



DEGRUSSA PROJECT: MAIDEN OPEN PIT ORE RESERVE

HIGH-GRADE ORE RESERVE SET TO KICK-START DEGRUSSA COPPER-GOLD MINE

HIGHLIGHTS

- Maiden Probable Ore Reserve for the DeGrussa open pit totalling **368,000t @ 13.6% Cu, 2.4g/t Au** (50,000t contained copper, 29,000oz contained gold), including:
 - **143,000 tonnes of high-grade Direct Sale Ore (DSO)** grading **25.6% Cu, 2.5g/t Au** for **37,000t of contained copper** and **12,000oz of contained gold** (supergene chalcocite)
 - **226,000t of massive sulphide and chalcocite ore @ 6.1% Cu, 2.4g/t Au** (14,000t contained copper, 17,000oz contained gold) to be stockpiled for processing in the commissioning phase of the 1.5Mtpa DeGrussa Concentrator.
- Increases Sandfire's **total Ore Reserve inventory** (including Underground Ore Reserves) to **8.39Mt @ 5.6% Cu, 1.8g/t Au** (465,000t contained copper, 485,000oz contained gold).
- Work continuing to allow the conversion of **open pit oxide copper resources of 3.58Mt @ 1.2% Cu and 0.5g/t Au** (44,000t contained copper, 56,000oz contained gold), **inferred chalcocite resources of 0.19Mt @ 4.4%Cu and 1.2g/tAu** (8,000t contained copper and 7,000t contained gold) and zinc to Ore Reserves.
- **2.32Mt of Inferred Massive Sulphide resources @ 4.3% Cu and 2.0g/t Au** (100,000t contained copper, 149,000oz of gold) planned to be upgraded to Indicated status, available for determination of ore reserves, by future underground drilling.
- **Mining of open pit** on track to **commence by mid-2011**.

Sandfire Resources NL (ASX: **SFR**; "Sandfire") is pleased to report maiden Open Pit Ore Reserves for its 100%-owned DeGrussa Copper Gold Project in Western Australia totalling an estimated **50,000 tonnes of contained copper** and **29,000 ounces of contained gold** – laying the foundations for pre-strip of the initial open pit mining operation to commence by mid-year.

The maiden probable Ore Reserves include **37,000 tonnes of contained copper** in high-grade chalcocite ore which will be available for direct shipping to customers.

The Open Pit Ore Reserves are **in addition to** the Underground Ore Reserves reported on 4 March 2011. The Open Pit Ore Reserve is based on the previously reported Indicated Resources of supergene chalcocite and massive sulphide ore in the upper portions of the DeGrussa and Conductor 1 deposits.

Chalcocite below a cut off grade of 8.5%, and all massive sulphide ore will be stockpiled and processed during the commissioning phase of the 1.5mtpa on-site concentrator in 2012.



The maiden Open Pit Ore Reserves do not include the previously reported open pit oxide copper resources totalling **3.58Mt @ 1.2% Cu and 0.5g/t Au** (44,000t contained copper, 56,000oz contained gold). Work is continuing as part of the DeGrussa Project Definitive Feasibility Study (DFS) to establish the optimum treatment method for these oxide copper resources, after which a significant proportion of these resources is expected to be available for conversion to Ore Reserves.

Further, the remaining Inferred Primary Massive Sulphide Resources totalling **2.32Mt @ 4.3% Cu and 2.0g/t Au** (100,000t contained copper, 149,000oz of gold) are planned to be upgraded to Indicated status, available for determination of ore reserves, by future underground drilling. (See full March 2011 JORC Resource Table for the DeGrussa Project in Appendix A to this release).

The resource categories that have been converted to reserve status to date are highlighted in orange as shown in the March 2011 JORC Resource Table for the DeGrussa Project (see Appendix A).

Maiden Open Pit Ore Reserves

The maiden probable Ore Reserves for the DeGrussa open pit are set out in Table 1 below:

Table 1: Open Pit Ore Reserves (See Note 1)

Reserve Classification	Treatment Destination	Deposit Material	Tonnes (Mt)	Copper %	Gold g/t	Contained Copper (t)	Contained Gold (oz)
Probable	Direct Sale Ore	Chalcocite	0.14	25.6	2.5	37,000	12,000
	Massive Sulphide	Chalcocite	0.09	5.1	2.5	5,000	7,000
	Concentrator	Conductor 1 MS	0.03	3.9	1.9	1,000	2,000
		DeGrussa MS	0.11	7.5	2.4	8,000	8,000
	Massive Sulphide Concentrator Sub-Total:		0.23	6.1	2.4	14,000	17,000
Total Probable Ore Reserve			0.37	13.6	2.4	50,000	29,000

The inclusion of the open pit reserves has resulted in a revised Ore Reserve inventory for the DeGrussa Project, as set out in Table 2 below:

Table 2: DeGrussa Copper-Gold Project – 28 March 2011 Ore Reserve Statement

Deposit	Reserve Category	Mining Method	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
DeGrussa	Probable	Open Pit - DSO	0.14	25.6	2.5	37,000	12,000
DeGrussa/C1/Chalcocite	Probable	Open Pit	0.23	6.1	2.4	14,000	17,000
DeGrussa	Probable	Underground	1.50	6.6	1.9	99,000	90,000
Conductor 1	Probable	Underground	5.76	4.9	1.8	283,000	337,000
Conductor 4	Probable	Underground	0.76	4.4	1.2	33,000	30,000
Total	Probable		8.39	5.6	1.80	465,000	485,000

Note 1 A cut-off grade of 8.5% Cu is applied on the Chalcocite to provide a targeted 26% Cu direct sale product (Achieved 25.6% Cu after dilution). All other material within the defined deposit boundaries has been included in the reporting of Ore Reserves with any sub-economic grade material being treated as internal diluents. These Ore Reserves include an overall assumption of 2.5% mining dilution at nil grade for all grade categories along with an assumed 2.5% mining loss of ore tonnes when mined. Calculations rounded to the nearest 10,000 tonnes; 0.1% Cu grade, 0.1 g/t Au grade; 1,000 tonnes Cu metal and 1,000 ounces Au metal. Errors of rounding may occur. These Ore Reserves occur within an open pit design containing 26Mt of total material, resulting in a waste to ore strip ratio of 70:1.

Note 2 Mining recovery factor of 95% applied to diluted stoping blocks, with cut-off grade of 1.5% Cu and minimum stope size of 2,000t. Calculations rounded to the nearest 1,000t, 0.1%, 0.1g/t and 1,000 ounces; errors of rounding may occur.; assumes commodity prices of US\$7,673/t for copper and US\$1,300/oz for gold with a USD/AUD exchange rate of \$0.86; assumes 91% metallurgical recovery rate. Note: Refer to the Competent Person's Statement – Ore Reserves at the end of this release.

Sandfire’s Managing Director, Mr Karl Simich, said the initial open pit operation was focused on rapid extraction of the high-grade DSO reserves to generate early revenue for the operation, with the second stage of the open pit focused on mining the oxide copper and primary sulphide material.

“In addition to the 50,000 tonnes of copper in the current open pit ore reserves, there is a further 44,000 tonnes of contained copper in the oxide resources, and we are working to convert this material to Ore Reserves upon finalising a suitable treatment route. The open pit operations will continue for approximately two years with mining on track to commence by the middle of this year,” Mr Simich said.

“It will be a busy second quarter for Sandfire, with the Definitive Feasibility Study nearing completion, the award of further contracts and the completion of our project financing – clearing the way for full-scale construction and development to kick off by mid-year,” he added.

ENDS

For further information contact:

Sandfire Resources NL

Karl Simich – Managing Director/CEO

John Evans – Executive Technical Director

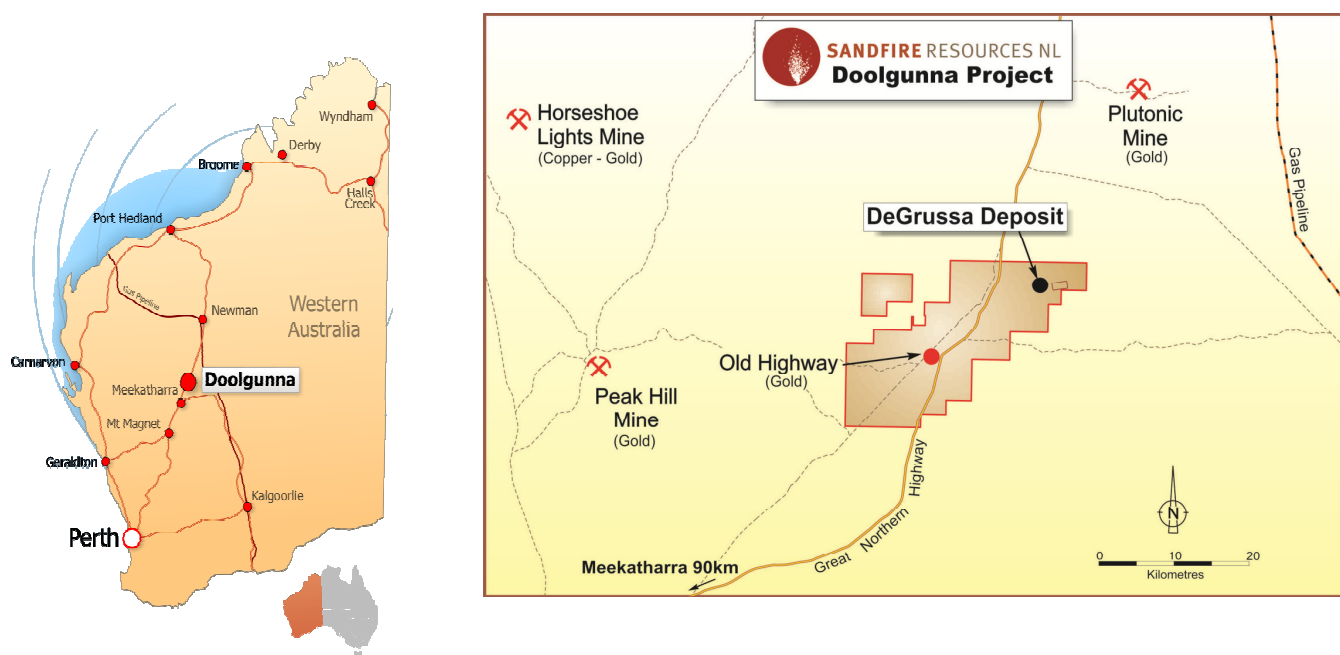
Office: +61 8 6430 3800

Read Corporate

Mobile: +61 419 929 046 (Nicholas Read)

Mobile: +61 421 619 084 (Paul Armstrong)

Figure 1 – DeGrussa Copper-Gold Project location



Appendix 1 – DeGrussa Copper-Gold Project – March 2011 JORC Resource Statement

Zone	Resource Category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)	Competent Person
Gold Laterite	<i>Measured</i>	0.14	-	1.5	-	7,000	1
Copper Oxides	<i>Measured</i>	2.17	1.1	0.5	24,000	37,000	1
	<i>Indicated</i>	1.41	1.4	0.4	20,000	19,000	1
Supergene Chalcocite	<i>Indicated</i>	0.25	17.6	2.6	43,000	20,000	2
	<i>Inferred</i>	0.19	4.4	1.2	8,000	7,000	1
Primary Massive Sulphides	<i>Indicated</i>	7.80	5.8	2.0	456,000	502,000	1
	<i>Inferred</i>	2.32	4.3	2.0	100,000	149,000	1
TOTAL		14.33	4.6	1.6	652,000	742,000	

Note: Refer to the Competent Person's Statements – Mineral Resources below.

- 1 Competent Person for these zones of resource was Diederik Speijers of McDonald Speijers
- 2 Competent Person for these zones of resource was David Slater of Coffey Mining

Competent Person's Statement – Mineral Resources

The information in this report that relates to Mineral Resources (except the Indicated Resource of Supergene Chalcocite) is based on information compiled by Diederik Speijers who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Speijers is a permanent employee of McDonald Speijers and 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 Speijers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Person's Statement – Mineral Resources

The information in this report that relates to the Indicated Resource of Supergene Chalcocite is based on information compiled by David Slater who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Slater is a permanent employee of Coffey Mining and 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 Slater consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Person's Statement – Underground Ore Reserves

The information in this report that relates to Underground Ore Reserves is based on information compiled by Shane McLeay of Entech Pty Ltd, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr McLeay 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 McLeay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Person's Statement – Open Pit Ore Reserves

The information in this report that relates to Open Pit Ore Reserves is based on information compiled by Quinton de Klerk of Cube Consulting, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr de Klerk has sufficient experience which is relevant 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 de Klerk 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 contain or comprise certain forward-looking statements regarding Sandfire's Mineral Resources and Reserves, exploration operations, project development operations, production rates, life of mine, projected cash flow, capital expenditure, operating costs and other economic performance and financial condition as well as general market outlook. Although Sandfire believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward looking statements and 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, delays or changes in project development, 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. Except for statutory liability which cannot be excluded, each of Sandfire, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this statement and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. 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. Accordingly you should not place undue reliance on any forward looking statement.

Exploration and Resource Targets

Any discussion in relation to the potential quantity and grade of Exploration Targets for the DeGrussa Project is only conceptual in nature. While Sandfire is confident that it will report additional JORC compliant resources for the DeGrussa Project, there has been insufficient exploration to define mineral resources in addition to the current JORC compliant resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.