

ASX/Media Release

29 February 2012

SANDFIRE COMMENCES MINING OF UNDERGROUND ORE

Sandfire Resources NL (ASX: **SFR**; "Sandfire") is pleased to announce that it has commenced mining of the first massive sulphide ore from underground at its DeGrussa Copper-Gold Mine, located 900km north of Perth in Western Australia.

The first truckload of massive sulphide has been delivered to the ROM ("run of mine") pad ready for processing through the concentrator in the September Quarter of 2012.

Sandfire's Managing Director, Mr Karl Simich, said the commencement of underground ore mining represented another outstanding achievement, coming ahead of the DFS schedule and just two weeks after the first direct shipping ore was mined in the open pit.

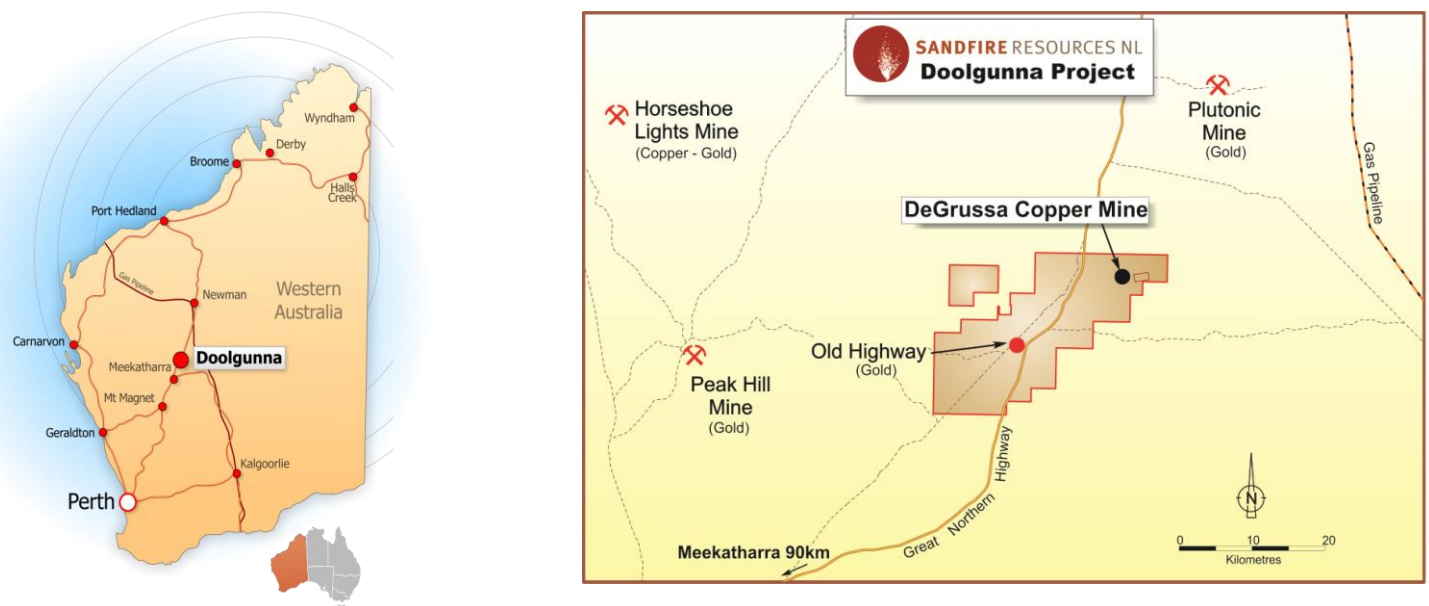
"This is another exciting step in our transition to production," Mr Simich said. "I would like to commend our team once again on their efforts, with this significant milestone coming ahead of schedule and, once again, within three years of the discovery of the DeGrussa deposit."

ENDS

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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

Appendix 2 – DeGrussa Copper-Gold Project – March 2011 JORC Ore Reserve Statement

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

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 – 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.

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.

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.