Quarterly Report – 1 October to 31 December 2009
Discovery Metals Limited (AIM: DME) (ASX/BSE: DML) ('Discovery Metals' or the 'Company')

HIGHLIGHTS

Boseto Copper Project Bankable Feasibility Study

- The Bankable Feasibility Study ('BFS') for current open pit deposits is 80% complete and remains on track for completion in March 2010.
- Boseto Environmental and Social Impact Assessment ('ESIA') has been submitted to the Government of Botswana for approval. From the findings of the ESIA, the Company sees no mitigated impacts or risks that will preclude the development of the Boseto Copper Project.
- The Boseto Copper Project’s BFS Progress Economics Update, released 6 October, shows:
  - Operating costs - 10 year average Net Cash Costs US$1.04/lb
  - Capital costs - US$150 million
  - Project economics improved with 10% rate of return being achieved at less than US$1.53/lb
  - Net Present Value range from US$116 million (US$2.00/lb) to US$426 million (US$4.00/lb copper price)
  - Internal Rates of Return range from 18% (US$2.00/lb) to 57% (US$4.00/lb copper price)
  - Payback is expected within 2 years of production commencing (at the base case copper price)
  - Targeted initial project life of 10 years.

Exploration & Infill Drilling

- Five deep holes were drilled at depth at the Zeta prospect. Two holes were drilled in the area within the existing resource envelope thought to be high grade and three holes drilled between 600 & 650 metres below surface. All holes intersected mineralisation and assays are pending.
- Regional soil sampling concentrated on the new Nyx target area.
- Work has commenced on the JOGMEC funded Dikoloti nickel/copper joint exploration programme.

Corporate

- In October 2009, the Company secured additional funding by the placement of 29,100,000 shares at 45 cents per share (GBP 25.5p) to raise AUD $13.1 million, to fund completion of the BFS, continued exploration and for deposits on long lead items in the future.
- In addition, the Company completed the AUD$2.7 million Share Purchase Plan for shareholders with addresses in Australia and New Zealand, for up to AUD$15,000 worth of shares at 45 cents per share.
- At the end of December 2009, Discovery Metals held AUD $17.6 million in cash.
1. Boseto Copper Project Bankable Feasibility Study

The Boseto Copper Project (the ‘Project’) Bankable Feasibility Study (‘BFS’) progressed during the quarter and was approximately 80% complete by the end of 2009. Finalisation of the BFS remains on schedule for the end of the March quarter 2010. The major items outstanding are the completion of the capital cost estimate by GRD Minproc (now called AMEC-Minproc) and the final mineral resource and mine plans from Snowden Mining Industry Consultants (‘Snowden’) for Plutus and Petra mineral resources after these resources are upgraded with all of the assay results since the previous calculation cut-off date in May 2009.

The infill drilling programme was completed in September 2009 and final assay results have been received. The programme was designed to upgrade portions of the Zeta, Plutus and Petra Inferred mineral resources to Indicated and Measured mineral resource categories. The final BFS updating of the Zeta Resource estimate was completed and announced in October. All deposits remain open along strike and at depth.

A major milestone for the Project was achieved with the completion of the Environmental Impact Assessment study (‘ESIA’) and submission to the Botswana Authorities (Department of Environmental Affairs).

Work on the copper concentrator design has been completed and is expected to culminate in a detailed capital expenditure estimate to BFS standard in February 2010.

The selection process for the Engineering, Procurement and Construction (EPC) contractor for the next phase of the Project (Implementation) has commenced with the short listing of suitably qualified internationally accredited consultancy companies in the areas of engineering and construction and a site visit of these companies to the Boseto project area in Botswana. The development of the EPC contract documentation based on recognised international standards has been completed. The award of the EPC contract is expected as soon as the BFS results are finalised.

(a) Update of BFS Progress Inputs/Outputs

An extensive update of the Boseto Copper Project economics was released on 6 October 2009 showing:

- **Cash operating costs** continue to be in the middle of the copper producer cost curve with the updated 10 year estimated average cost of US$1.04/lb (January 2009 - US$1.06/lb);
- **Capital costs** have increased to US$150 million (January 2009 - US$131 million) based on an increased contingency for capital component price changes;
- **Overall project economics** have improved despite including additional capital contingency and exploration expenditure, with the break even copper price at which the project provides a 10% discounted cash flow rate of return now being less than US$1.53/lb;
- **Net Present Values** ranging from US$116 million at a US$2.00/lb copper price to US$426 million at a US$4.00/lb copper price;
- **Internal Rates of Return** ranging from 18% at a US$2.00/lb copper price to 57% at a US$4.00/lb copper price;
- **Payback** is expected within 2 years of production commencing (at the base case copper price); and
- **Targeted** initial project life of 10 years.

Annual production from the Boseto copper concentrator is planned to average approximately 25,600 tonnes of copper and nearly 700,000 ounces of silver contained in a high grade concentrate grading 44% Cu.
(b) BFS Team

Discovery Metals continues to use a small team of experienced executives to manage a number of specialist consulting teams who are completing their respective areas of responsibility of the BFS for the Boseto Copper Project. Key aspects of the planned project development are subjected to further review by external specialists.

Completed work and reports on critical areas (resource geology and mine planning, ground water supply, metallurgy & process plant design and environmental compliance) have been forwarded to consultants performing the independent engineering review. The process has been designed to ensure that the quality of information contained in the BFS is verified and externally reviewed. This will provide improved confidence in the study outcomes and to contribute towards a BFS that meets the requirements of all stakeholders including existing and prospective investors, the Botswana Government and local authorities and debt financiers.

The principal consultancy groups working on the BFS are:

- Snowden has undertaken mineral resource estimation, geotechnical assessment, open pit design, production schedule optimisation, grade control assessment and underground mining conceptual studies;
- AMEC-Minproc are progressing the engineering package including process engineering, plant design and associated infrastructure;
- SRK Consulting (‘SRK’) was assigned the ESIA; together with the skills assessment study related to the area surrounding the proposed mine/processing site, as well as undertaking the tailings dam study. SRK has also completed the hydro-geological work required to define a water resource for the Project;
- Metallicon, a South African based metallurgical consulting group, with extensive copper and platinum experience, is assisting with understanding the metallurgy, coordinating the test work and advising on the process design; and
- SRK has supplied a team from Australia supplemented by outside specialists to form the independent review team for the BFS.

The BFS team has been complemented with highly experienced consultants in the fields of geology, mining equipment evaluation, human resources strategy and project execution as required.

During the quarter, several peer reviews were carried out by internationally accredited consultancy companies in the areas of resource classification and resource modelling, metallurgy, mineral processing, hydro-geology and the ESIA. The results of the peer review confirm the BFS work performed to date, with minimal additional follow up required.

(c) Mineral Resource Evaluation

The infill drilling programme required to upgrade significant portions of the Zeta, Plutus and Petra Inferred mineral resources to Measured and Indicated resource status was completed and all assay results were received during the quarter. An updated Zeta mineral resource estimation was completed and announced on 19 October 2009. The final Plutus/Petra resource estimate for the BFS is planned for completion by February 2010.
The total Mineral Resource at the Boseto Copper Project, reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, “2004 Edition”) at a cut off grade of 0.6% Cu is:

**60.4 Mt @ 1.4% Cu and 19.5g/t Ag** containing **846kt copper metal** and **38 Moz of silver** comprising:

- Measured Resources of 3.9 Mt @ 1.6% Cu and 23.0g/t Ag;
- Indicated Resources of 7.8 Mt @ 1.5% Cu and 22.8g/t Ag; and
- Inferred Resources of 48.7 Mt @ 1.4% Cu and 18.7g/t Ag.

**(d) Open Pit Mining Study**

An open pit design and mining engineering study was undertaken by Snowden. The study included detailed pit design and production scheduling to optimise cash flows and the project NPV. These formed the basis of the BFS Project Update announced on 6 October 2009.

Production scenarios using the different options of stockpiling low grade material and oxide mineralisation were also evaluated.

**(e) Underground Mining Study**

Snowden is completing a Scoping Study to determine the potential to develop underground mining operations for the Zeta mineral resource and the outcomes from this project are presently under review. It is intended to include the potential upside from an underground development at Zeta in the BFS document and commission Snowden to undertake a Pre-Feasibility Study (‘PFS’) level assessment and prepare an underground mine design for the Zeta mineral resource. It is planned to drill a number of deeper holes beneath the Plutus Prospect to explore for a continuation of high grade zones which may also present potential for an underground mine.

**(f) Grade Control Study**

Snowden has also completed a grade control study for the BFS and the review of the first draft report has commenced. The study has addressed grade control philosophy, resource model confidence, control of mining (dilution), control of metal flows to plant, mass balance and metal accounting and control of product quality.

Grade control is critical to the operations at Boseto and management is confident that the mining of mineralised zones can be tightly controlled.

**(g) Geotechnical Assessment**

Snowden has completed a geotechnical assessment of the pit slope parameters to be used in the BFS. This included development of geotechnical and structural models for each deposit, assessment of the potential pit slope failure mechanisms and a suite of kinematic and limit equilibrium analyses to assess slope stability and determine slope design parameters to the required probability of failure. The geomechanical laboratory testing programme included compressive strength tests, slake durability tests on the weathered materials as well as direct shear tests on core containing structural features. The results confirmed the pit slope angles from the Pre-Feasibility Study.

**(h) Processing Study**

Process Engineering has been completed for the concentrator design with the generation of Block Flow Diagrams, Process Flow Diagrams, Process Design Criteria, Mass Balance and Mechanical Equipment Lists. The results from this work have undergone an extensive peer review and been scrutinised by an external independent review team.
Detailed plant design was completed with the development of Piping & Instrumentation Diagrams, General Arrangement and detailed plant design drawings.

Vendor packages for the main equipment have been issued and the technical and financial adjudication process has been completed. This work will lead to a detailed and up to date capital expenditure estimate to BFS standard by February 2010.

The processing plant throughput is currently planned at 2Mtpa, although the design will encompass the capability of expanding to 3Mtpa at incremental capital cost. The comminution circuit comprises single stage crushing, SAG milling with pebble crusher and then ball milling. The flotation circuit incorporates a conventional rougher-cleaner-re-cleaner circuit for sulphide and oxide material.

The final metallurgical variability test work programme for comminution and flotation work encompassing Plutus, Zeta and Petra samples has been completed. The results, analyses and interpretation of test work findings confirm present metallurgical understanding of the Boseto mineralisation. High copper concentrate grades of 44% have been predicted from the processing of Boseto ore.

(i) Infrastructure Studies

Ongoing discussions continued with the Botswana Power Corporation (‘BPC’) requesting grid power supply by the first quarter of 2012. BPC confirmed that the contracts for Botswana’s new power plant projects have been awarded and their plans remain on track to significantly increase the country’s power grid capacity. The present Botswana power supply deficit is expected to decline gradually over the next few years until 2012, after which a small power surplus is anticipated.

The probable power supply route to the Project would be via Maun by extension of the Francistown-Maun power line or via Orapa. Alternate power generation methods available to the Project for self generation on site at Boseto include diesel, heavy fuel oil (HFO) generator sets and small coal fired power stations. The capital cost estimate for the Project includes an allowance for full self generation of all the power needs of the operation.

(j) Environmental and Social Impact Assessment

The final version of the ESIA report has been completed. All specialist studies including archaeology, ecology, groundwater supply and impact, noise, air quality, soil and land use capability and socio-economic considerations have been completed. The ESIA report has been submitted to the Botswana Authorities for approval. The review meeting with the Botswana Government has been scheduled for late February 2010.

No impacts that would be considered to constitute an unacceptable level of risk in developing the Boseto Copper Project have been identified in the ESIA studies.

Archaeological clearance for the development of the Project has been granted by the National Museum. The archaeological clearance covers the proposed mine footprint area as well as for the linear infrastructure (power line, road and water pipeline).

The baseline monitoring programme has been established in line with the Equator Principles and Performance Standards of the International Finance Corporation (‘IFC’). This is consistent with Discovery Metals’ commitment to progress Project development to comply with the Equator Principles.

(k) Hydro-Geological Study

Discovery Metals previously announced the successful delineation of groundwater resources which are more than sufficient to meet the processing and other operational needs of the Project. Well fields to develop these ground water resources will be situated within approximately 15 kilometres of the proposed plant site and design and capital cost estimates are currently being finalised.
(I) Tailings Disposal Study

The PFS design recommended conventional wet tailings deposition using a ring main with spigots. With the water resource now confirmed, conventional wet tailings deposition will form part of the BFS design. Field work regarding geotechnical investigations and soil analyses has been completed together with the final design work and the final report is expected by February 2010.

2. Boseto Execution Phase

Discovery Metals has secured the services of Alan Smyth, an experienced civil engineer with extensive international experience in construction projects. Alan will lead the Discovery Metals owner’s team in the selection and monitoring of the EPC contractor and form a team to oversee many of the smaller design and construct contracts required for the site. Alan will be with Discovery Metals through the construction and commissioning phases.

As stated in Section 1, the selection process for the EPC contractor for the next phase of the Project (Implementation) has commenced with the short listing of suitably qualified internationally accredited consultancy companies in the areas of engineering and construction. EPC contract documentation based on recognised international standards has been completed, with the award of the EPC contract expected once the BFS results are finalised.

3. Exploration & Infill Drilling

Botswana Copper Project (Discovery Metals 100%)

The Botswana copper tenements comprise 14 prospecting licences covering 10,100 square kilometres in north-west Botswana. The tenements extend from 60 kilometres south-west of Maun to the Namibian border, a distance of over 300 kilometres. These tenements contain approximately 1,300 strike kilometres of rocks potentially hosting copper-silver mineralisation across the Kalahari Copper Belt.

To date, less than 220 kilometres of the 1300 kilometre prospective horizon have been explored by Discovery Metals’ soil sampling programme. In addition to the reported Mineral Resources, Zeta and Plutus/Petra remain open at depth and along strike. Mineralised prospects not yet included in the Mineral Resource include Quirinus, South-West Petra, Nexus and north east extensions of Plutus, Nexus and Zeta. Only 67 kilometres of the 220 kilometre prospective horizon has been drilled to date with various grades of mineralisation intersected across that entire strike.

Field activity in the December quarter focussed on deep drilling at Zeta to evaluate the underground resource. Regional soil sampling programmes continued in a number of areas within 10 kilometres of the proposed Boseto plant site. A total of 4 diamond drill holes for 2,357m were completed.

Zeta Infill Drilling Programme

Following a final round of infill drilling, the Zeta mineral resource was updated in October 2009 to:

35.4 Mt @ 1.4% Cu and 22.3 g/t Ag at a cut-off grade of 0.6% Cu

consisting of Measured resources of 3.9 Mt @ 1.6% Cu and 23.0g/t Ag, Indicated resources of 7.0 Mt @ 1.5% Cu and 23.8g/t Ag and Inferred Resources of 24.5 Mt @ 1.4% Cu and 21.8g/t Ag.

Although the Zeta deposit remains open along strike and at depth, this updated resource will together with the updated Plutus/Petra resources form the basis of the Bankable Feasibility Study. No further drilling for open pit resources will be undertaken at Zeta prior to the completion of the Bankable Feasibility Study.
Zeta Underground Drilling program

A program is underway to evaluate the potential for an underground mining operation at Zeta. This program includes drilling deep holes to test the mineralisation at depth. A further four more holes (2,357m) were completed during the quarter to complete the first phase of the drilling program. Assay results are still pending.

Petra Prospect Drilling Programme

The Petra mineral resource was last updated in April 2009 to:

9.1Mt @ 1.2% copper (Cu) and 14.1g/t silver (Ag) using a cut-off grade of 0.6% Cu

consisting of Indicated resources of 0.8 Mt @ 1.4% Cu and 14.0g/t Ag and Inferred resources of 8.3 Mt @ 1.2% Cu and 14.1g/t Ag.

The Petra resource now connects directly to the Plutus resource creating a continuous strike length of more than 10 kilometres, open at depth and to the north east. To the south west, Petra is cut off by a younger, barren Karoo Graben.

Plutus Prospect Drilling Programme

The Inferred Mineral Resource for the Plutus Prospect was last updated in October 2008 to:

15.9Mt @ 1.6% copper (Cu) and 16.4g/t silver (Ag) at a cut-off grade of 0.6% Cu.

Infill drilling at Plutus was completed in September 2009 and will improve the quality of the Plutus resource (from Inferred to Indicated status) and was focused on the portion of the resource being considered for open pit mining. The current round of drilling results will generate assay information from a number of shallow holes specifically drilled to improve the Company’s understanding of the near surface mineralisation where previous drilling and metallurgical testing has demonstrated the presence of oxide copper minerals including chrysocolla and malachite.

These results will assist in defining the boundaries of higher grade mineralised zones within the Plutus mineral resource where the grades exceed 2% copper. These +2% copper zones are anticipated to enable development of shallow higher-grade starter pits which will contribute to improved project economics as well as provide potential for future underground resources. The potential for underground resources will be further tested with a deep drilling program during the first half of 2010.

An updated mineral resource estimate is expected to be completed late in February 2010 using all drill hole results since the determination of the current resource.

Quirinus Prospect Drilling Programme

The Quirinus Prospect is located 15 kilometres from the current identified mineral resources at Zeta, Plutus and Petra and is located within trucking distance of the proposed concentrator site.

Three discrete anomalous copper zones (greater than 100ppm Cu) were delineated by soil geochemistry at Quirinus, with the total anomalous copper signature of 13.4 kilometres in strike length. Four diamond drill holes and three reverse circulation holes were drilled at Quirinus, confirming copper-silver mineralisation identified by the Niton soil geochemical programme.

There has been no further work on the Quirinus Prospect this year as efforts were focused on the mineral resources currently designated for the BFS. Further exploration and delineation programmes at Quirinus are expected to be carried out in 2010 as part of the regional exploration programme.
Regional Exploration Programme

The regional soil geochemical programme (using a hand held ‘Niton’ XRF Analyser) expanded into areas outside the Boseto project. The main area sampled during the December quarter is the Nyx area which is located approximately 10 kilometres south of Zeta on a different geological structure to that hosting the Zeta deposit. A total of 2,075 samples were analysed. Results are undergoing quality control checks.

With sufficient “near-Boseto” drilling targets now generated, the Niton crews are gearing up for a programme of targeted regional soil sampling in 2010 over prospective areas on the rest of the Discovery Metals’ tenements.

4. Dikoloti Nickel Project, North-East Botswana (Discovery Metals 85% owned)

Exploration consisted of a helicopter borne VTEM (Versatile Time Domain Electro-Magnetics) survey over all four prospecting licences at Dikoloti, soil sampling over various geophysical, geochemical and geological targets generated from compilation of previous exploration results and re-logging of drill core from Dikoloti North.

The Dikoloti nickel project comprises four prospecting licences covering an area of 600 square kilometres surrounding the nickel deposits of BCL Limited in the Selebi-Phikwe region of north-east Botswana. Discovery Metals has earned an 85% interest from Xstrata, which is currently diluting its interest in this project. An Inferred mineral resource of 4.1Mt @ 0.7% Ni, 0.5% Cu and 1.2 ppm PGE’s (Pt + Pd) at a cut-off of 0.5% Ni for 28,700 tonnes of contained nickel has been reported in accordance with the guidelines of the JORC (2004) code.

Discovery Metals announced on 8 October 2009 that it has entered into a Joint Exploration Agreement with The Japan Oil, Gas and Metals National Corporation (JOGMEC) to fund an AUD$3 million exploration programme for Dikoloti. The highlights of the agreement are:

- Discovery Metals will remain operator of the joint venture during the farm-in exploration period and for any future projects or operating phases;
- The joint venture will be controlled by a joint operating committee, with representation of both JOGMEC and Discovery Metals;
- A number of highly prospective exploration targets have been identified adjacent to the existing Inferred Resource;
- JOGMEC has the right to earn a joint venture interest of up to 60%; and
- Should the exploration programme prove successful, it would be expected that JOGMEC would assign its interest to another Japanese entity for the development and operating phases.

In detail, the VTEM survey completed 3,461 line kilometres and the preliminary data has been received. Discovery Metals is encouraged by the results generated and is planning to carry out ground based EM follow up over several VTEM targets in order to establish if drill testing is warranted. Such drilling could be carried out later in 2010.

A total of 790 soil samples were collected but the results have not yet been received and compiled. Re-logging of the drill core at Dikoloti North indicates that previous drilling of a significant UTEm anomaly had not extended deep enough to intersect the plunging copper/nickel massive sulphide mineralisation. Estimates of the plunge suggest the mineralisation occurs at least 200m vertically below surface and therefore remains open to the north.
5. Australian Projects

a) Musgrave Project, Western Australia (Discovery Metals 100%)

A joint venture agreement is in place with Redstone Resources Limited (‘Redstone’). The Company is in the process of evaluating the standing of these tenements.

b) Litchfield Project, Northern Territory (Discovery Metals 100%)

The Litchfield tenements are in the process of being relinquished.

6. Corporate Activities

On 23 October 2009, the Company announced it had successfully placed 29,100,000 shares at AUD 45 cents per share (GBP 25.5p) to raise AUD $13.1 million (net of expenses) with institutional and retail investors in both the United Kingdom and Australia. In anticipation of a successful BFS outcome, this funding will enable the assembly of the Company’s project team responsible for the construction of the Boseto Copper Project facilities commencing in 2010. The funding will also allow the Company to pay early cash deposits on long lead items of plant and equipment with the aim of shortening the development time-frame to the production of copper concentrate and for ongoing exploration programmes.

In addition, the Company completed an AUD$2.7 million Share Purchase Plan (SPP) for shareholders with addresses in Australia and New Zealand, for purchases of up to AUD$15,000 worth of shares at 45 cents per share.

At the end of the December quarter 2009, Discovery Metals held AUD $17.6 million in cash.
**Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Fred Nhiwatiwa who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Nhiwatiwa is a full-time employee of Discovery Metals Limited. Mr Nhiwatiwa has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”.

The information in this report as it relates to the Zeta, Plutus and Petra Mineral Resources for the Boseto Copper Project was reviewed by David Arnott, who is a MAusIMM. Mr Arnott is employed fulltime by Snowden Mining Industry Consultants Pty Ltd (Snowden). Mr Arnott has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”.

The information in this report as it relates to the Dikoloti Mineral Resource was reviewed by Mr Stefan Mujdrica of Xstract Mining Consultants Pty Ltd. At the time of reviewing the reported Mineral Resource, Mr Mujdrica was employed by Snowden. Mr Mujdrica is a MAusIMM and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”.

Messrs Nhiwatiwa, Arnott and Mujdrica consent to the inclusion in this report of the matters based on information provided by them and in the form and context in which it appears.

**Forward Looking Statements**

This release includes certain statements that may be deemed “forward-looking statements”. All statements in this discussion, other than statements of historical facts, that address future activities and events or developments that Discovery Metals expects, are forward-looking statements. Although Discovery Metals believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, continued availability of capital and financing, and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance and that actual results or developments may differ materially from those projected in forward-looking statements.
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Stock exchange listings
Australian Stock Exchange - ASX Code: DML
Botswana Stock Exchange - BSE Code: DML
Alternate Investment Market - London Stock Exchange
AIM Code: DME

Issued capital
At 31 December 2009 ordinary issued capital of Discovery Metals was 230,261,453 ordinary shares and 43,042,835 shareholder, director and executive options.

Directors
Gordon Galt – Chairman
Brad Sampson – Managing Director
Morrice Cordiner – Non-Executive Director
Ribson Gabonwe – Non-Executive Director
Jeremy Read – Non-Executive Director
John Shaw – Non-Executive Director

Company Secretary - Roslynn Shand
Appendix 5B

Mining exploration entity quarterly report


Name of entity
Discovery Metals Limited

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<tr>
<th>ABN</th>
<th>Quarter ended (“current quarter”)</th>
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<tbody>
<tr>
<td>29 104 924 423</td>
<td>December 2009</td>
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### Consolidated statement of cash flows

#### Cash flows related to operating activities

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<th>Description</th>
<th>Current quarter $A’000</th>
<th>Year to date (6 months) $A’000</th>
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<tbody>
<tr>
<td>1.1 Receipts from product sales and related debtors</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.2 Payments for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) exploration and evaluation</td>
<td>(3,166)</td>
<td>(6,560)</td>
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<tr>
<td>(b) development</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(c) production</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(d) administration</td>
<td>(589)</td>
<td>(1,507)</td>
</tr>
<tr>
<td>1.3 Dividends received</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.4 Interest and other items of a similar nature received</td>
<td>93</td>
<td>170</td>
</tr>
<tr>
<td>1.5 Interest and other costs of finance paid</td>
<td>-</td>
<td>-</td>
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<tr>
<td>1.6 Income taxes paid</td>
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<td>-</td>
</tr>
<tr>
<td>1.7 Other (Indirect Taxes)</td>
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<td>407</td>
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<td><strong>Net Operating Cash Flows</strong></td>
<td><strong>(3,404)</strong></td>
<td><strong>(7,490)</strong></td>
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#### Cash flows related to investing activities

<table>
<thead>
<tr>
<th>Description</th>
<th>Current quarter $A’000</th>
<th>Year to date (6 months) $A’000</th>
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</thead>
<tbody>
<tr>
<td>1.8 Payment for purchases of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) prospects</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(b) equity</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(c) other fixed assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.9 Proceeds from sale of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) prospects</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(b) equity</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(c) other fixed assets</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.10 Loans to other entities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.11 Loans repaid by other entities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.12 Other (provide details if material) (JOGMEC Joint Venture Contribution)</td>
<td>726</td>
<td>726</td>
</tr>
<tr>
<td><strong>Net Investing cash flows</strong></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1.13 Total operating and investing cash flows (carried forward)</td>
<td><strong>(2,678)</strong></td>
<td><strong>(6,764)</strong></td>
</tr>
</tbody>
</table>

+ See chapter 19 for defined terms.

31/12/2009
Appendix 5B
Mining exploration entity quarterly report

1.13 Total operating and investing cash flows (brought forward)

<table>
<thead>
<tr>
<th></th>
<th>(2,678)</th>
<th>(6,764)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flows related to financing activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.14 Proceeds from issues of shares, options, etc.</td>
<td>15,504</td>
<td>15,504</td>
</tr>
<tr>
<td>1.15 Proceeds from sale of forfeited shares</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.16 Proceeds from borrowings</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.17 Repayment of borrowings</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.18 Dividends paid</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.19 Other (provide details if material)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Net financing cash flows</strong></td>
<td>15,504</td>
<td>15,504</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net increase (decrease) in cash held</strong></td>
<td>12,826</td>
<td>8,740</td>
</tr>
<tr>
<td>1.20 Cash at beginning of quarter/year to date</td>
<td>4,776</td>
<td>8,862</td>
</tr>
<tr>
<td>1.21 Exchange rate adjustments to item 1.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.22 Cash at end of quarter</strong></td>
<td>17,602</td>
<td>17,602</td>
</tr>
</tbody>
</table>

**Payments to directors of the entity and associates of the directors**

**Payments to related entities of the entity and associates of the related entities**

<table>
<thead>
<tr>
<th></th>
<th>Current quarter $A’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.23 Aggregate amount of payments to the parties included in item 1.2</td>
<td>60</td>
</tr>
<tr>
<td>1.24 Aggregate amount of loans to the parties included in item 1.10</td>
<td>-</td>
</tr>
</tbody>
</table>

1.25 **Explanation necessary for an understanding of the transactions**
- 

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows
- 

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest
- 

**Financing facilities available**

*Add notes as necessary for an understanding of the position.*

<table>
<thead>
<tr>
<th></th>
<th>Amount available $A’000</th>
<th>Amount used $A’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Loan facilities</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.2 Credit standby arrangements</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

† See chapter 19 for defined terms.
### Estimated cash outflows for next quarter

<table>
<thead>
<tr>
<th>Exploration and evaluation</th>
<th>$A’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>2,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2</td>
<td></td>
</tr>
</tbody>
</table>

**Total**                   | 2,000  |

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

<table>
<thead>
<tr>
<th></th>
<th>Current quarter $A’000</th>
<th>Previous quarter $A’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Cash on hand and at bank</td>
<td>17,602</td>
<td>4,776</td>
</tr>
<tr>
<td>5.2 Deposits at call</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.3 Bank overdraft</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.4 Other (provide details)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total: cash at end of quarter (item 1.22)</strong></td>
<td>17,602</td>
<td>4,776</td>
</tr>
</tbody>
</table>

### Changes in interests in mining tenements

<table>
<thead>
<tr>
<th>Tenement reference</th>
<th>Nature of interest (note (2))</th>
<th>Interest at beginning of quarter</th>
<th>Interest at end of quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Interests in mining tenements relinquished, reduced or lapsed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 Interests in mining tenements acquired or increased</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+ See chapter 19 for defined terms.

31/12/2009
### Issued and quoted securities at end of current quarter

*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*

<table>
<thead>
<tr>
<th>Total number</th>
<th>Number quoted</th>
<th>Issue price per security (see note 3) (cents)</th>
<th>Amount paid up per security (see note 3) (cents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 Preference securities (description)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.3 <em>Ordinary securities</em></td>
<td>230,261,453</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs</td>
<td>35,046,820</td>
<td>35,046,820</td>
<td>45 cents (placement &amp; SPP) 30 cents (options exercise)</td>
</tr>
<tr>
<td>7.5 <em>Convertible debt securities (description)</em></td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7.7 Options (description and conversion factor)</td>
<td>500,000</td>
<td>30 cents</td>
<td>1 April 2010</td>
</tr>
<tr>
<td></td>
<td>1,500,000</td>
<td>30 cents</td>
<td>1 May 2010</td>
</tr>
<tr>
<td></td>
<td>1,300,000</td>
<td>35 cents</td>
<td>1 May 2010</td>
</tr>
<tr>
<td></td>
<td>28,677,310</td>
<td>30 cents</td>
<td>25 May 2010</td>
</tr>
<tr>
<td></td>
<td>718,188</td>
<td>26 cents</td>
<td>1 September 2010</td>
</tr>
<tr>
<td></td>
<td>500,000</td>
<td>30 cents</td>
<td>1 September 2010</td>
</tr>
<tr>
<td></td>
<td>250,000</td>
<td>36 cents</td>
<td>1 October 2010</td>
</tr>
<tr>
<td></td>
<td>497,337</td>
<td>36 cents</td>
<td>5 December 2010</td>
</tr>
<tr>
<td></td>
<td>250,000</td>
<td>36 cents</td>
<td>1 October 2011</td>
</tr>
<tr>
<td></td>
<td>2,000,000</td>
<td>50 cents</td>
<td>12 December 2011</td>
</tr>
<tr>
<td></td>
<td>1,000,000</td>
<td>35 cents</td>
<td>Vest 24/11/2010</td>
</tr>
<tr>
<td></td>
<td>1,000,000</td>
<td>44 cents</td>
<td>Expire 12/12/2011</td>
</tr>
<tr>
<td></td>
<td>500,000</td>
<td>43 cents</td>
<td>1 February 2012</td>
</tr>
<tr>
<td></td>
<td>250,000</td>
<td>26 cents</td>
<td>25 March 2012</td>
</tr>
<tr>
<td></td>
<td>1,000,000</td>
<td>55 cents</td>
<td>1 November 2012</td>
</tr>
<tr>
<td></td>
<td>500,000</td>
<td>54 cents</td>
<td>Vest 1/02/2010</td>
</tr>
<tr>
<td></td>
<td>100,000</td>
<td>37.5 cents</td>
<td>Expire 1/02/2013</td>
</tr>
<tr>
<td></td>
<td>250,000</td>
<td>32 cents</td>
<td>Expire 25/03/2010</td>
</tr>
<tr>
<td></td>
<td>1,000,000</td>
<td>35 cents</td>
<td>1 November 2012</td>
</tr>
<tr>
<td></td>
<td>1,250,000</td>
<td>37.5 cents</td>
<td>Expire 25/03/2013</td>
</tr>
<tr>
<td>7.8 Issued during quarter</td>
<td>8,518,519</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7.9 Exercised during quarter</td>
<td>1,136,253</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7.10 Expired during quarter</td>
<td>1,000,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7.11 Debentures (totals only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.12 Unsecured notes (totals only)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* See chapter 19 for defined terms.
Compliance statement

1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).

2 This statement does not give a true and fair view of the matters disclosed.

Sign here: ..................................................... Date: 28 January 2010

(Company Secretary)

Print name: Roslynn Shand

Notes

1 The quarterly report provides a basis for informing the market how the entity’s activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.

2 The “Nature of interest” (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.

3 Issued and quoted securities The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.

4 The definitions in, and provisions of, AASB 1022: Accounting for Extractive Industries and AASB 1026: Statement of Cash Flows apply to this report.

5 Accounting Standards ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

+ See chapter 19 for defined terms.

31/12/2009