



SANDFIRE EMBARKS ON \$8M EXPLORATION DRIVE

\$8M SPEND IN SIX MONTHS TARGETING NEW RESOURCES, NEW LODES, NEW FINDS

Sandfire Resources NL (ASX: **SFR**; "Sandfire") is pleased to announce that it has today launched a new **\$8 million-plus** exploration initiative that will see as many as 4-6 drilling rigs operating concurrently at its **Doolgunna Copper-Gold Project** (see Figure 1) in Western Australia over the next six months.

The three-pronged strategy is designed to increase the copper-gold resource inventory at the DeGrussa Project, in part by testing the potential for new VMS deposits in the near-mine environment, as well by exploring for potential repeats of the mineralisation across its 395 square kilometre tenement package.

Sandfire has committed to a **minimum budget (non-success basis) of \$8 million** over the next six months as part of its planned company-wide exploration expenditure of \$15-20 million for calendar 2010. If required, the Company will secure additional drilling capacity over and above the three diamond drill rigs currently on site to deliver this program and expects at different times to have a further 1-2 diamond rigs and up to two Reverse Circulation (RC) drilling rigs operating.

"We have devised an extensive, sophisticated and fully-funded exploration program that will give investors the best possible opportunity of capitalising on the huge potential of our world-class land holding," said Sandfire Managing Director, Mr Karl Simich.

"The best chance for discovering new mineralisation in VMS systems is in close proximity to the known deposits, and the forthcoming deep drilling program will test for new lodes down-plunge and along strike of the three known lenses.

"At the same time, regional exploration will ramp up to test a host of highly promising targets generated by extensive airborne VTEM surveys and ground geophysical surveys. The large number of targets suggests that DeGrussa could be just the start of what is to come at Doolgunna. We expect this program to generate significant news flow over coming months."

The objectives of the forthcoming program are:

1. **Resource extension drilling** within the immediate environment of the DeGrussa and Conductor 1 lenses to increase the recently announced Phase 1 JORC compliant Indicated and Inferred Resource of **7.13Mt @ 5.2% copper, 1.9g/t gold and 15g/t silver**, including:
 - *The **near-surface, high-grade chalcocite zone** which lies immediately above the DeGrussa and Conductor 1 lenses. This zone was intersected by initial RC drilling last year which led to the discovery of the deeper sulphide mineralisation;*
 - *The Conductor 4 deposit, which lies approximately 200m east and stratigraphically below the DeGrussa and Conductor 4 deposits. Previous intersections in this zone include **17.7m @ 5.5% copper and 2g/t gold and 5.1m @ 15% copper and 3.7g/t gold.***
2. **A major program of deep diamond drilling** in the near-mine environment, with a fence of five, wide-spaced diamond holes of up to 2,000 metres each to be drilled targeting extensions of the mineralisation or new lenses both along strike and down-dip of DeGrussa, Conductor 1 and Conductor 4 lodes. These holes will provide a platform to conduct sophisticated directional down-hole electromagnetic (DHEM) surveys targeting new sulphide lodes; and

3. **Expanded regional RC and diamond drilling** targeting previously defined VTEM targets within the broader 395 square kilometre Doolgunna Project area as well as new targets defined by the recently completed second airborne VTEM survey.

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.

Figure 1 – DeGrussa Project: Location

