



ASX RELEASE

22 June 2009

ADDITIONAL MASSIVE SULPHIDE INTERSECTION RECORDED IN NEWLY DISCOVERED ZONE

HIGHLIGHTS

- Fourth RC drill hole targeting the newly discovered large EM anomaly north of high-grade DeGrussa mineralisation (Conductor 1) intersects massive sulphide mineralisation 80m south of previous intersections:

DGRC 117: Visible chalcopyrite in sulphides intersected from 287 to 323m downhole.
- Assay results now awaited for three RC drill holes, DGRC 114, 115 and 117 from this initial phase of drilling.
- Downhole EM surveys commencing today on all recently completed RC drill holes.
- 1,000 line km airborne EM survey commencing on Wednesday 24 June covering prospective stratigraphic horizons along strike from DeGrussa.
- Diamond drilling scheduled to commence in early July to fully test the DeGrussa and Conductor 1 discoveries – drilling will be ongoing to test the limits of the mineralised systems.

For personal use only

Further to its release of 17 June, Sandfire Resources NL (ASX: **SFR**; **Sandfire**) advises that a fourth RC drill hole targeting the recently identified **Conductor 1 anomaly** to the north of its high-grade **DeGrussa discovery**, part of its 100%-owned Doolgunna Project, has also intersected massive sulphides approximately 80 metres south of the previously reported holes.

Geological logging of drill samples from hole DGRC 117 confirms that massive sulphide mineralisation was intersected from **287 metres to 323 metres – a downhole interval of 36 metres.**

This was a vertical drill hole located at 733720m E and 7173120m N, which is 80 metres south of the previously reported drill hole DGRC 114, which intersected 35 metres of visually similar sulphide mineralisation (*see Fig. 1 below*). Samples have been despatched to the laboratory for this latest drill hole.

Accordingly, Sandfire is now awaiting assay results for the following drill holes targeting Conductor 1, which is interpreted to be a large body of sulphide mineralisation located adjacent to DeGrussa:

DGRC 114: Visible chalcopyrite in sulphides intersected from 135 to 170m downhole

DGRC 115: Visible chalcopyrite in sulphides intersected from 92 to 122m downhole

DGRC 117: Visible chalcopyrite in sulphides intersected from 287 to 323m downhole

This completes this initial phase of Reverse Circulation drilling to test Conductor 1. Hole DGRC 117 is considered to be significant, in that it demonstrates that this potentially large sulphide body extends to the south. As previously advised, hole DGRC 116 did not intersect massive sulphide mineralisation (*see Fig. 1 below*).

Additional field-based exploration activities commenced at the Doolgunna Project today, including a program of downhole EM surveys which are being carried out on all of the recently completed RC drill holes and over the DeGrussa discovery zone.

A helicopter-borne EM survey will also commence on Wednesday 24 June comprising over 1,000km of close-spaced survey lines over the prospective stratigraphic horizons along strike from the DeGrussa prospect.

In early July, a program of diamond core drilling will commence to test the massive sulphide deposits recently identified at DeGrussa and Conductor 1. This program will be ongoing and is designed to test the limits of the mineralised systems.

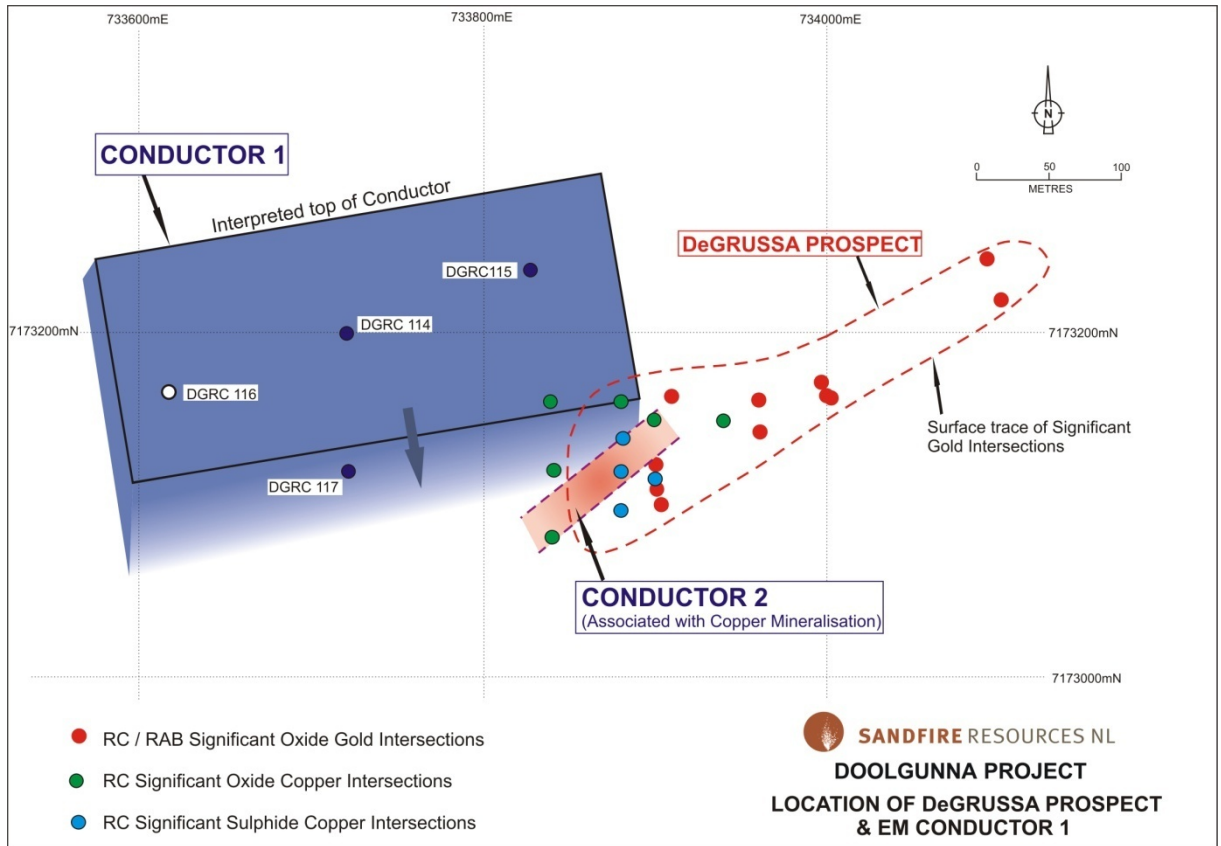


Figure 1

Conductor 1 anomaly adjacent to DeGrussa mineralisation – latest drilling

- ENDS -

W JOHN EVANS
Technical Director
AUSIMM Competent Person

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by John Evans who is a Fellow of the Australasian Institute of Mining and Metallurgy. John Evans 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 of Reporting of Exploration Results, Mineral Resources and Ore Reserves. John Evans consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For further information, please contact:

Karl Simich – Executive Director:
 Mobile: +61 418 916 945
 Nicholas Read – Read Corporate:
 Mobile: +61 419 929 046

For personal use only