC drilling program at Gora yielded a number of high-grade intercepts, including 7m at 32.0 g/t Au from 110m depth**
- **Positive Definitive Feasibility Study for Grande Côte Mineral Sands Project completed – results included a 21% IRR for first 14 years of operation**

OPERATIONAL OVERVIEW

Sabodala Gold Operation

- Gold production for the June quarter was 36,874 ozs - within expectations of 35,000 to 40,000 ozs
- Total tonnes mined for the quarter was 3.5M tonnes (853K tonnes of ore and 2,671K tonnes of waste)
- A specialist drilling contractor commences in July 2010 to provide drilling services and maintenance support and improve availability of the mining drill fleet
- Mill throughput for the quarter was 544K tonnes – slightly lower than previous quarters, primarily a result of a higher proportion of feed being fresh, hard ore
- Gross cash operating costs (excluding royalties) were US$541/oz, an improvement on the US$575/oz in the previous quarter
- A process study has recommended the inclusion of a secondary crushing circuit as part of the plant expansion to provide the opportunity to achieve throughput of greater than 3.5 Mtpa
- All key additional mining equipment ordered for the expanded operations are ex-works in July and August 2010, and are expected to be operational in October and November 2010 (some two months ahead of the original schedule)

Regional Exploration

- **Gora**: a number of the holes drilled to date have intersected more than one vein, and many of the results indicate a significant widening of the vein system at depth – which has only been tested to approximately 90 metres vertically. Preliminary geological modelling and engineering analysis is being undertaken to better define the next phase of drilling
- Work planned for the September 2010 quarter includes initial drill programs at two prospects (Diabougou and Gondamekho NW) where artisanal miners are exploiting multiple structures

Mine Lease Exploration

- Step-out drilling to the north of the Sabodala pit has intersected the continuation of the orebody as expected at approximately 350m below surface and a new deeper flat zone approximately 600m below surface (with interpretation ongoing)

Grande Côte Mineral Sands Project

- Definitive Feasibility Study ("DFS") for the Project was positively concluded and formed the basis to proceed to secure funding

DFS highlights:

- a mine dredge path for the first 14 years of the operation has been developed which has yielded a proved and probable Ore Reserve estimate of 751 million tonnes of 1.8% heavy mineral (HM)
- capital cost (including contingency) is estimated at US$406 million
- zircon and ilmenite output would represent approximately 7% and 10% respectively of world production, which together with the high quality of the zircon, makes the Project of international significance
- the internal rate of return based on the first 14 years of operation only (with no terminal value) is 21% and the projected payback period is approximately 5 years after operations commence – confirming the Project's attractive economics

CORPORATE / FINANCE

- Cash and cash equivalents = US$13.9m
- Project Finance facility = US$6.0m (repaid US$6m during the June quarter with the balance to be repaid over the September 2010 quarter)
- Mining Fleet Lease facility = US$10.5m. Facility limit increased to US$27.8m in July 2010 to provide for acquisition of additional mining equipment associated with the Sabodala expansion (US$15.1m) and re-gearing of existing equipment (US$2.2m)
- Hedge Facility = 246,500 ozs (at US$846/oz) – delivered 25,000 ounces during quarter
- 2,450,575 shares issued at A$0.95 raising A$2.3m under Share Purchase Plan
- 4,500,000 shares issued from exercise of options at A$0.69 raising A$3.1m

SABODALA GOLD OPERATION

Production Statistics

		Jun 2010 Year End	Jun 2010 Quarter	Mar 2010 Quarter	Dec 2009 Quarter	Sep 2009 Quarter
Ore mined	('000t)	3,189	853	708	820	807
Waste mined	('000t)	11,472	2,671	2,896	3,420	2,485
Total mined	('000t)	14,661	3,524	3,604	4,240	3,292
Strip ratio	waste/ore	3.6	3.1	4.1	4.2	3.1
Ore processed	('000t)	2,235	544	592	600	499
Head grade	(g/t)	2.63	2.31	2.05	2.63	3.66
Gold recovery	(%)	91.0	90.3	90.5	90.6	92.2
Gold produced (1)	(oz)	172,140	36,874	35,214	45,792	54,260
Gold sold	(oz)	172,558	30,543	34,494	50,078(2)	57,443
Average price received	US$/oz	916	916	924	941	890
Gross cash costs (excl. royalties)	US$/oz	495	541	575	532	382
Gross cash costs (incl. royalties)	US$/oz	528	571	612	564	412

Notes:
(1) Gold produced is gold poured and does not include gold-in-circuit at period end
(2) Includes 5,665 ounces shipped before period end but not converted to cash

Performance Overview

Sabodala's June quarter production was 36,874 ounces, giving 172,140 ounces for the year to 30 June 2010. The output for both the quarter and the year met expectations – being 35,000 to 40,000 ounces for the quarter and 170,000 to 180,000 ounces for the year.

Total tonnes mined for the quarter was 3.5M tonnes, comprising 853K tonnes of ore and 2,671K tonnes of waste (at a strip ratio of 3.1 waste/ore). To improve the efficiency and availability of the mine drill fleet (which continued to be low during the June quarter), a specialist drilling contractor will commence in July 2010 to provide drilling services and maintenance support for the company owned drills.

Mill throughput for the quarter was 544,211 tonnes, which was lower than previous quarters as a result of a higher proportion of feed being fresh, hard ore and the loss of two days through an unscheduled shutdown. Average grade for the quarter was 2.31 g/t, and recovery was 90.3%.

Gross cash operating cost for the quarter was US$541/oz (excluding royalties), an improvement on US$575/oz in the March 2010 – largely a result of a lower milling cost on a cost per tonne milled basis.

Expansion

Planning continued during the quarter to expand the Sabodala gold plant from a nominal capacity of 2.0 million tonnes per annum (Mtpa) to 3.5 Mtpa.

A process study was concluded which has recommended the inclusion of a secondary crushing circuit to increase the efficiency of the SAG mill and size the milling and leaching circuits for approximately 4.0 Mtpa. It is expected that the primary jaw crusher will then be the constraining factor on throughput, however it is anticipated that with improved efficiencies at the crusher, overall throughput can be lifted above 3.5 Mtpa.

The majority of the additional mining equipment ordered for the expanded operations (including a third hydraulic shovel, two primary blast hole drill rigs, five haul trucks and two dozers) are ex-works in July and August 2010, and are expected to be operational in October and November 2010. This equipment is being financed by an increase in the lease facility with Societe Generale.

SABODALA GOLD OPERATION

Exploration

Regional Exploration

Exploration on the Regional land holding during the June quarter primarily comprised:

- Completion of the Phase 1 reverse circulation drilling program at the **Gora** deposit
- Further RAB drilling at the **Majiva** prospect (Makana Permit) – which continues to provide numerous low grade gold intercepts
- Commencement of a RAB drilling program at the **Diegoun** prospect

A map providing an overview of the regional holding and the current prospects is attached as Appendix 1.

Gora (formerly Zone D) (Sounkounkoun Permit)

A highly encouraging Phase 1 51-hole reverse circulation (RC) drill program was completed that yielded a number of high-grade intercepts, including 7 metres at 32.0 g/t Au from 110 metres depth (including 1 metre @ 181 g/t Au from 114 metres).

A number of the holes intersected more than one vein, and many of the results indicate a significant widening of the vein system at depth. With the depth of the drill holes in the Phase 1 program averaging only 123 metres down hole (approximately 90 metres vertically), deeper drilling will be required to test the down dip extensions, all of which remain open.

Details of the drill results are set out in ASX/TSX releases on 7 May 2010, 27 May 2010 and 23 June 2010.

Systematic step-out RAB drilling was also undertaken to map out the full strike length of the mineralised structures to the north and south with a total of 4,429 metres in 208 holes completed. Results are pending.

Following the conclusion of the highly encouraging Phase 1 drill program, geological modelling and preliminary engineering analysis is being undertaken to better define the next phase of drilling, the purpose of which will be to both extend the resource and determine the potential for near-term open pit mineable mill feed for Sabodala.

The Gora deposit is located approximately 25 kilometres north east of the Sabodala processing plant (accessible from the Faleme pipeline road) within the Sounkounkoun exploration permit, in which MDL and AXMIN Inc. are joint venture partners whereby MDL is earning a majority interest and manages the exploration.

Diegoun (Sounkounkoun permit)

Following previous detailed termite mound sampling which returned significant gold anomalies (defined by the 120ppb threshold), the highly anomalous zones which form a doughnut shape with a diameter of approximately 5 km are now being tested by a systematic RAB drilling program. The area is within the Main Transcurrent Shear Zone (MTZ) along strike from Randgold's 3.5M ounce Massawa resource.

Work planned for the September 2010 quarter includes :

- An initial RC drilling program at the **Diabougou** prospect – where artisinal miners are exploiting several moderate to steeply dipping quartz veins over a strike length of nearly 2km
- Subject to drill rig availability, an initial RC drilling program at the **Goundamekho NW** prospect – where artisinal miners are recovering free gold on multiple parallel structures over a width of at least 200m

Note: RAB drilling results are not used for resource estimation and are an indication only for the presence or absence of gold.

Mine Lease Exploration

During the quarter one diamond drill hole rig and one RC rig were active on the mine lease. The focus was on the Sabodala Main Flat Extension to the north and Sutuba to the south of the Sabodala pit.

Sabodala Main Flat Extension

Step-out drilling to the north of the Sabodala pit has intersected:

- the continuation of the Sabodala orebody as expected at approximately 350m below surface; and
- a new deeper flat zone approximately 600m below surface (with interpretation ongoing).

Sutuba

In-fill drilling between the Sabodala pit and Sutuba to the south is being undertaken to determine the potential for near term, near surface feed for the mill.

The September quarter drill plan includes the first holes into the Sambaya Hill prospect, located between the 1.7Moz Masato deposit of Oromin and the Sabodala deposit.

GRANDE CÔTE MINERAL SANDS PROJECT

During the quarter, the results of the DFS for the Grande Côte Mineral Sands Project were announced, which formed the basis for proceeding with the Project.

The DFS, compiled in association with AMC Consultants, commenced in August 2009 and considered all aspects related to development of the Project, including mining, metallurgical, processing and engineering, marketing, economics, and social and environmental aspects.

Key highlights of the DFS are:

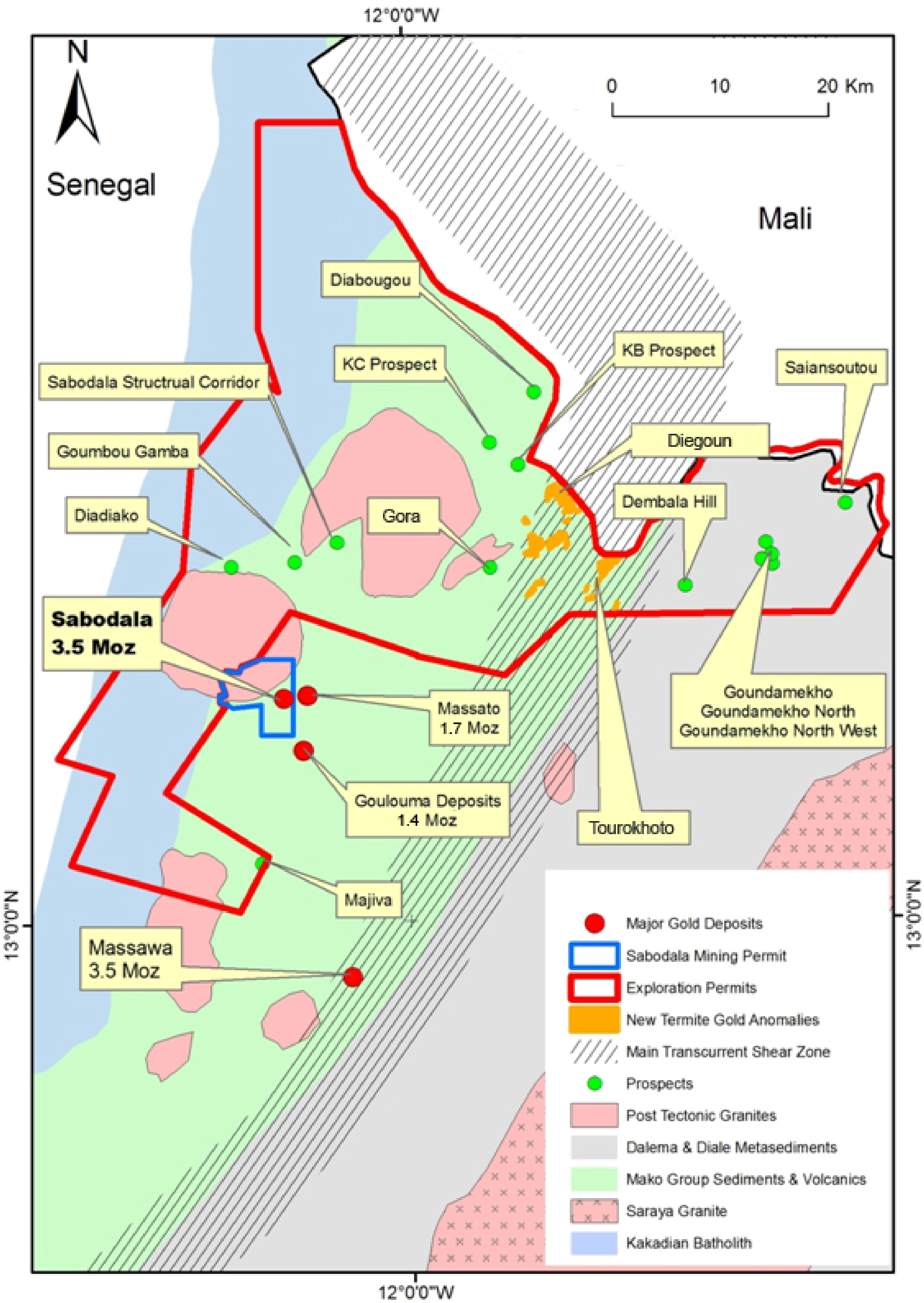
- A mine dredge path for the first 14 years of the operation has been developed which has yielded a proved and probable Ore Reserve estimate of 751 million tonnes of 1.8% heavy mineral (HM)
- The capital cost (including contingency) is estimated at US$406 million
- Zircon and ilmenite output would represent approximately 7% and 10% respectively of world production, which together with the high quality of the zircon, makes the Project of international significance
- The internal rate of return based on the first 14 years of operation only (with no terminal value) is 21% and the projected payback period is approximately 5 years after operations commence – confirming the Project's attractive economics

Other points of note from the DFS include:

- The ore body characteristics comprise free flowing sands, a consistent grain size, no overburden, minor vegetation, minimal slimes, and no hard lenses – thereby limiting operating costs
- The ore body size and characteristics provide for a large scale dredge operation, mining approximately 55 million tonnes per annum, and conventional processing technology
- With a dredge path for the first 14 years covering an area approximately 40% of the mine lease, an additional 10 or more years of mine life beyond the current Ore Reserves is considered feasible subject to additional drilling
- Testwork on a series of bulk samples has determined that the Project can yield a high quality zircon product plus a saleable ilmenite product, along with small amounts of rutile and leucoxene. Average annual production rates are projected at approximately :
  - 80,000 tonnes of zircon
  - 575,000 tonnes of ilmenite
  - 6,000 tonnes of rutile
  - 11,000 tonnes of leucoxene
- Grande Côte is planned to enter the market in 2013 and consultancy group TZMI is forecasting that the zircon market dynamics from 2012 will be increasingly dominated by tight supply, with the degree of undersupply dependent on the success of bringing new projects into operation. From 2015 onwards, the expectation is for a widening deficit, mainly as a result of major losses of production by existing suppliers and a lack of new projects entering the market
- A premium price for the zircon product is anticipated as a result of (1) its high quality, (2) the close proximity of the Port of Dakar to the important European and North American markets, and (3) the utilisation of container shipments to sell small lots into a range of niche markets and which allow for just-in-time inventories for customers
- Cash operating costs are projected to average approximately US$75 million annually
- A high level project development schedule has construction commencing in the 3rd quarter of 2011, a completion date for initial commissioning during the 1st quarter of 2013 and for first sales of products to be produced by June 2013

Having already received the necessary mining approvals and established the fiscal arrangements with the Government of Senegal, funding for the Project will now be sought and planning undertaken to expedite development of the Project.

Appendix 1: SABODALA REGIONAL LAND HOLDING



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For the three months ended 30 June 2010

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CORPORATE INFORMATION

Corporate Directory

Directors

Nic Limb, Executive Chairman
Jeff Williams, Managing Director
Martin Ackland, Executive Director
Clever Fonseca, Executive Director
Robert Danchin, Deputy Chairman, Non-Executive Director
David Isles, Non-Executive Director
Oliver Lennox-King, Non-Executive Director
Murray Grant, Non-Executive Director

Senior Management

Rick Sharp, Chief Financial Officer
Melvyn Drummond, Company Secretary

Registered Office

Level 7, 530 Little Collins Street
Melbourne, Victoria 3000, Australia
T:+61 3 9909 7633
F: +61 3 9621 1460
E: mdlmail@mineraldeposits.com.au
W: www.mineraldeposits.com.au

Toronto Office

Suite 301, 155 University Avenue
Toronto, Ontario M5H 3B7, Canada
T: +1 416 361 6196
F: +1 416 361 9131

Senegal Office

Rue 26, N'Gor
Dakar, Senegal
T: +221 338 693 181
F: +221 338 603 683

Auditor

Deloitte Touche Tohmatsu

Share Registries

Australia: Computershare Investor Services Pty Ltd
T: 1300 850 505
Canada: Computershare Trust Company of Canada
T: +1 800 564 6253

Stock Exchange Listings

Australian Securities Exchange, ASX code: **MDL**
Toronto Stock Exchange, TSX code: **MDM**

Issued Capital

Issued shares	580,576,525
Unlisted options	30,850,000

Unlisted Options – Exercise Profile

Exercise Price (A$)	Options (m)
$0.75	0.750
$0.85	0.500
$1.40	20.000
$1.60	9.350
$2.00	0.250
VWAP = $1.44	**30.850**

About MDL

Mineral Deposits Limited is an ASX and TSX listed mining company with a current focus in Senegal, West Africa through a producing gold mine, the Sabodala Gold Operation, and a to be developed mineral sands project, the Grande Côte Mineral Sands Project.

The Sabodala Gold Operation, which poured its first gold in March 2009, is located 650 kilometres east of the capital Dakar within the West African Birimian geological belt in Senegal, and about 90 kilometres from major gold mines and discoveries in Mali. The area has only recently been opened for mining and exploration and is emerging as a significant new gold camp, with more than 10M ounces of resources already discovered.

The Grande Côte Mineral Sands Project is located on the coast of Senegal starting approximately 50 kilometres north of Dakar and extending northwards for more than 100 kilometres. The large scale of the ore body and the high quality of the zircon provides the potential to establish an operation of international significance.

Senegal is one of Africa's most successful democracies, having gained independence in 1960. It enjoys a stable and investor friendly political and social environment. The government of the Republic of Senegal is MDL's valued partner and holds a 10% free carried interest in both projects, which will accrue dividends once MDL has recovered its capital invested.

Forward Looking Statements

Certain information contained in this report, including any information on MDL's plans or future financial or operating performance and other statements that express management's expectations or estimates of future performance, constitute forward-looking statements. Such statements are based on a number of estimates and assumptions that, while considered reasonable by management at the time, are subject to significant business, economic and competitive uncertainties. MDL cautions that such statements involve known and unknown risks, uncertainties and other factors that may cause the actual financial results, performance or achievements of MDL to be materially different from the company's estimated future results, performance or achievements expressed or implied by those forward-looking statements. These factors include the inherent risks involved in exploration and development of mineral properties, changes in economic conditions, changes in the worldwide price of gold, zircon, ilmenite and other key inputs, changes in mine plans and other factors, such as project execution delays, many of which are beyond the control of MDL.

Nothing in this report should be construed as either an offer to sell or a solicitation to buy or sell MDL securities.

Competent Persons Statement

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" and as defined in NI43-101. Mr Young has consented to the inclusion of this information in the form and context in which it appears in this report.

For further information please contact:

Jeff Williams, Managing Director
T: +61 3 9909 7633 | E: jeff.williams@mineraldeposits.com.au

Rick Sharp, Chief Financial Officer
T: +61 3 9909 7689 | E: rick.sharp@mineraldeposits.com.au