

**ASX ANNOUNCEMENT**



**RELEASE DATE:** 29 January 2010

**TO:** **Manager Companies**  
**Australian Securities Exchange**  
**Company Announcements Office**

**CONTACT:** **Lexton Graefe (08 9 322 8393)**

**RE:** **December 2009 Quarterly Report & Appendix 5B**

**PAGES:** 1 of 8

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Dear Sir/ Madam

Please see attached Quarterly Report and Appendix 5B for the period ending 31 December 2009.

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## **QUARTERLY ACTIVITY REPORT**

### **FOR THE PERIOD ENDED 31 DECEMBER 2009**

The following report covers corporate activity, exploration and field work at Shield Mining's Tijirit gold project in Mauritania, West Africa.

- **5,026 metre RC drilling programme commenced (and completed in January, 2010)**
- **Soil sampling continued**

#### **Mauritania**

##### **Tijirit Gold Project**

Following the successful drill programme last season and the fund raising, the 2010 exploration programme continued during the quarter with more extensive soil sampling.

By the end of December, 3,096 soil samples had been collected and sent for analysis. Some results have been received and have been used to better define the drill targets for the drilling programme.

Prospect plans showing drill hole locations with respect to the soil geochemistry and interpreted geological plans and sections can be viewed on the website at [www.shieldmining.com](http://www.shieldmining.com).

##### **Drilling**

Following the award of the drilling contract for 5,000 metres of reverse circulation (RC) drilling, the work commenced in November. The contract was terminated shortly after starting as the drilling contractor was unable to properly comply with the requirements of the contract.

A new contractor was appointed and by the end of the quarter, 22 holes for 1,830 metres were completed. The contract was completed by the 15th January with 68 holes and 5,026 metres drilled. Preliminary results were released in January and the remainder of the results are due to be released before the end of February.

##### **Background**

The Tasiast gold mine (owned by Redback Mining Inc.), is 35km to the northwest of Tijirit and in an adjacent Achaean Greenstone belt. Tijirit exhibits a similar geology to Tasiast. Previous explorers outlined broad spaced (1km centres) gold in soil anomalies on Tijirit in the 1990s during the same campaign that delineated Tasiast. Tasiast now hosts a world-class gold project with reserves of 2.28Moz and resources of 3Moz and is now producing 230,000 ounces per annum.

In two field seasons during 2008 Shield collected soil samples on four grids with results confirming the broad spaced anomalies defined from earlier work. These grids were infill sampled to 80m x 40m with results enhancing and extending previously delineated anomalies. Ground geophysics was also successfully undertaken. The anomalies were then trenched to give better guidance to the drill programme.

In April, 2009 a 3,275 metre drill programme was undertaken over three of the prospects. The results from this confirmed the presence of gold and the similarity of geology to the Tasiast Gold Mine.

## Corporate

### Financial

Significant exploration expenditure is planned for the coming quarter. This will complete the company's immediate planned program and expenditure obligations for both EL447 and EL448. Further work will be assessed in light of the results from these current programs.

### Issue of Options

In November, Shield issued 1,000,000 options to employees and contracted associates. Directors were not eligible to participate. The options issued to the employees were issued under the existing Employee Share Option Plan adopted in 2006 and were allotted to key personnel who have and continue to be instrumental in providing invaluable support and skills-based industry knowledge to the Company.

The exercise price for the options is \$0.25 and they have an expiry date of 15 November 2012.

The issue increased the total number of options on issue to 25,313,143, with 21,313,143 of those options being granted as part of the recent rights issue and concurrent placement.

**Shield Mining Limited (ASX:SHX) is an Africa-focused gold and base metals explorer listed on the Australian Securities Exchange. Shield is active in Mauritania where it holds 100% of 2 and 60% of 2 exploration licences, covering a total area of 2,429km<sup>2</sup>. Its primary focus is the Tijirit Gold Project, located 35km SW of the Tasiast Gold Mine owned by Redback Mining Inc. with similar geology. Shield has soil sampled, trenched and RC drilled (8800 metres) on 5 prospects. It is currently waiting the results of the 2<sup>nd</sup> drilling programme which should be available in late February. At its Akjoujt copper/gold project it is currently flying a gravity survey with results expected in March. The Saboussiri copper-gold tenement has a drill ready geophysical target.**

**Details of Sampling & Analysis:** RC samples were collected every metre, split to approximately 125gms and composited every 2m to 2.5kg on site. Samples are transported by road to SGS Laboratories in Kayes, Mali. Gold only analysis is by aqua regia digestion thence flame AAS detection on a 50gm charge (0.01ppm Au detection limit) (SGS ARE155 method). Soil samples were collected in September on a 80m x 40m grid. Material was taken from below the windblown sand and sieved on site to 75µ (-200 mesh). Sample size of sieved material was a nominal 75gm. Samples were air freighted to Genalysis Laboratories in Perth. Gold only analysis is by aqua regia digestion thence graphite furnace AAS detection on a 10gm charge (1ppb Au detection limit) (Genalysis B/ETA method).

*The information in this Report that relates to exploration results is based on information compiled by Mr Phil Fillis who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Fillis is a geologist consulting to the company, with over 30 years experience as a geologist. Mr Fillis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for 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. Mr Fillis consents to the inclusion in the report of the matters based on his information in the form and context in which it is used.*

# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

|                       |
|-----------------------|
| Shield Mining Limited |
|-----------------------|

ABN

|                |
|----------------|
| 62 108 267 063 |
|----------------|

Quarter ended ("current quarter")

|               |
|---------------|
| December 2009 |
|---------------|

### Consolidated statement of cash flows

|   | December Quarter<br>\$A'000 | Year to date<br>(6 months)<br>\$A'000 |
|---|-----------------------------|---------------------------------------|
| <b>Cash flows related to operating activities</b>               |                             |                                       |
| 1.1 Receipts from product sales and related debtors             |                             |                                       |
| 1.2 Payments for (a) exploration and evaluation                 | (426)                       | (733)                                 |
| (b) development   | -                           | -                                     |
| (c) production  | -                           | -                                     |
| (d) administration  | (205)                       | (419)                                 |
| 1.3 Dividends received  | -                           | -                                     |
| 1.4 Interest and other items of a similar nature received       | 37                          | 46                                    |
| 1.5 Interest and other costs of finance paid                    | -                           | -                                     |
| 1.6 Income taxes paid   | -                           | -                                     |
| 1.7 Other (provide details if material)                         | -                           | -                                     |
| <b>Net Operating Cash Flows</b>                                 | <b>(594)</b>                | <b>(1,106)</b>                        |
| <b>Cash flows related to investing activities</b>               |                             |                                       |
| 1.8 Payment for purchases of: (a) prospects                     | -                           | -                                     |
| (b) equity investments  | -                           | -                                     |
| (c) other fixed assets  | (5)                         | (50)                                  |
| 1.9 Proceeds from sale of: (a) prospects                        | -                           | -                                     |
| (b) equity investments  | -                           | -                                     |
| (c) other fixed assets  | -                           | -                                     |
| 1.10 Loans to other entities                                    | -                           | -                                     |
| 1.11 Loans repaid by other entities                             | -                           | -                                     |
| 1.12 Other (provide details if material)                        | -                           | -                                     |
| <b>Net investing cash flows</b>                                 | <b>(5)</b>                  | <b>(50)</b>                           |
| 1.13 Total operating and investing cash flows (carried forward) | <b>(599)</b>                | <b>(1,156)</b>                        |

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Shield Mining Limited December 2009 Quarterly Report**

|   |  |              |            |
|---|--|--------------|------------|
| 1.13  | Total operating and investing cash flows (brought forward) | (599)        | (1,156)    |
| <b>Cash flows related to financing activities</b> |  |              |            |
| 1.14  | Proceeds from issues of shares, options, etc.              | -            | 2,081      |
| 1.15  | Proceeds from sale of forfeited shares                     | -            | -          |
| 1.16  | Proceeds from borrowings                                   | -            | -          |
| 1.17  | Repayment of borrowings                                    | -            | -          |
| 1.18  | Dividends paid   | -            | -          |
| 1.19  | Other (provide details if material)                        | -            | -          |
|   | <b>Net financing cash flows</b>                            | -            | 2,081      |
| <b>Net increase (decrease) in cash held</b>       |  |              |            |
|   |  | <b>(599)</b> | <b>925</b> |
| 1.20  | Cash at beginning of quarter/year to date                  | 3,614        | 2,090      |
| 1.21  | Exchange rate adjustments to item 1.20                     | -            | -          |
| 1.22  | <b>Cash at end of quarter*</b>                             | 3,015        | 3,015      |

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

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

|      |  | December quarter<br>\$A'000 |
|------|--|-----------------------------|
| 1.23 | Aggregate amount of payments to the parties included in item 1.2 | 90                          |
| 1.24 | Aggregate amount of loans to the parties included in item 1.10   | NIL                         |

1.25 Explanation necessary for an understanding of the transactions

Directors fees and salaries including any superannuation, and payments to Director related entities

**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

Nil

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

Nil

+ See chapter 19 for defined terms.

### Financing facilities available

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

|                                 | Amount available<br>\$A'000 | Amount used<br>\$A'000 |
|---------------------------------|-----------------------------|------------------------|
| 3.1 Loan facilities             | Nil                         | Nil                    |
| 3.2 Credit standby arrangements | Nil                         | Nil                    |

### Estimated cash outflows for next quarter

|                                | \$A'000      |
|--------------------------------|--------------|
| 4.1 Exploration and evaluation | 1,122        |
| 4.2 Development                | -            |
| <b>Total</b>                   | <b>1,122</b> |

### 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.

|   | September quarter<br>\$A'000 | December quarter<br>\$A'000 |
|---|------------------------------|-----------------------------|
| 5.1 Cash on hand and at bank                      | 114                          | 170                         |
| 5.2 Deposits at call                              | -                            | 824                         |
| 5.3 Bank overdraft                                | -                            | -                           |
| 5.4 Other (provide details) – Term Deposits       | 3,500                        | 2,021                       |
| <b>Total: cash at end of quarter (item 1.22)*</b> | <b>3,614</b>                 | <b>3,015</b>                |

### Changes in interests in mining tenements

|     | Tenement<br>reference   | Nature of interest | Interest at<br>beginning<br>of quarter | Interest at<br>end of<br>quarter |
|-----|---|--------------------|--|----------------------------------|
| 6.1 | Interests in mining tenements relinquished, reduced or lapsed |                    |  |                                  |
| 6.2 | Interests in mining tenements acquired or increased           |                    |  |                                  |

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Shield Mining Limited December 2009 Quarterly Report**

**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.*

|  | Total number | Number quoted | Issue price per security (see note 3) (cents) | Amount paid up per security (see note 3) (cents) |
|--|--------------|---------------|---|--|
| 7.1 <b>Preference +securities</b><br><i>(description)</i>  | Nil          |               |   |  |
| 7.2 Changes during quarter<br>(a) Increases through issues<br>(b) Decreases through returns of capital, buy-backs, redemptions | Nil          |               |   |  |
| 7.3 <b>+Ordinary securities</b>  | 73,223,476   | 73,223,476    |   |  |
| 7.4 Changes during quarter<br>(a) Increases through issues<br>(b) Decreases through returns of capital, buy-backs              | Nil<br>Nil   |               |   |  |
| 7.5 <b>+Convertible debt securities</b><br><i>(description)</i>  | Nil          |               |   |  |
| 7.6 Changes during quarter<br>(a) Increases through issues<br>(b) Decreases through securities matured, converted              | Nil<br>Nil   |               |   |  |
| 7.7 <b>Options</b> <i>(description and conversion factor)</i>  |              |               | <i>Exercise price</i>                         | <i>Expiry date</i>                               |
| Unlisted Options   | 3,000,000    | -             | \$0.40  | 30 Jun 2011                                      |
| Unlisted Options   | 21,313,143   | -             | \$0.20  | 31 Aug 2011                                      |
| Unlisted Options   | 1,000,000    | -             | \$0.25  | 15 Nov 2012                                      |
| 7.8 Issued during quarter  | 1,000,000    | -             | \$0.25  | 15 Nov 2012                                      |
| 7.9 Exercised during quarter   | Nil          |               |   |  |
| 7.10 Expired during quarter  | Nil          |               |   |  |
| 7.11 <b>Debentures</b> <i>(totals only)</i>  | Nil          |               |   |  |
| 7.12 <b>Unsecured notes</b> <i>(totals only)</i>   | Nil          |               |   |  |

+ 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.



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Company Secretary  
Lexton Graefe

Date: 29 January 2010

## 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.

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+ See chapter 19 for defined terms.