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**SANDFIRE RESOURCES**



## **QUARTERLY REPORT**

**FOR THE PERIOD ENDED 30 JUNE 2004**

**ASX CODE: SFR**



## HIGHLIGHTS

- Gravity survey locates an anomaly at Borroloola.
- Agreement reached with various Native Title Parties including the Karajarri at Sandfire.
- Option to purchase the Mt Genoa tenement at Mt Augustus signed.
- A total of 12.74 million options were issued pursuant to the Prospectus dated 4 May 2004.

## ACTIVITY REPORT

### *Borrooloola Project (Sandfire 100%)*

A detailed (50m x 250m station spacing) gravity survey over the project area was completed during the quarter. The objective of undertaking the survey was to establish whether a gravity feature existed that could be due to an accumulation of base metal within the McArthur Group rocks.

The main structural elements of the area were well defined by the survey due to the density contrast between the major stratigraphic groups. No feature that could be ascribed to a base metal type target was located. However, a well defined gravity low of 1.2 mgal was outlined in the southern part of the project area adjacent to the Four Archers Fault. The source of the feature is obscured by Cretaceous rocks and a variety of other regolith types. The source of the gravity feature could be a down faulted block of Tawallah or Roper Group rocks or an intrusive into the McArthur Group rocks. Intrusives into the McArthur Group are uncommon, the most notable being Kimberlitic intrusives such as those at the Merlin project 120 km to the east.

Through recent mapping, the Company has started to develop a structural model for the area more in line with current developments in the understanding of the geology of the region. This work has mainly focussed on the northern part of the project area. Prior to this activity, copper mineralisation was mainly known from the Gordon's Prospect. Based on Company's work conducted during the quarter, copper mineralisation is now known over the length of the Coppermine Fault within the Company's tenements.

The next phase of work, to be undertaken in 2004, will involve additional mapping and an induced polarisation survey in the northern part of the project area to help define a drilling target and mapping and sampling in the area of the gravity anomaly to establish the source of the anomaly.

### *Sandfire Project (Sandfire 100%)*

Additional data obtained during the quarter has enlarged the area of interest to the Company. Three (3) new exploration licences were applied for to cover the areas concerned. These new applications bring the total number of exploration licences at Sandfire to seven (7).

Discussions with the Native Title Holders have been concluded and the Company has entered into a Heritage Protection Agreement with the Karajarri Traditional Lands Association and the Kimberley Land Council ('KLC') whereby the Company can access the tenements for exploration purposes on the terms of the agreement. The Native Title determination in favour of the Karajarri traditional owners over areas covering much of the Company's Sandfire tenements confers upon the Karajarri the right of exclusive possession of the land. Pursuant to the Heritage Protection Agreement the Company has submitted a Heritage Impact Assessment notice to the KLC and has been advised that a field inspection by the Karajarri traditional owners of the area of the proposed gravity survey is required. This is planned for early August 2004. The gravity survey should commence towards the end of August 2004.

To provide a base for future work, the Company engaged Fugro Airborne Surveys to undertake an analysis of the available aeromagnetic data. In addition to providing information on the basement, this interpretation identified shallower magnetic sources which

follow the interpreted traces of the Nita Downs and Admiral Bay faults. The origins of these magnetic features are unknown at this stage of the program.

At the completion of the gravity program, the various data sets will be integrated with the objective of defining a drill target.

*Mt Augustus (Sandfire 100%)*

The Company has signed Heritage Protection Agreements with the Gnulli and Wajarri Elders Native Title Claimant Groups which will allow the tenements to be advertised and, subject to no further objections, proceed to grant. A new exploration licence E08/1173 was applied for to cover the available ground in the vicinity of the Mt Genoa project.

*Mt Genoa (Option Agreement)*

The Mt Genoa project is located approximately 10 km south of Mt Augustus Homestead in the Gascoyne Mineral Field. The tenement E09/997 is held in the name of Lithos Exploration Services Pty Ltd ('Lithos') and covers two occurrences of lead (galena) and copper mineralisation. The tenement adjoins the Company's other holdings in the area and covers the same stratigraphy.

The Company has entered into an option agreement with Lithos to purchase the tenement on the following terms:

- (a) Initial option for six (6) months which may be extended for six (6) months for a payment of \$5,000 in each case;
- (b) Exercise price of 200,000 fully paid shares and 1 million partly paid shares (\$0.15 to pay);
- (c) Lithos to maintain working title to the whole area of the tenement during the term of the option;
- (d) The Company will issue Lithos with a further 1 million \$0.20 three (3) year unlisted options if the Company defines an Indicated Resource within the E09/997 or E09/1173 owned by the Company.

The Company's interest in the area stems from the nature of the base metal occurrences as being similar to the style of mineralisation being sought in the Mt Augustus and Yannarie projects.

The initial exploration program to be completed in 2004 will consist of mapping, a detailed gravity survey and an induced polarisation survey.

*Yannarie Project (Sandfire 100%)*

E08/1409 was granted on 24 May 2004. This tenement covers the northern part of the sub-basin sediments.

A Heritage Protection Agreement has been signed with the Gnulli Native Title Claimants. A Heritage Protection Agreement with the Thudgari Native Title Claimants is pending and once signed the remaining two tenements can be advertised and, subject to no further objections, proceed to grant.

Subject to the availability of aircraft, an airborne magnetometer and spectrometer survey will be undertaken in 2004.

*Urandy Project (Sandfire 100%)*

During the quarter, the existing three (3) EL applications were withdrawn and replaced with two applications covering a larger area.

Heritage Protection Agreements have been prepared for the remaining two (2) Native Title Claimants and when executed by the respective parties will enable the tenements to be advertised and, subject to no further objections, proceed to grant.

An airborne magnetometer and spectrometer survey is planned for 2004 in conjunction with the Yannarie survey.

*Doolgunna Project (Sandfire 100%)*

Heritage Protection Agreements have been signed with the Gingirana and Yugunga Nya Native Title Claimants allowing two (2) of the four (4) tenements to be advertised. The Heritage Protection Agreement with the Nharnuwangga Wajarri and Ngarlawangga Native Title Holders is under consideration and when signed will enable the remaining two (2) tenements to be advertised.

*Corporate*

A total of 12,744,420 options were issued pursuant to the Prospectus dated 4 May 2004.



| SCHEDULE OF TENEMENTS               |            |               |               |                       |
|-------------------------------------|------------|---------------|---------------|-----------------------|
| NAME                                | TENEMENT   | AREA/SIZE     | DATE OF GRANT | SANDFIRE'S INTEREST % |
| <b>DOOLGUNNA PROJECT</b>            |            |               |               |                       |
| FAUSTUS NOMINEES PTY LTD            | ELA52/1697 | 23 Sub-Blocks |               | 100/100               |
| FAUSTUS NOMINEES PTY LTD            | ELA52/1698 | 28 Sub-Blocks |               | 100/100               |
| FAUSTUS NOMINEES PTY LTD            | ELA52/1699 | 54 Sub-Blocks |               | 100/100               |
| FAUSTUS NOMINEES PTY LTD            | ELA52/1715 | 56 Sub-Blocks |               | 100/100               |
| <b>YANNARIE PROJECT</b>             |            |               |               |                       |
| RESOURCE DEVELOPMENT CO PTY LTD     | ELA08/1374 | 70 Sub-Blocks |               | 100/100               |
| FAUSTUS NOMINEES PTY LTD            | ELA08/1409 | 52 Sub-Blocks | 24/05/04      | 100/100               |
| RESOURCE DEVELOPMENT CO PTY LTD     | ELA09/1111 | 70 Sub-Blocks |               | 100/100               |
| <b>MT AUGUSTUS PROJECT</b>          |            |               |               |                       |
| FAUSTUS NOMINEES PTY LTD            | ELA09/1138 | 50 Sub-Blocks |               | 100/100               |
| FAUSTUS NOMINEES PTY LTD            | ELA09/1139 | 70 Sub-Blocks |               | 100/100               |
| FAUSTUS NOMINEES PTY LTD            | ELA09/1140 | 70 Sub-Blocks |               | 100/100               |
| <b>MT GENOA PROJECT</b>             |            |               |               |                       |
| LITHOS EXPLORATION SERVICES PTY LTD | E09/997    | 8 Sub-Blocks  | 09/09/00      | 0/100                 |
| SANDFIRE RESOURCES NL               | ELA09/1173 | 68 Sub-Blocks |               | 100/100               |
| <b>URANDY PROJECT</b>               |            |               |               |                       |
| SANDFIRE RESOURCES NL               | ELA08/1462 | 70 Sub-Blocks |               | 100/100               |
| SANDFIRE RESOURCES NL               | ELA08/1463 | 70 Sub-Blocks |               | 100/100               |
| <b>SANDFIRE PROJECT</b>             |            |               |               |                       |
| RESOURCE DEVELOPMENT CO PTY LTD     | E04/1344   | 70 Sub-Blocks | 20/10/03      | 100/100               |
| RESOURCE DEVELOPMENT CO PTY LTD     | ELA04/1424 | 59 Sub-Blocks |               | 100/100               |
| RESOURCE DEVELOPMENT CO PTY LTD     | ELA04/1425 | 59 Sub-Blocks |               | 100/100               |
| SANDFIRE RESOURCES NL               | ELA04/1445 | 64 Sub-Blocks |               | 100/100               |
| SANDFIRE RESOURCES NL               | ELA04/1449 | 70 Sub-Blocks |               | 100/100               |
| SANDFIRE RESOURCES NL               | ELA04/1450 | 54 Sub-Blocks |               | 100/100               |
| SANDFIRE RESOURCES NL               | ELA04/1451 | 67 Sub-Blocks |               | 100/100               |
| <b>BORROLOOLA PROJECT</b>           |            |               |               |                       |
| SANDFIRE RESOURCES NL               | EL 10121   | 5 Sub-Blocks  | 05/09/02      | 100%                  |
| SANDFIRE RESOURCES NL               | MLN 624    | 16.18 ha      | 04/08/71      | 100%                  |



Pursuant to Deeds between the Company and Faustus Nominees Pty Ltd and Resource Development Co Pty Ltd, Sandfire Resources NL is the beneficial owner of all of the tenements listed as being held by either or both of these entities.

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**GREG STEEMSON**  
**MANAGING DIRECTOR**

23 July 2004

The geological information in this report is based on data compiled by Greg Steemson. Mr Steemson is a fellow of the Australasian Institute of Mining and Metallurgy. He has consented to the inclusion of this information in the form and context in which it appears in this report.

The Australian Stock Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.