



## NEW DISCOVERY AT DEGRUSSA COPPER-GOLD PROJECT

SIGNIFICANT MASSIVE SULPHIDE ZONE INTERSECTED 900M NORTH-EAST OF DEGRUSSA

### Key Points:

- **New zone of massive sulphides discovered to the immediate north-east of Conductor 4**
- **Three intersections to date define mineralisation with prioritised assays received for the discovery hole, DGDD-205:**
  - **10.4m @ 7.8% copper, 3.25g/t gold and 19.8% silver from 578.1m**
- **Step-out drilling continuing with three drilling rigs operating targeting a substantial conductive body**
- **This new discovery, Conductor 5, reinforces the substantial exploration potential of the DeGrussa Project, with several untested anomalies defined by surface EM surveys to the north-east of the known mineralisation**

Sandfire Resources NL (ASX: **SFR**; "Sandfire") is pleased to announce the discovery of a **significant new zone of massive sulphide mineralisation** approximately 900 metres north-east of the DeGrussa / Conductor 1 deposits at its 100%-owned DeGrussa Copper-Gold Project in Western Australia (*Figure 1*).

The new zone, which is referred to as **Conductor 5**, was discovered by follow-up diamond drilling to test a strong off-hole conductor generated by down-hole electro-magnetic (EM) surveys undertaken on recently completed drill holes to the north-east of the Conductor 4 deposit.

The first three holes targeting this conductor have intersected significant widths of massive sulphide mineralisation north-east of Conductor 4. The holes, which were collared approximately 80 metres apart, returned the following intercepts (*see Table 1 for drill collar locations*):

- DGDD-205      **10.4 metres of massive sulphide mineralisation** from 578.1m to 588.5m
- DGDD-219      **15.1 metres of massive sulphide mineralisation** from 531.6m to 546.7m
- DGDD-225      **23.2 metres of massive sulphide mineralisation** from 487.0m to 510.2m

Prioritised assay results have been received for the first hole, DGDD-205, which returned the following significant intercept:

- DGDD-205      **10.4 metres @ 7.8% Cu, 3.25g/t Au, 19.8% Ag** from 578.1m

The Conductor 5 mineralisation occurs in a similar stratigraphic position to the Conductor 4 deposit, commencing around 500 metres below surface. Initial drilling indicates that the Conductor 5 mineralised body dips to the south-west and remains open.

Further step-out drilling is continuing with holes DGDD-226, DGDD-227 and DGDD-228 currently in progress.



Sandfire has assigned three diamond drill rigs to complete an intensive program of step-out and in-fill drilling to further test the new Conductor 5 discovery. The Company expects to complete a further six to eight diamond drill holes at Conductor 5 within the next two weeks.

Further significant results will be reported as they come to hand. Assay results for the other holes are pending.

The discovery of a new massive sulphide lode at Conductor 5 provides further strong evidence that the DeGrussa Project is a very substantial VMS system, bringing the total number of separate deposits discovered within the past 14 months to four (DeGrussa, Conductor 1, Conductor 4 and Conductor 5).

Several EM conductors have been defined in the vicinity of the new discovery by ground-based EM surveys to the north-east of the existing deposits at DeGrussa/Conductor 1.

These conductors will be tested by drilling in the near future as soon as rigs become available. There are currently three diamond drill rigs operating at DeGrussa with one RC rig expected to return to site within the next 1-2 weeks.

The RC rig will initially be used to drill out the oxidised mineralisation above Conductor 1, defining the various mineralisation types that occur above the primary sulphide lodes of the DeGrussa Project. These mineralisation types include oxide gold, a zone of native copper mineralisation, oxide copper mineralisation and high grade residual supergene chalcocite mineralisation.

**ENDS**

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#### **Competent Person's Statement**

The information in this public report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr John Evans who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Evans is a permanent employee and Director of Sandfire Resources NL. Mr 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. Mr Evans consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Forward-Looking Statements**

Certain statements made during or in connection with this statement, including, without limitation, those concerning exploration targets, contain or comprise certain forward-looking statements regarding Sandfire's exploration operations, economic performance and financial condition. Although Sandfire believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management. Sandfire undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules.

*Table 1 – Drill collar locations, Conductor 5 drilling to date (July 2010)*

Hole ID	Max Depth	NAT East	NAT North	NAT RL	Dip	Azimuth
DGDD205	629.7	734601.062	7173102.69	571.467	-60	350
DGDD219	596.2	734597.755	7173197.31	567.7	-71	6
DGDD225	537.6	734550.195	7173275.62	568.13	-70	354

Figure 1 – DeGrussa Copper-Gold Project location

