



18 July 2013

Mr Wade Baggot Adviser, Issuers (Perth) ASX Limited Level 8, Exchange Plaza 2 The Esplanade Perth WA 6000

Dear Wade,

LODGEMENT OF JUNE 2013 QUARTERLY REPORT, QUARTERLY UPDATE PRESENTATION INVESTOR CONFERENCE CALL AND WEBCAST

I am pleased to attach the following items for immediate release to the market:

- 1. June 2013 Quarterly Activities Report
- 2. DeGrussa Mine Life Extension and Ore Reserve Update
- 3. June 2013 Quarterly Update Powerpoint Presentation

In addition, Sandfire's Managing Director and CEO, Karl Simich, is hosting an investor teleconference and live webcast on the June 2013 Quarterly Report at 10.00am (AWST) / 12.00pm (AEST) today. Details of the call are provided in the June 2013 Quarterly Activities Report.

The webcast and synchronised slide presentation is available through the Company's website or through BRR Media.

Read Corporate

Access this webcast at:

http://www.brrmedia.com/event/113088 http://www.sandfire.com.au

Yours sincerely,

Matt Fitzgerald Chief Financial Officer and Company Secretary

For further information contact: Sandfire Resources NL Karl Simich – Managing Director/CEO Office: +61 8 6430 3800

Mobile: +61 419 929 046 (Nicholas Read) Mobile: +61 421 619 084 (Paul Armstrong)











1.5Mtpa DeGrussa Concentrator at dusk

ASX Code:

SFR

Issued Capital:

Ordinary Shares 155.6M Options 6.4M

Major Shareholders:

OZ Minerals 19.2% POSCO 15.3%

Directors:

Derek La Ferla

Non-Executive Chairman

Karl M. Simich

Managing Director and Chief Executive Officer

Paul Hallam

Non-Executive Director

W. John Evans

Non-Executive Director

Soocheol Shin

Non-Executive Director

Robert Scott

Non-Executive Director

Management:

Michael Spreadborough Chief Operating Officer

Matthew Fitzgerald Chief Financial Officer and Company Secretary

Robert Klug Chief Commercial Officer

_ .

18 July 2013



QUARTERLY REPORT

for the period ended 30 June 2013

HIGHLIGHTS

Production & Operations

Contained metal production	June 2013 Quarter	FY2013	Project to date
COPPER			
Concentrator	14,293	33,887	33,887
DSO	-	30,130	34,169
Total copper (t)	14,293	64,017	68,056
GOLD			
Concentrator	7,762	17,978	17,978
DSO	-	12,880	15,218
Oxide gold	3,522	11,821	12,786
Total gold (oz)	11,284	42,679	45,982

- June 2013 Quarter: 14,293t of copper and 11,284oz of gold produced at a C1 cash operating cost of US\$1.37/lb.
- FY2013 production: 64,017t copper, 42,679oz gold.
- Open pit operations completed with Stage 2 mined out and all DSO sold.
- 1.5Mtpa plant nameplate throughput achieved and ramp-up of underground mine towards 1.5Mtpa near completion with significant development focus.
- FY2014 production guidance: 65-75,000t of copper, 35-45,000oz of gold at C1 cash operating costs in the range of US\$1.05-1.15/lb.

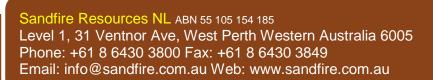
Exploration

- DeGrussa Mineral Resource increased to 13.4Mt grading 4.7% Cu and 1.9g/t Au for 634,000t copper and 795,000oz gold.
- Addition of 66,000t of copper and 149,000oz of gold net of depletion to 31 March 2013, more than replacing production depletion: mine life extended.
- Prospective structural repetitions of DeGrussa host stratigraphy with anomalous geochemistry identified south of DeGrussa mine.

Corporate

- Experienced Australian mining executive Paul Hallam appointed as Independent non-executive Director and former senior BHP, Rio and WMC executive Michael Spreadborough appointed as Chief Operating Officer.
- Second \$45M debt repayment completed: \$285M balance at 30 June 2013. Cash and deposits \$77M.

30 June 2013 Quarterly Report Presentation and Update to be webcast live at 10.00am (WST)/12.00pm (AEST) with a simultaneous investor conference call (see details inside this Quarterly Report).





1.0 OVERVIEW

Copper production for the June Quarter was 14,293 tonnes, reflecting the continued ramp-up and optimisation of the DeGrussa Concentrator as well as the ramp-up of the underground mine towards the targeted ore production rate of 1.5Mtpa (125,000 tonnes per month).

The Stage 2 open pit was mined out in April, marking the completion of open pit operations at DeGrussa. A total of 13.1Mbcm of material was extracted during the Stage 1 and Stage 2 open pit operations. The Direct Shipping Ore (DSO) program was completed by the end of the Quarter.

Underground mining progressed on schedule with five stopes now in various stages of development and production. Commissioning of the paste plant continued with the first stope filled and the second being finalised.

The main Evans Decline advanced over 2km from the portal and has now been completed. Development of the Conductor 1 Decline and the Conductor 4/5 Decline commenced towards the end of the Quarter from junctions off the Evans Decline. The Conductor 4/5 Decline is expected to access these deep, high-grade deposits towards the end of the year and will also facilitate the establishment of important underground drilling positions. Total underground development reached over 13km at Quarter-end.

Mill throughput increased by 20% for the Quarter to 373,375 tonnes with the 1.5Mtpa nameplate throughput target achieved from April 2013. Recovery was steady at 80%, reflecting the continuing impact on recovery of open pit transitional material as outlined in the March Quarterly Report. Approximately 100,000 tonnes of transitional open pit material remains to be processed on a reducing campaign basis during the September Quarter, after which ore feed will be 100 per cent sourced from underground. Recoveries of 85-92% have been achieved for primary underground ore.

The Company has released its production guidance for FY2014, with targeted copper production in the range of 65-75,000 tonnes of contained copper metal and gold production in the range of 35-45,000oz. The Company has also provided comprehensive unit operating cost and capital guidance, with headline C1 cash costs expected to be in the range of US\$1.05-1.15/lb for FY2014.





Surface drilling at DeGrussa (left) and assay oven (right)

As a result of the successful surface diamond drilling programs targeting the Conductor 4 and Conductor 5 deposits (see March 2013 Quarterly Report), DeGrussa has an increased Mineral Resource at 31 March 2013 comprising 13.4 million tonnes grading 4.7% copper and 1.9g/t gold for 634,000 tonnes of contained copper and 795,000oz of contained gold.

This increase was driven primarily by an extension to the Conductor 4 deposit and a significant thickening of the Conductor 5 deposit, delineated by a successful surface drilling program completed earlier in the year. This has resulted in the addition of 66,000 tonnes of contained copper and 149,000oz of contained gold, net of mining depletion. This has more than replaced production depletion and extended the life of the DeGrussa operation to late 2020 (based on Ore Reserves and Mineral Resources).

1.1 Safety

SANDFIRE RESOURCES NL

There were two lost time injuries for the June Quarter – minor incidents involving a contractor and an operator. The lost time injury frequency rate (LTIFR) (per million hours worked) increased to 4.4 at the end of the Quarter (compared to 2.6 at the end of the March Quarter).

The safety performance for the Quarter overall was in line with the DeGrussa Safety Plan.

2.0 MINING & PRODUCTION

2.1 Overview

June 2013 Quarter – Production Statistics		Tonnes	Grade (% Cu)	Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)
DSO	Mined	-	-	-	-	-
	Crushed	-	-	-	-	-
	DSO sales	19,595	7.0	3.2	1,374	2,043
Concentrator	Mined	324,209	4.9	1.6	15,875	16,258
	Milled	373,375	4.7	1.5	17,717	18,308
	Concentrate produced	59,939	23.8	4.0	14,293	7,762
	Concentrate sold	62,898	23.8	4.0	14,948	8,140
Oxide gold	Mined	-	-	-	-	-
	Milled (toll treatment)	29,876	-	4.1	-	3,893
	Gold production	-	-	-	-	3,522
	Gold sales	-	-	-	-	3,522
Total	Mined	324,209	4.9	1.6	15,875	16,258
	Crushed/Milled	403,251	4.7	1.7	17,717	22,201
	Copper production	59,939	23.8	4.0	14,293	7,762
	Gold production	-	-	-	-	3,522
	Contained metal production	-	-	-	14,293	11,284
	Copper and gold sales	82,493	19.8	-	16,322	13,705

Note: Mining and production statistics are rounded to the nearest 0.1% Cu grade and 0.1 g/t Au grade. Errors may occur due to rounding. Production Statistics are subject to change following reconciliation and finalisation subsequent to the end of the Quarter.

2.2 Open Pit

As reported previously, open pit operations were completed in April 2013. A total of 13.1Mbcm of material was extracted during the Stage 1 and Stage 2 open pit operations. Demobilisation of the open pit contractor, Hamptons Mining and Civil, was completed during the Quarter.

The DSO mining and sales program was completed during the Quarter, with a total of 144,887 tonnes grading 23.6% Cu for 34,169 tonnes of contained copper and 15,218 ounces of gold sold on a project-to-date basis.

2.3 Underground

Underground mining progressed on schedule with five stopes now in various stages of development and production. A total of 760,040 tonnes of sulphide ore has been mined and delivered to the ROM since stoping commenced in October 2012.

Commissioning of the paste plant continued with the first stope, the P1 stope in Conductor 1, filled and the second stope, P2, being finalised.

Underground mining will continue to progressively ramp up, with current underground mining rates at ~100,000 tonnes per month (1.2Mtpa) delivering ore to the concentrator. Full production rates of 125,000 tonnes per month (1.5Mtpa) are expected to be achieved from the end of the September 2013 Quarter.

Underground development is proceeding on schedule, with the Evans Decline now completed after advancing over 2km from the portal during the Quarter. The next key phase of underground development began during the Quarter with commencement of development of the Conductor 1 and Conductor 4/5 Declines from junctions off the Evans Decline. A third jumbo was introduced to facilitate this additional development.

The Conductor 1 Decline will enable the large Conductor 1 deposit to be fully developed and extracted. The Conductor 4/5 Decline will enable development and mining of the deep, high-grade Conductor 4 and 5 deposits to occur. This Decline is expected to reach Conductor 4, located approximately 400m away, towards the end of the year enabling development activities to commence.

The development of these new declines is important as it will ensure that DeGrussa can source ore from multiple underground sources, providing stability and consistency of production in the long term. It will also facilitate the establishment of underground diamond drilling platforms later this year from which extensions and potential repeats of the Conductor 4 and 5 deposits can be targeted.

These drill positions will also be used to allow early grade drilling to define mining shapes in Conductor 4 and 5 and to conduct in-fill drilling to enabled conversion of Inferred Mineral Resources to Ore Reserves in these deposits.

Total development for the underground mine to date is over 13km.



DeGrussa underground ore face

2.4 Processing

The ramp-up of the DeGrussa Concentrator continued during the Quarter, with steady improvements in key metrics achieved including:

- a 20% increase in tonnes milled for the Quarter to 373,375 tonnes at an average head feed grade of 4.7% Cu (Q3FY2013: 310,727 tonnes at 4.7% Cu) achieving the 1.5Mtpa nameplate target from April onwards;
- steady overall recovery of 80% for the Quarter (Q3FY2013: 80%), reflecting the continuing impact of blending open pit transitional material with primary underground sulphide ore;
- a 25% increase in concentrate production to 59,939 tonnes (Q3FY2013: 48,085 tonnes); and
- a 20% increase in contained metal production to 14,293 tonnes of contained copper (Q3FY2013: 11,632 tonnes).

As outlined in the March Quarterly Report, overall concentrator recoveries have been constrained in the short term while concentrator feed is being supplemented by sulphide ore from the open pit. Open pit sulphide ore feed comprised between 25-30% of the ore feed blend to the Concentrator during the Quarter.

Recovery continues to be optimised through increased plant stability, although processing of transitional open pit ore continued to have an impact. As noted previously, primary sulphide ore from underground mining by itself achieves pleasing recoveries currently ranging from 85-92% and on-spec copper concentrate.



DeGrussa Paste Plant

The contribution of open pit sulphide material continues to reduce in line with the underground mine ramp-up. Approximately 100,000 tonnes of open pit sulphide ore remains to be processed, with this material to be blended on a reducing campaign basis during the September Quarter. Once this is completed, ore feed to the Concentrator will comprise 100 per cent primary sulphide ore from underground.

Overall, concentrate quality is continuing to improve, achieving the targeted 24-25% level.

Further optimisation programs, in line with plant ramp-up, were completed during the Quarter and are expected to continue to build on operating improvements to date. These included planned shut-downs to replace SAG mill liners and liner inspections, SAG mill lubrication, improvements to the tailings thickener and repairs to cyclone feeder lines.

2.5 Guidance - FY2014

Sandfire is pleased to provide production guidance for the 12 months to 30 June 2014, as set out below:

	FY2014 (0	Guidance)	FY2013 (actual)		
Contained metal production	Cu(kt)	Au(koz)	Cu(kt)	Au(koz)	
Concentrator	65-75	35-45	34	18	
DSO	-	-	30	13	
Oxide gold	-	-	-	12	
Total	65-75	35-45	64	43	
DSO			4	2	
Oxide gold			_	1	
Total – FY 2012			4	3	
Total – Project to date – FY 2013			68	36	

FY2014 copper and gold production is expected to come solely from the concentrator, with the DSO and oxide gold production and sales programs now complete.

Refer to Sandfire's June 2013 Quarterly Presentation (released today) for further guidance on operating parameters, production guidance, unit costs and capital expenditure.

3.0 SALES AND MARKETING

Sales of copper metal for the June 2013 Quarter totalled 16,322 tonnes (Q3FY2013: 12,297 tonnes), while gold sales totalled 13,705 ounces (Q3FY2013: 10,115oz).

3.1 DSO Shipments

The DSO mining and sales program was completed during the Quarter, with a total of 144,887 tonnes grading 23.6% Cu for 34,169 tonnes of contained copper and 15,218 ounces of gold sold on a project-to-date basis.

3.2 Copper Concentrate Shipments

A total 62,898 tonnes of plant concentrate grading 23.8% Cu containing 14,948 tonnes of copper was shipped for the Quarter (Q3FY2013: 38,418 tonnes of plant concentrate grading 24% Cu shipped containing 9,308 tonnes of copper).

On a Project to Date basis, 130,402 tonnes of plant concentrate grading 23.2% Cu and containing 30,233 tonnes of copper metal has been shipped.

DeGrussa copper concentrate is being sold under a number of separate sales contracts – each for up to 3-year terms – with international trading companies and smelters. Sandfire's marketing strategy is for sales contracts covering up to 85 per cent of annual copper concentrate production from DeGrussa, with the remainder available for delivery into the spot market and production variances.

5



Stacking copper concentrate ready for transport

4.0 FEASIBILITY STUDIES & METALLURGY

4.1 Oxide copper

Work continued during the Quarter to progress the Feasibility Study on a heap leach/solvent extraction and electrowinning (SX/EW) recovery option for the stockpiled copper oxide ore at DeGrussa. Planning remains on track for the commencement of copper production from this oxide processing circuit during FY2015.

GR Engineering Services continued to progress the engineering study of the oxide copper crushing-scrubbing plant, with excellent results achieved from scrubbing trials which demonstrated that excellent copper recoveries can be achieved.

A composite of +150um scrubbed material was sent to Worley Parsons and Hydrogeosense USA, with testing underway to complete the required detailed heap leach design. ALS AMMTEC has commenced additional bottle roll and acid consumption testing of the bulk scrubbing testing to understand the acid consumption and total copper extraction rates to be used in the financial modelling.

Outotec has completed the thickening testing of the reject of the scrubbing testing and is preparing a report on this testwork program. ATC Williams has been given the results of this testing and the amount and rates of deposition of the composites for the final design for the oxide TSF.

Western Process Equipment has started to develop the equipment list for the scrubbing plant.

Xstrata Tech has a well-developed flow-sheet for the design of the SX/EW part of the project and is specifying the equipment and pricing for the SX/EW equipment.

5.0 DEGRUSSA EXPLORATION

5.1 Overview

Sandfire continues to progress a tightly focused, multi-disciplined exploration campaign to unlock the broader potential of the Doolgunna region for additional VMS deposits. Cutting edge geophysical and geochemical techniques, in conjunction with detailed geological interpretation and analysis, has resulted in significant advances in the vectoring towards potential accumulations of VMS mineralisation within the DeGrussa mine stratigraphic corridor.

A relatively limited surface diamond drilling program earlier this year targeting extensions to Conductor 4 and Conductor 5 (see March Quarterly Report) has yielded immediate success, resulting in an increase in the Company's high-grade Mineral Resource inventory (see 5.2 below).

An important focus during the second half of CY2013 will be the establishment of new underground drilling positions from the new Conductor 1 and Conductor 4/5 declines, which will enable the Company to target depth extensions and potential repeats of the deep, high-grade VMS lenses.

This important phase of the Company's exploration program at DeGrussa has only just commenced and is expected to accelerate as additional underground drilling positions become available.

The breakdown	of metres	drilled for	FY2013 is	shown I	helow.
THE DIEARGOWII	OI IIIGUGS	uninea ioi i	1 1201313	SHOWILL	Jeiow.

	AC/RAB Drilling	RC Drilling	Diamond Drilling	Total Drilling
Drilling	(m)	(m)	(m)	(m)
Q1FY2013	21,782	-	9,168	30,950
Q2FY2013	17,384	2,751	7,198	27,332
Q3FY2013	33,423	2,919	8,823	45,165
Q4FY2013	35,552	3,310	4,866	43,729
FY2013 - TOTAL	108,141	8,980	30,055	147,176

5.2 Increase in High Grade Mineral Resource

The Mineral Resource for the DeGrussa Project as at 31 March 2013 has increased to 13.4 million tonnes grading 4.7% Cu and 1.9g/t Au for 634,000 tonnes of contained copper and 795,000oz of contained gold.

An additional 66,000 tonnes of contained copper and 149,000oz gold has been added to DeGrussa's mineral inventory following depletion to March 2013, with the additional Inferred Mineral Resource now incorporated into the DeGrussa mine plan (refer to the Company's June 2013 Quarterly presentation for further details).

The majority of the increase in tonnage and contained metal has come from successful surface drilling programs at DeGrussa targeting the two deepest high-grade deposits – Conductor 4 and Conductor 5.

These drilling programs were guided by information and insights gained from structural interpretation from mapping within the underground mine and open pit.

This has enabled Sandfire to develop an enhanced understanding of the lithological sequence, structural setting and, consequently, the positioning of potential accumulations of VMS mineralisation at DeGrussa.

The surface drilling programs have resulted in the addition of 56,000 tonnes of contained copper (an increase of 42%) and 63,000 ounces of contained gold (an increase of 34%) in total Inferred Mineral Resources for these two deposits, as shown below:

Mineral Resource – Conductor 4 and 5	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
March 2012 – Total	2.7	4.9	2.1	134,000	185,000
Increase	0.8	6.7	2.4	56,000	63,000
March 2013 – Total	3.5	5.3	2.2	190.000	248.000

The March 2013 Mineral Resource also reflects updates to DeGrussa and Conductor 1, reflecting increased understanding of the orebodies gained from mapping, grade control drilling, and mining activities.

The revised Mineral Resource for Conductor 4, incorporating the results of diamond drilling targeting the interpreted eastern extension of the deposit, is shown below:

Mineral Resource – Conductor 4	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
Indicated	1.0	5.3	1.8	54,000	59,000
Inferred	1.1	4.4	1.7	48,000	60,000
March 2013 - Total	2.1	4.8	1.7	102,000	119,000

This represents a 0.4Mt increase in tonnage (25% increase) and 24,000t Cu increase in contained copper (31% increase) compared with the March 2012 Mineral Resource.

Diamond drilling to test an interpreted sub-parallel lens stratigraphically below Conductor 5 passed through the deposit and encountered significantly thicker massive sulphide intersection than previously interpreted, highlighting the potential to materially increase the Mineral Resource in this area.

As outlined in the December 2012 and March 2013 Quarterly reports, three diamond holes were completed to test this thickened position, with the results, incorporated into a revised Mineral Resource estimate, as set out below:

Mineral Resource – Conductor 5	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
Inferred	1.4	6.2	2.8	88,000	129,000
March 2013 - Total	1.4	6.2	2.8	88,000	129,000

This represents a 0.4Mt increase in tonnage (40% increase) and 32,000t Cu increase in contained copper (57% increase) compared with the March 2012 Mineral Resource.

Drilling of the Inferred Resource in C4 and C5 will be undertaken from underground when development has progressed sufficiently to allow more practical and less expensive drilling positions given the depth of these ore bodies. Drilling of the C4 Inferred Resource is planned in the first half of CY2014.

5.3 Ore Reserve and Mine Plan Update

The Ore Reserve of the DeGrussa Mine has been updated referencing the March 2013 Mineral Resource model and depletions up to March 2013.

The Company continues to incorporate the Inferred Mineral Resource from Conductor 4 and 5 into its Life-of-Mine (LOM) planning process due to geological continuity and the high copper grade nature of the deposits. The Inferred Mineral Resources from these deposits have not been included in the update to Ore Reserves. Refer to the Company's June 2013 Quarterly presentation for further details.

5.4 DeGrussa Mine Corridor

During the Quarter, exploration within the DeGrussa mine corridor has concentrated on:

- Defining extensions of new and known massive sulphide mineralisation peripheral to the mine development through underground diamond drilling. This phase of the structured exploration programme has only recently commenced, with the rate of progress subject to the availability of underground drill positions;
- Testing near-mine extensions of sedimentary horizons known to host massive sulphide mineralisation. Final definition of the near-surface eastern expressions of the Conductor 1 and DeGrussa Offset is now complete. Further drilling will concentrate of testing the C1 host horizon for at least 1.5km west of the mine. Thick palaeochannel deposits in this area have prevented adequate evaluation of potential mineralisation in the past due to difficult drilling conditions; and
- In-fill Aircore drilling designed to improve the recognition of geochemical anomalies and stratigraphy, and targeted high-power, small-loop EM geophysical surveying aiming at the mine sequence stratigraphy distal to the DeGrussa mine. A number of newly defined anomalies generated from this work will be tested during the next Quarter.

5.5 DeGrussa Regional Exploration

Systematic, regional grid Aircore drilling, in conjunction with limited, targeted Reverse Circulation drilling, has identified a number of strong Copper-Gold geochemical anomalies related to DeGrussa-type stratigraphy located roughly 5km south-west of the DeGrussa mine site (Cow Hole Bore). The anomalous Copper-Gold values are associated with volcanogenic sediments, basalts and dolerites, extending over a strike length exceeding 3.5km. Exploration in the following Quarter will focus on better defining the tenor and disposition of the higher grade portions of the anomalous geochemistry prior to more intensive drill testing.

6.0 AUSTRALIAN EXPLORATION

6.1 Borroloola Project

The Borroloola Project comprises a total area in excess of 10,000 square kilometres of tenements and tenements under application in the Northern Territory. The tenements are located north of the McArthur River Mine (Xstrata), the second largest SEDEX base metal deposit in the world. The McArthur River deposit initially contained 230 million tonnes at a grade of 13% combined lead and zinc. Sandfire's tenements cover a strike length of approximately 100km of the Emu Fault Zone, which is the controlling structure of the McArthur River deposit. The Borroloola tenements are also prospective for sedimentary manganese mineralisation, similar to the world-class Groote Eylandt manganese deposits (BHP) in the Gulf of Carpentaria, uranium and iron ore.

Two farm out Joint Venture agreements have been signed during the Quarter to advance the project. These two parties intend to continue an aggressive exploration program of the tenements. This will allow Sandfire to focus on its highest priority regional base metal exploration.

The Batten Trough JV covering the eastern portion of the Borroloola tenements is under an option and joint venture agreement with MMG Exploration Pty Ltd (MMG) which has the right to earn up to an 80% interest in the tenements. MMG must spend a minimum of \$2 million within the first year and can earn a 60% interest by spending \$10 million within four years. MMG then has the right to earn a further 20% by completing a prefeasibility study.

The Borroloola West JV covering the western portion of the tenement package is under an agreement with West Rock Resources Ltd (West Rock) in alliance with Cliffs Natural Resources who have the right to earn up to an 80% interest. West Rock is focussing on the manganese and copper potential of the tenements. West Rock must spend a minimum of \$0.5 million within the first year and can earn a 51% interest by the expenditure of \$1.5 million within two years. West Rock then have the right to earn a further 19% by expenditure of a further \$2.5 million within two years and a further 10% for a total 80% interest by expending \$7 million within six years.

Sandfire retains a 100% interest in EL26555, where it intends to complete a shallow drilling program at the Hells Gate iron ore prospect during the 2013 field season.

6.2 Kennedy Highway Project

The Kennedy Highway Project includes five exploration licenses in the Eastern Succession of the Mount Isa Block, south of Cloncurry, Queensland. The tenements are prospective for Broken Hill Type lead-zinc-silver deposits similar to the high grade Cannington mine (BHP) to the north and Iron Oxide Copper-Gold deposits similar to the Ernest Henry Mine (Xstrata). An option agreement for a Joint Venture is in place on EPM15948 with Global Resources Corporation Ltd, where Sandfire can earn up to an 80 per cent interest by funding exploration. Tenements EPM19418 and 19453 (Lilleyvale) are 100% owned by Sandfire and a further two tenement applications are expected to be granted this year.

Sandfire has completed a further gravity survey on its 100% owned Lilleyvale tenements to better define a deep gravity target for a Broken Hill type system. Drilling is planned later in the season.

6.3 Altia Project

The Altia Project is located 70km south-east of Cloncurry in north-west Queensland. The project includes an option to Joint Venture into two areas encompassing 43.7 km² with Breakaway Resources Limited (ASX: BRW) to earn up to 80% of the project. The tenements are prospective for Broken Hill style lead-zinc-silver deposits such as the nearby Cannington deposit (BHP) to the south and the Ernest Henry Iron Oxide copper-gold deposits (Xstrata) to the northwest. The Joint Venture area includes the Altia Deposit, where previous exploration has defined the deposit and a number of regional targets.

Drilling will commence shortly to test a number of high priority targets along strike from the Altia deposit defined by geophysical, geochemical and geological anomalies highlighted by previous work last field season.

Drilling is targeting the known mineralised horizon for zones of alteration associated with large Broken Hill style deposits as in the project area. Heritage surveys have cleared all planned drill sites.

6.4 Bland Creek Project

The Bland Creek Project lies 50km south-east of West Wyalong, in the Lachlan Fold Belt of New South Wales. The tenements are prospective for porphyry copper-gold mineralisation as found at Northparkes (Rio Tinto), Cadia (Newcrest) and Cowal (Barrick). The granted exploration licence, EL 5792, is held under a farm-in agreement to earn up to 80% with Straits Resources Ltd (ASX:SRQ) and the surrounding tenements are 100% owned by Sandfire.

The drilling program was completed during the Quarter with a further 26 Aircore holes drilled for ~3,000 metres. The drilling extended the Monaco copper anomaly to over 1 km and better defined the core of the Silvestone geochemical anomaly.

Diamond drilling followed up the refined anomalies with five holes completed for ~ 1,700m. A follow up hole was drilled at the Silverstone prospect and two further holes at the Monaco prospect to test for a high grade core to the porphyry system.

Two diamond holes were also targeted at 'Cowal type' high level gold system to follow up previous holes and anomalous multi-element anomalies. Drilling extended the gold anomaly at the Imola prospect to over 100m and intersected strong alteration at the Hockenheim prospect.

Recent drilling has extensively tested the prospective areas within the joint venture tenement and will be fully reviewed during the cereal cropping season. No further work is planned on the ground until at least the December Quarter.

6.5 Alford Project

The Alford Project on the Yorke Peninsular lies 20km north-east of Wallaroo, South Australia in the southern portion of the Gawler Craton. The tenements are prospective for iron oxide copper-gold mineralisation as found at Prominent Hill (OZ Minerals), Olympic Dam (BHP) and Hillside (Rex Minerals). The project includes an option to Joint Venture into the Alford project (EL3969, PM268) with Argonaut Resources Limited (ASX: ARE) to earn up to 75% of the project. A further 100% Sandfire owned tenement has been granted on the Yorke Peninsula (EL5272).

The Aircore drilling program was completed with 6 infill holes for ~500m at the Glenrae Prospect on a nominal spacing of 200m x 180m centres during the Quarter.

A program of diamond drilling was undertaken to follow up the anomalous geochemistry defined in the large Aircore program last quarter, especially where they are associated with IP chargeability geophysical anomalies. Four holes for ~1300 m were completed, three holes along the Alford East trend and one hole drilled at the Glenrae prospect.

Results of the drilling are being interpreted, indicating a large anomalous copper and gold mineralised system with IOCG associations.

Further work is planned once the crops are harvested in the December Quarter and will include further geophysical surveys, including IP and Gravity with follow up Aircore and diamond drilling.

7.0 CORPORATE

7.1 Finance Facility

The second repayment of \$45 million under the company's debt finance facility was completed at the end of June 2013. This followed the \$50 million repayment completed in March 2013. A further \$45 million has been deposited into a debt service reserve account in preparation for the scheduled \$45 million September 2013 repayment.

Cash on hand at 30 June 2013 totalled \$77 million.

7.2 New Director Appointed

During the Quarter, Sandfire appointed experienced and highly regarded Australian mining executive, Mr Paul Hallam, to its Board as an independent non-executive Director. The appointment further strengthens and diversifies Sandfire's Board, bringing significant experience in the areas of technical and operational management at senior levels in the global mining industry.

Mr Hallam is a qualified Mining Engineer and accomplished senior resource industry executive with over 35 years experience in blue chip Australian and International companies, including 15 years at senior executive management level.

His former roles include Director – Operations with the leading Australian iron ore producer Fortescue Metals Group (2008-2011), Executive General Manager – Development & Projects with Newcrest Mining Limited (2005-07), Director, Victorian Operations for Alcoa Australia and Executive General Manager – Base & Precious Metals for North Limited until its acquisition by Rio Tinto in 2000.

New Chief Operating Officer 7.2

During the Quarter, Sandfire appointed highly experienced mining operations and project executive Mike Spreadborough as its new Chief Operating Officer, commencing August 2013. Mr Spreadborough joins Sandfire from his most recent role as Chief Operating Officer for Inova Resources Ltd (formerly Ivanhoe Australia).

He has more than 20 years of experience in mining copper, gold, lead, zinc, uranium and iron ore, including 16 years of underground mining experience. Prior to his role at Inova, Mr Spreadborough held a number of senior executive and operational positions including as General Manager - Coastal Operations for Rio Tinto, General Manager - Mining for WMC and later Vice President - Mining for BHP Billiton at the world-class Olympic Dam Mine in South Australia.

Investor Call and Webcast 7.3

An investor conference call on Sandfire's June Quarterly Report will be held today (Thursday 18 July 2013) for investors and analysts, commencing at 10.00am (WST)/12.00pm (AEST). Analysts, brokers and investors can join the conference call by dialling the following numbers:

Within Australia: 1 800 558 698

International: +61 2 9007 3187

Audio Access Code: 731423

The Quarterly Report and an accompanying Quarterly slide presentation will be available via the ASX Company Announcements Platform (Code: SFR), as well as at Sandfire's website: www.sandfire.com.au

In addition, a live webcast of the investor call and the slide presentation will be available via the Boardroom Radio (BRR Media) service by clicking on the following link:

http://www.brrmedia.com/event/113088/

ENDS

For further information, please contact:

Karl Simich - Managing Director/CEO

Office: +61 8 6430 3800

Media Inquiries:

Nicholas Read - Read Corporate: Mobile: +61 419 929 046 (Nicholas Read)

Figure 1 - DeGrussa Copper-Gold Project Location



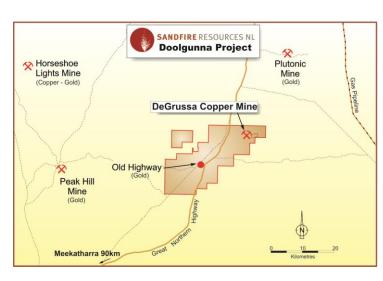




Figure 2 – Australian Joint Venture and Exploration Project Locations

JORC Compliance Statement for Underground Mineral Resources and Ore Reserves

A summary of the information used in this release is as follows:

The DeGrussa VHMS (volcanic-hosted massive sulphide) copper-gold deposit is located 900 kilometres north of Perth and 150 kilometres north of Meekatharra in the Peak Hill Mineral Field. The system is hosted within a sequence of metasediments and mafic intrusions situated in the Bryah Basin that have been metamorphosed and structurally disrupted.

The sulphide mineralisation consists of massive sulphide and semi-massive sulphide mineralisation. Primary sulphide minerals present are pyrite, chalcopyrite, pyrrhotite and sphalerite, together with magnetite. The sulphide mineralisation is interpreted to be derived from volcanic activity. The deposit shares characteristics with numerous VHMS deposits worldwide.

DeGrussa is located wholly within Mining Lease 52/1046. This tenement is subject to the Yugunga-Nya (WC99/046) and Gingirana Claims (WC06/002). A Land Access Agreement was executed with both claimant groups in November 2010. Sandfire is required to make royalty payments to the State and affected Native Title Claimants on a periodical basis.

Drilling of the DeGrussa massive sulphide lens (of which there are four defined lenses of mineralisation) and surrounding area is by diamond drill holes of NQ2 diameter core and, to a lesser extent, by Reverse Circulation (RC) face sampling hammer drilling. The nominal drill-hole spacing is less than 80m x 40m in the inferred areas of the Mineral Resource and increases in density as the classification increases to measured where nominal 13m x 20m drill hole spacing is achieved. Drilling has been by conventional diamond drilling with a small number holes aided by the use of navigational drilling tools. RC drilling was completed with a nominal 140mm face sampling hammer and split on a cone or riffle splitter. Drill-hole collar locations were surveyed using RTK GPS, and all holes were down-hole surveyed using high speed gyroscopic survey tools.

Sampling of diamond core was based on geological intervals (standard length 0.5 m to 1.3 m). The core was cut into half or quarter (NQ2) to give sample weights up to 3 kg. RC samples were 1.0m samples down-hole, with sample weights between 3.5kg and 7kg depending on material type. Field quality control procedures involved assay standards, along with blanks and duplicates. These QC samples were inserted at an average rate of 1:15.

The sample preparation of diamond core involved oven drying, coarse crushing of the core sample down to ~10 mm followed by pulverisation of the entire sample to a grind size of 90% passing 75 micron. A pulp sub-sample was collected for analysis by either four acid digest with an ICP/OES, ICP/MS (multi element) finish or formed into fused beads for XRF determination on base metals and a fire assay for Au.

All reported assays have been length weighted. No top-cuts have been applied. A nominal 0.3% Cu lower cut-off is applied. High grade intervals internal to broader zones of sulphide mineralisation are reported as included intervals.

The attitude of the ore bodies at DeGrussa is variable but there is a dominant southerly dip from ~40 to 90 degrees flat-lying and is drilled to grid west with drill holes inclined between -60 and -90 degrees. As such the dominant hole direction is north and with varying intersection angles all results are clearly defined as either down hole or approximate true width.

Density of the massive sulphide orebody ranges from 2.8g/cm³ to 4.9g/cm³, with an average density reading of 3.7g/cm³. Geotechnical and structural readings recorded from diamod drilling include recovery, RQD, structure type, dip, dip direction, alph and beta angles, and descriptive information. All data is stored in the tables Oriented Structure, Geotechnical RQD, Core Recovery, Interval Structure as appropriate.

A suite of multi-element assays are completed on each mineralised sample and include all economic and typical deleterious elements in copper concentrates. This suite includes Cu, Au, Ag, Zn, Pb, S, Fe, Sb, Bi, Cd and As.

Open Pit Mineral Resources are quoted on a historical model and as such are compliant with the JORC 2004 quidelines.

ENDS

For further information contact:
Sandfire Resources NL
Karl Simich – Managing Director/CEO

Office: +61 8 6430 3800

Read Corporate

Mobile: +61 419 929 046 (Nicholas Read) Mobile: +61 421 619 084 (Paul Armstrong)

Appendix 1 – Ore Reserve and Mineral Resource

DeGrussa Mine - Underground As at 31 March 2013			Ore F	Reserve					Minera	l Resource		
Deposit	Reserve category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)	Resource category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
DeGrussa	Proved	1.2	5.7	1.8	67,000	66,000	Measured	1.0	7.4	2.3	73,000	72,000
	Probable	0.4	8.2	2.1	32,000	26,000	Indicated	0.4	9.4	2.4	34,000	28,000
Conductor 1	Proved	1.4	5.4	1.8	76,000	82,000	Measured	1.3	6.5	2.2	86,000	92,000
	Probable	3.9	4.4	1.7	174,000	210,000	Indicated	3.7	5.1	1.9	190,000	231,000
							Inferred	0.2	4.6	1.8	11,000	14,000
Conductor 4	Probable	1.0	4.3	1.5	43,000	47,000	Indicated	1.0	5.3	1.8	54,000	59,000
							Inferred	1.1	4.4	1.7	48,000	60,000
Conductor 5	Probable	=	=	=	=	=	Inferred	1.4	6.2	2.8	88,000	129,000
Stockpiles	Proved	<0.1	7.9	3.0	2,000	3,000	Measured	<0.1	7.9	3.0	2,000	3,000
	Proved	2.6	5.6	1.8	145,000	151,000	Measured	2.3	6.9	2.2	161,000	167,000
	Probable	5.3	4.7	1.7	248,000	282,000	Indicated	5.1	5.4	1.9	278,000	318,000
							Inferred	2.8	5.3	2.3	147,000	203,000
	Total	7.9	5.0	1.7	393,000	434,000	Total	10.2	5.7	2.1	586,000	688,000
DeGrussa Mine – Open Pit As at 31 March 2013			Ore F	Reserve					Minera	l Resource		
Deposit	Reserve category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)	Resource category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
Conductor 1	Probable	-	-	-	-	-	Indicated	0.1	3.9	1.8	2,000	3,000
Stockpiles	Proved	3.1	1.5	1.1	45,000	104,000	Measured	3.1	1.5	1.1	45,000	104,000
	Proved	3.1	1.5	1.1	45,000	104,000	Measured	3.1	1.5	1.1	45,000	104,000
	Probable	-	-	-	-	-	Indicated	-	-	-	-	-
							Inferred	-	-	-	-	-
	Total	3.1	1.5	1.1	45,000	104,000	Total	3.1	1.5	1.1	48,000	108,000

DeGrussa Mine - Total As at 31 March 2013	Ore Reserve							Ore Reserve Mineral Resource					
Deposit	Reserve category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)	Resource category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)	
DeGrussa	Proved	1.2	5.7	1.8	67,000	66,000	Measured	1.0	7.4	2.3	74,000	72,000	
	Probable	0.4	8.2	2.1	32,000	26,000	Indicated	0.4	9.4	2.4	34,000	28,000	
Conductor 1	Proved	1.4	5.4	1.8	76,000	82,000	Measured	1.3	6.5	2.2	86,000	92,000	
	Probable	3.9	4.4	1.7	174,000	210,000	Indicated	3.8	5.1	1.9	192,000	234,000	
							Inferred	0.3	4.6	1.8	12,000	15,000	
Conductor 4	Probable	1.0	4.3	1.5	43,000	47,000	Indicated	1.0	5.3	1.8	54,000	59,000	
							Inferred	1.1	4.4	1.7	48,000	60,000	
Conductor 5		-	-	-	-	-	Inferred	1.4	6.2	2.8	88,000	129,000	
Stockpiles	Proved	3.1	1.5	1.1	47,000	107,000	Measured	3.1	1.5	1.1	47,000	107,000	
	Proved	5.7	3.4	1.4	190,000	256,000	Measured	5.4	3.8	1.6	206,000	271,000	
	Probable	5.3	4.7	1.7	248,000	282,000	Indicated	5.2	5.4	1.9	280,000	321,000	
							Inferred	2.8	5.3	2.3	148,000	203,000	
	Total	11.0	4.0	1.5	439,000	538,000	Total	13.4	4.7	1.9	634,000	795,000	

JORC 2012 MINERAL RESOURCE AND ORE RESERVE ESTIMATION PARAMETERS DEGRUSSA COPPER MINE

Section 1: Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	 The deposit was sampled by a combination of surface diamond drill (DD) and reverse circulation (RC) holes. Sampling is guided by Sandfire DeGrussa protocols and QAQC procedures as per industry standard. DD samples include both half-core and quarter-core samples of NQ2 core size and RC samples are collected by a cone or riffle splitter using a face sampling hammer with a nominal 140mm hole. DD sample size reduction is completed through a Jaques jaw crusher to -10mm and all samples Boyd crushed to -4mm and pulverised via LM2 to nominal 90% passing -75µm. Pulp size checks are completed. Underground drilling is prepared by the onsite laboratory Bureau Veritas combines and fuses 0.4g of assay sample plus 9.0g flux into a glass bead. The deposit was initially sampled by a combination of surface diamond drill (DD) and reverse circulation (RC) holes totalling 58,622m DD and
techniques	 The deposit was initially sampled by a combination of surface diamond driff (DD) and reverse circulation (RC) notes totalling 36,022m DD and 22,072m RC used in Definitive Feasibility Study (DFS). Additional underground 395 NQ2 DD (50,910m) has been completed for Conductor 1 and Degrussa lodes on a nominal grid to 13m on strike and 20m on dip of orebody within grade control areas. Near mine exploration drilling including 8 DD (4056.3m) and 7 RC (2166m) surface holes were completed for the Mineral Resource update of Conductor 4 and Conductor 5 lodes All surface drill collars are surveyed using RTK GPS with downhole surveying, except on shallow RC holes by gyroscopic methods. All underground drill collars are surveyed using Trimble S6 electronic theodolite. Downhole survey is completed by gyroscopic downhole survey. Holes are inclined at varying angles for optimal ore zone intersection. All core where possible is oriented using a highly accurate Reflex ACT II RD orientation tool with stated accuracy of +/-1% in the range 0 to 88°.
Drill sample recovery	 Diamond core recovery is logged and captured into the database with weighted average core recoveries greater than 98%. Surface RC sampling is good with almost no wet sampling in the mine area. Core is meter marked and orientation to check against the driller's blocks, ensuring that all core loss is taken into account. At the RC rig sampling systems are routinely cleaned to minimize the opportunity for contamination and drilling methods are focused on sample quality. Samples are routinely weighed and captured into the central secured database. No sample recovery issues have impacted on potential sample bias.
Logging	Geological logging is completed for all holes and representative across the ore body. The lithology, alteration, and structural characteristics of core are logged directly to a digital format following standard procedures and using Sandfire DeGrussa geological codes. Data is imported into

ASX/Media Release

18 July 2013

the central database after validation in LogChief™. Logging is both qualitative and quantitative depending on field being logged. All cores are photographed. All DD and RC drill holes are fully logged. Sub-sampling Core orientation is completed where possible and all are marked prior to sampling. Half core samples are produced using Almonte Core Saw. techniques and Samples are weighed and recorded. Some guarter core samples have been used and statistical test work has shown them to be sample representative. preparation RC samples are split using a cone or riffle splitter. A majority of RC samples are dry. On the occasion that wet samples are encountered, they are dried prior to splitting with a riffle splitter. Underground and open pit sample preparation at the onsite laboratory involves the original sample being dried at 80° for up to 24 hours and weighed on submission to laboratory. Sample is then crushed through Jagues crusher to nominal -10mm (DD samples only). Second stage crushing uses Boyd crusher to nominal -4mm (both RC and DD samples). Sample is split to less than 2kg through linear splitter and excess retained for for metallurgical work. Sample splits are weighed at a frequency of 1/20 and entered into the job results file. Pulverising is completed using LM2 mill to 90% passing 75%µm. Two lots of packets are retained for on-site laboratory services whilst the pulverised residue is shipped to Ultra Trace in Perth for further analysis. Sample preparation at Ultra Trace involves the sample being dried at 80° for up to 24 hours and weighed. DD samples are then crushed through a Jaques crusher to nominal -10mm. Second stage crushing uses Boyd crusher to a nominal -4mm. All RC samples are Boyd crushed to -4mm. Samples are then split to less than 2kg through linear splitter and excess retained. Sample splits are weighed at a frequency of 1/20 and entered into the job. Pulverising is completed using LM2 mill to 90% passing 75%µm. Size at a minimum of 1 per batch. 1.5kg of rock quartz is pulverised at every 10th sample. Sandfire DeGrussa has protocols that cover auditing of sample preparation at the laboratories and the collection and assessment of data to ensure accurate steps in producing representative samples for the analytical process. Key performance indices include contamination index of 90% (that is 90% blanks pass); Crush Size index of P95-10mm; Grind Size index of P90-75µm and Check Samples returning at worse 20% precision at 95% confidence interval and bias of 5% or better. Duplicate analysis has been completed and identified no issues with sampling representatively. Test work on half-core versus quarter-core has been completed with results confirming that sampling at either core size is representative of the in situ material. The sample size is considered appropriate for the Massive Sulphide mineralization style.

Quality of assay Samples submitted to Ultra Trace in Perth are assayed using Mixed 4 Acid Digest (MAD) 0.3g charge and MAD Hotbox 0.15g charge methods data and with ICPOES or ICPMS. The samples are digested and refluxed with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and laboratory tests Perchloric acids and conducted for multi elements including Cu, Pb, Zn, Ag, As, Fe, S, Sb, Bi, Mo, Re, Mn, Co, Cd, Cr, Ni, Se, Te, Ti, Zr, V, Sn, W and Ba. The MAD Hotbox method is an extended digest method that approaches a total digest for many elements however some refractory minerals are not completely attacked. The elements S, Cu, Zn, Co, Fe, Ca, Mg, Mn, Ni, Cr, Ti, K, Na, V are determined by ICPOES, and Ag, Pb, As, Sb, Bi, Cd, Se, Te, Mo, Re, Zr, Ba, Sn, W are determined by ICPMS. Samples are analysed for Au, Pd and Pt by firing a 40g of sample. Lower sample weights are employed where samples have very high S contents. This is a classical FA process and results in total separation of Au, Pt and Pd in the samples Samples submitted to the onsite laboratory have 0.4g of sample plus 9.0g flux combined and fused into a glass bead. XRF is used to analyse for a suite of elements (including Cu, Fe, SiO2, Al, Ca, MgO, P, Ti, Mn, Co, Ni, Zn, As, and Pb). Pulps are dispatched to Ultra Trace in Perth for ICPOES or ICPMS for extended elements (including Cu, Fe, As, Pb, S, Zn, Fe, Ag, Sb, Bi, Cd, Cl, F, and Hg). Au, Pt, and Pd analysed by FA/ASS on a 40g assay charge (assay charge is variable depending on Sulphur content). Handheld XRF units are used as grade control tools to delineate ore boundaries and grades in the field and for exploration for alteration minerals. These units are fit for this purpose. Handheld XRF results are not used in the Mineral Resource estimation. Sandfire DeGrussa QAQC protocol is considered industry standard with standard reference material (SRM) submitted on regular basis with routine samples. SRMs and blanks are inserted at a minimum of 5% frequency rate. A minimum of 2% of assays are routinely re-submitted as Check Assays and Check Samples through blind submittals to external and primary laboratories respectively. Adhoc umpire checks are done. QAQC data returned is automatically checked against set pass/fail limits within SQL database and are either passed or failed on import. On import a first pass automatic QAQC report is generated and sent to QAQC Geologists for recommended action. QAQC data analysis has been completed for all data and demonstrates sufficient accuracy and precision for use in Mineral Resource estimation. Verification of Significant intersections have been verified by alternative company personnel. sampling and There are no twinned holes drilled for the DeGrussa Mineral Resource. assaying Primary data are captured on field tough book laptops using Logchief™ Software. The software has validation routines and data is then imported into a secure central database. The primary data is always kept and is never replaced by adjusted or interpreted data. Location of data Sandfire DeGrussa Survey team undertakes survey works under the guidelines of best industry practice. points All surface drill collars are accurately surveyed using RTK GPS system within +/-50mm of accuracy (X, Y, Z) with no coordinate transformation applied to the picked up data. There is a GPS base station on site that has been located by a static GPS survey from two government standard survey marks (SSM) recommended by Landgate. Downhole survey completed by gyroscopic downhole methods at regular intervals. Underground drilling collar surveys are carried out using Trimble S6 electronic theodolite and wall station survey control. Re-traverse is carried out every 100 vertical meters within main decline. Downhole surveys are completed by gyroscopic downhole methods at regular intervals. MGA94 Zone 50 grid coordinate system is used. A 1m ground resolution DTM with an accuracy of 0.1m was collected by Digital Mapping Australia using LiDAR and a vertical medium format

	digital camera (Hasselblad). The LiDAR DTM and aerial imagery were used to produce a 0.1m resolution orthophoto that has been used for subsequent planning purposes.
Data spacing	No Exploration Results included in this release.
and distribution	Data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for JORC 2012 classifications applied.
	Samples have been composited to optimal density weighted 1m lengths prior to geostatistical analysis and Mineral Resource estimation.
Orientation of	The majority of the drillholes are orientated to achieve intersection angles as close to perpendicular to the mineralisation as practicable.
data in relation to geological structure	No significant sampling bias occurs in the data due to the orientation of drilling with regards to mineralised bodies.
Sample security	All samples are prepared onsite under the supervision of Sandfire Geological staff.
	Samples are transported to the Perth Ultra Trace laboratory by Toll IPEC or Nexus transport companies in sealed bulka bags.
	• The onsite laboratory receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.
Audits or reviews	• The sampling techniques and data collection processes are of industry standard and have been subjected to multiple internal and external reviews. Most recently Cube Consulting Pty completed a review during 17th - 19th December 2012 and found procedures to be consistent with industry standard and appropriate with minor recommendations for enhancement as part of continuous improvement.

Section 2: Not applicable

Section 3: Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sandfire employs SQL as the central data storage system using Datashed software front end. User access to the database is regulated by specific user permissions. Only the Database Manager can overwrite data.
	• Existing protocols maximise data functionality and quality whilst minimising the likelihood of error introduction at primary data collection points and subsequent database upload, storage and retrieval points.
	• Data templates with lookup tables and fixed formatting are used for collecting primary data on field Toughbook laptops. The software has validation routines and data is subsequently import it into a secure central database.
	• An IT contracting company is responsible for the daily Server backups of both the source file data on the file server and the SQL Server databases. The selected SQL databases are backed up to disk with "Backup Exec" each day and then transferred to tape for long term storage. This allows for a full recovery in the event of disaster.
	• The SQL server database is configured for optimal validation through constraints, library tables, triggers and stored procedures. Data that fails these rules on import is rejected or quarantined until it is corrected.
	• Database is centrally managed by a Database Manager who is responsible for all aspects of data entry, validation, development, quality control and specialist queries. There is a standard suite of vigorous validation checks for all data.
Site visits	Competent Person for this update is a full time employee of Sandfire and undertakes regular site visits ensuring industry standards of the Mineral Resource estimation process from sampling through to final block model.
	Regular site visits were undertaken during this update.
Geological interpretation	• Interpretation is based on geological knowledge acquired through data acquisition from the open pit and underground workings, including detailed geological core and chip logging, assay data, underground development face mapping of orebody contacts and in-pit mapping. This information increases confidence in the interpretation of the deposit.
	 Interpretations have been completed using all available geological logging data from diamond core and reverse circulation drilling. Interpreted fault planes have been used to constrain the wireframes where applicable.
	All development drives are mapped and surveyed and interpretation adjusted as per ore contacts mapped.
	Wireframes were constructed using cross sectional interpretations based on logged massive sulphides in combination with Cu, Fe and S analyses.
	• The geological interpretation of minerlised boundaries are considered robust and alternative interpretations do not have the potential to impact significantly on the Mineral Resources. Ongoing site and coporate peer reviews, and external reviews, ensure that the geological interpretation is robust.
	• Interpretation has been based on logged massive sulphide in combination with Cu, Fe and S assays and adjusted to mapping in underground development drives. These wireframes models are used as hard boundaries during the Mineral Resource estimation. Wireframes are also terminated at known faults.
	The primary sulphide mineralisation consists of very continuous massive sulphide to semi-massive sulphide. Discrete lenses of mineralization external to the massive sulphide occasionally occur within Chlorite Alteration zones which may contain thin lenses of massive sulphides.

	Gold is associated with the chalcopyrite rich phases and occurs as a high silver electrum.
	Orebodies have either pinched out or are truncated by faults.
	Conductor 1, Conductor 4 and Conductor 5 were once a continuous unit but subsequently fragmented by the Shiraz and Merlot faults.
Dimensions	• All known DeGrussa deposit mineralisation extends from 733500mE to 734785mE, 7172965mN to 7173590mN and 650m below surface.
	• The DeGrussa sulphide lode generally strikes towards NE with a strike length of approximately 210m, dipping very steeply towards the south with a SSE subtle plunge and having a vertical extent of about 200m.
	• The Conductor 1 lode lies north of DeGrussa and generally strikes NE dipping generally at 70° to the SW. It has a strike length of about 400m with a vertical extent of 370m plunging to SE at about 15°.
	 Conductor 4 lenses lie to the east of DeGrussa and Conductor1 lodes and are stratigraphically deeper. Strike length is up to 510m with dips varying between 35°- 45° to the SE and a vertical extent of 3500m
	 Conductor 5 lenses are east of Conductor 4 and have strike length up to 280m meter strike length dipping at about 45° to the south-southwest, and a vertical extent of 370m.
Estimation and modelling techniques	• Block estimation has been completed within Datamine™ Studio 3 Resource Modelling software. Three dimensional mineralisation wireframes were completed within Surpac™ and Micromine™ software and imported into Datamine™. These wireframes are used as hard boundaries for the interpolation.
	• Ordinary Kriging using a local dynamic anisotropy search is used for block grade estimates using uniquely coded 1m composite data for respective lodes.
	• All block estimates are based on interpolation into parent blocks. Parent block estimates are then assigned to sub-blocks. Mineral Resource estimation does not include any form of dilution.
	• Block model extends from 733,250mE to 735,250mE, 7,172,850mN to 7,173,750mN and vertical from1, 700mRL to 2,800mRL. Elements estimated include Cu, Au, Ag, Fe, S, Pb, and Zn.
	• Thorough univariate statistical analysis of density weighted, 1m, mineralogy flagged, downhole composites has been completed for all elements and for all lodes and top-cuts established where applicable.
	1m composites are extracted with minimum passing of 70% and best fit such that no residuals are created.
	• Variogram modelling completed within Snowden Supervisor™ software and used to define the characterization of the spatial continuity of all elements within all lodes and parameters used for the interpolation process. Variogram model are cross-validated to ensure parameters are accurate.
	• Quantitative kriging neighborhood analysis (QKNA) using goodness of fit statistics to optimize estimation parameters has been undertaken. Parameters optimised include block size, search parameters, number of samples (minimum and maximum) and block descritization.
	Ordinary krigged Mineral Resource estimates are checked against an alternate inverse distance weighting estimates and also reconciled with
	previous estimates.
	No assumptions were made regarding recovery of by-products during the Mineral Resource estimates.
	• Estimates includes deleterious or penalty elements Pb, Bi, Zn, As, MgO as well as Magnetic Susceptibility and Pyrite: Pyrrhotite ratio for metallurgical modelling.
	• QKNA indicates parent block sizes of X (5m) by Y (5m) by Z (5m) to be suitable for grade control (GC) areas where drillhole ore intercept spacing varies from 0.2m to 45m averaging 6m. Within Resource Definition areas parent block sizes of X (10m) by Y (10m) by Z (10m) were

found to be adequate for drillhole intercept spacing varying from 8m to 90m averaging at 30m. Parent blocks were sub-blocked to X (0.5m) by Y (0.5m) by Z (0.5m) ensuring high resolution at ore boundaries when filling wireframes with blocks taking into consideration orebody geometry.

- Directional ranges have been determined from variogram modelling and are used to constrain the search distances used in block interpolation, incorporating geologists' interpretation of ore geometry and continuity. Estimation search strategies implemented have sought to ensure robust estimates while minimising conditional bias. Three search estimation runs are used with initial short-search runs extending the sample influence in later runs.
- Grade restriction applied during interpolation is either as a capping or restricted search or combination of both. Restricted searching during
 estimation is applied to restrict the influence of extreme grades from smearing distant blocks by using a tighter search ellipsoid.
- No selective mining units were assumed in this estimate
- Within the massive sulphides there is a good and consistent correlation between Cu, Fe, S and bulk density which has been analysed separately for all lodes using multiple regression to fit the density and Cu, Fe, S relationship. The regressed formula is then applied to block model estimated Cu, Fe and S to assign the estimated block bulk density value.
- The geological interpretation wireframes correlate with massive sulphide minerlisation boundaries. The block model has been assigned a unique mineralisation zone code that corresponds with the geological domain as defined by wireframes. Geological interpretations are used as hard boundaries during interpolation where blocks are estimated only with composites having the corresponding zone code.
- Statistical analysis indicated that outlier management was crucial to prevent severe high grade smearing that could result in potential overestimation for some elements. The approach used has been capping or restricted search or the combination of both (Top-cuts and restricted search were defined following thorough examinations of histograms, probability curves and the spatial locations of the outliers).
- Standard model validation has been completed using visual and numerical methods and formal peer review sessions by key geology staff.
- Mineral Resource Model has been validated visually against the input composite/raw drillhole data with sufficient spot checks carried out on a number of block estimates on sections and plans.
- Easting, northing and elevation swath plots have been generated to check input composited assay means for block estimates within swath windows. Ordinary krigged estimates have also been checked against an alternate inverse distance weighting estimates within the same swath windows.
- A comparison of block volume weighted mean versus the drillhole cell de-clustered mean grade of the composited data was undertaken.
- Efficiency models using block Kriging Efficiencies (KE) and Slope of Regression (ZZ) were used to quantitatively measure estimation quality to ensure the desired level of quality of estimation.
- No meaningful reconcile+ation data is available at this time.

Moisture

• Tonnages are estimated on a dry basis.

Cut-off parameters

• Based upon data review a notional lower cut-offs of 0.3% Cu for Oxides Copper and 1.0% Cu for Massive Sulphides appear to be a natural grade boundary between ore and trace assay values.

Mining factors or assumptions

• The upper portion of the DeGrussa deposit was mined by open pit completed in two stages. The approximate dimensions of the open pit at completion were 600m length, 500m wide and 140m deep. Mining comprised of conventional backhoe excavator methods with ore being mined in 5m benches on 2.5m flitches.

	The underground mining method is long-hole open stoping (both transverse and longitudinal) with minor areas of jumbo cut and fill or upl benching in some of the narrower areas. The primary method of backfill will be paste fill. The sequence will aim for 100% extraction of orebody.	
	Detailed mine plans are in place and mining is occurring	
Metallurgical factors or assumptions	Sulphide mineralisation consists of massive sulphide, semi-massive sulphide and minor stringer zone mineralisation. Distinct iron sulphide mineralogy (and quantity) tends to define metallurgical response. Properties within the different ore types are relatively consistent across ore bodies and appear to follow similar comminution parameters and flotation responses. The sulphide minerals are amenable to recover flotation. The dominant valuable component is copper, which is contained predominantly in chalcopyrite with minor assemblages chalcocite mineralisation.	s the ry by
	Assumptions are based on DFS metallurgical test work and ongoing monitoring of the DeGrussa processing plant ramp up.	
	Target recovery is 90% of Cu.	
Environmental factors or assumptions	The DeGrussa project is constructed with a fully lined Tailings Storage Facility and all Sulphide material mined from the operation will processed in the concentrator, eliminating any PAF on the waste dumps.	ll be
Bulk density	Regular and systematic specific gravity measurements are taken on representative number of diamond drill core according to a for protocol. This data is included in the database. Within the massive sulphides bulk density varies from 2.8 g/cm3 to 4.9 g/cm3, with average density reading of 3.7 g/cm3. Average density of 2.8 is assigned to waste blocks. In areas of the deposit where there are limited Archimedean measurements regressed formula is based on downhole gamma gamma (Conductor 4 and Conductor 5). The gamma data has been appropriately calibrated with Archimedean data. Archimedean data will represent the conductor 5 are taken on representative number of diamond drill core according to a for	h an data
	downhole gamma when more measurements are taken from future drilling.	
	This is not a bulk project.	
	Densities vary within the massive sulphides minerlisation and have consistent correlation with Cu, Fe and S. Regressed formula of densities used to calculate densities into blocks based on block estimated Cu, Fe and S. Within the semi-massive sulphides and waste zones aver densities have been assigned.	-
Classification	Mineral Resources have been classified into Measured, Indicated and Inferred categories based on drill hole intercept spacing, geological confidence, grade continuity and estimation quality. A combination of these factors guides the manual digitising of strings on drill section construct envelopes that are used to control the Mineral Resource categorization. This process allows review of the geological control/confidence on the deposit.	ns to
	Blocks classified as Measured are blocks are within areas having drill hole intercept spacing less than 30m by 20m and estimated wi minimum of 8 samples with no more than 4 samples from any single drillhole.	ith a
	Indicated Mineral Resources are blocks within areas with drill hole intercept spacing of less than 90m by 60m, estimated with minimu samples with no more than 4 samples from a single drillhole.	ım 6
	Mineral Resource classification has appropriately taken into account data spacing, distribution, reliability, quality and quantity. Confidence predicting grade continuity, geological confidence and estimation quality have also been taken into account.	ce in
	The geological model and Mineral Resource estimation reflect the Competent Person's view of the deposit.	
	The geological model and inimeral resource estimation reflect the competent Ferson's view of the deposit.	

Audits or reviews	•	This Mineral Resource has not been audited externally.
	•	The process for geological modelling, estimation and reporting of Mineral Resources is industry standard and has been subject to an
		independent external review. Cube Consulting Pty undertook a review during 17th - 19th December 2012 and found the process to be
		industry standard with minor recommendations as part of continuous improvement.
Discussion of	•	Mineral Resources has been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of
relative accuracy/		Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resources estimates.
confidence	•	The statements relates to global estimates of tonnes and grade.
	•	Existing operating reports of achieved production verse estimate is positive. Further data will be monitored as the mine ramps up to full scale
		operations.

Section 4: Estimation and Reporting of Ore Reserves

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 The Underground Ore Reserve estimate is based on the Mineral Resource estimate carried out by Sandfire Resource NL in March 2013. The Mineral Resources are reported inclusive of Ore Reserve.
Site visits	A site visit was conducted by the competent person.
	The site visit included underground inspections as well visual inspection of core.
Study status	Definitive Feasibility Study.
Cut-off parameters	 Three cut-off grades have been calculated based on current and forecasted costs and modifying factors, forecast for a period of three years. These cut-off values are; Fully Costed - cut-off includes all operating costs associated with the extraction and processing of ore material, Incremental - cut-off grade applies to all material that does not require any additional development, and Marginal – cut-off applies to material that will be mined in the process of gaining access to economic material.
Mining factors or ssumptions	 Ore Reserves have been calculated by generating detailed mining shapes for each stoping block as well as development. All mining dilution has been designed into the Reserve shapes and interrogated. Mining recovery factors have been applied post geological interrogation to generate the final diluted and recovered Ore Reserve. All mining methods are currently being applied on site and are in line with the parameters set out in the Feasibility Study. Stope sizes have been created to suit the Mineral Resource. As the Mineral Resource changes in width and dip the mining method changes from large multi lift stopes to echelon retreat single access stopes. Mining dilution has been applied to each mining shape with 0.5 m of over break applied to the footwall and hangingwall. When mining shapes come into contact with geotechnically complicated zones additional dilution is designed to ensure the stability of the mining shapes is sustained. A mining recovery of 95% has been applied to all stopes. This mining recovery is applied to allow for any ore loss due to mining related issues

	such as but not limited to; under break due to poor drilling and blasting techniques, stope bridging or freezing or material being left in stopes
	due inaccessibility.Minimum mining width for stoping is 4m.
	 All Inferred Mineral Resources included in the Ore Reserve shapes have had all grade stripped and are hence assumed to be waste.
	 Infrastructure for the mining method is currently installed or being installed and has been accounted for in the costing.
Metallurgical	
factors or assumptions	 The enrichment of the sulphide ore is by traditional crushing, grinding, flotation and filtration to produce a high grade high purity concentrate suitable for further pyrometallurgical enrichment. ROM ore is crushed in a jaw crusher and stored in a crushed ore bin. Feeders underneath the crushed ore bin reclaim ore and introduce it into a SAG and Ball mill circuit (SAB) whereby the ore is reduced to a size suitable for flotation. The flotation circuit consists of roughing, scavenging, concentrate regrind, cleaning, scavenging cleaning and recleaning stages to increase the grade of the concentrate to ~25% copper. The concentrate is then thickened and filtered to nominal moisture of ~10%. Assumptions are based on DFS metallurgical test work and ongoing monitoring of the DeGrussa processing plant ramp up.
	Target recovery is 90% of Cu.
Environmental	DeGrussa is currently compliant with all environmental regulatory requirements. To the best of the Competent Person's knowledge all sites for waste rock are compliant and their design and construction have complied with all environmental regulations, permits and recommendations.
Infrastructure	All infrastructures required for the processing and mining of the Ore Reserve is in place and operating.
Costs	 All costs used in the generation of the Ore Reserve have been based on current modelling of the life of mine plan. A revenue reduction factor of 19.6% has been applied which included all transport, smelting, refining and royalty payments. Exchange rates have been sourced from Sandfire Resources NL's current financial modelling data.
Revenue factors	Revenue has been based on a copper price of USD 7823 and a USD to AUD exchange rate of 0.94. This information is seen as a representative of current economic forecast for the period.
Market	Sandfire is a low cost copper concentrate producer.
assessment	Selling into global market for custom concentrates.
	Pricing is fundamentally on value of contained metals the main metal being copper with gold and small silver credits.
	The price of copper being set based on the LME which is a mature, well established and publically traded exchange .
	Sandfire produces a clean concentrate, low in deleterious elements.
	Sandfire's DeGrussa copper concentrate has a grade similar to the average grade most non-Chinese smelters feed at and notably above the common feed grade for Chinese smelters.
	Sandfire relies upon independent expert publications (CRU, Wood Mac, Metal Bulletin) and other sources (bank reports, trader reports, conferences, other trade publications) in forming a view about future demand and supply and the likely effects of this on both metal prices and concentrate prices.
	• The current market for copper is defined by weak global demand and rising mine supply leading to an expected cooper surplus at least thru to 2016, however the long run marginal cost of new mine capacity and production is likely to underpin the market at around US\$3/lb.
	 "Clean" copper concentrates with copper grades between 23 and 28% are expected to continue to be in demand and Sandfire foresees continued demand for its concentrate.
	At the last tender Chinese smelters directly or indirectly via traders offered competitively for SFR concentrates.

	There is still significant interest in spot and long term sales opportunities for Sandfire concentrates.
	Chinese smelters are still at low levels of utilisation and more smelter capacity is being built.
	• The break even TC/RC for smelters varies somewhere between 60/6 and 80/8, therefore strong buying interest is expected should the spot
	TC/RC get above these levels effectively capping TC/RC costs at around the 90/9 level.
Economic	No NPV's have been generated as part of the Ore Reserve assessment, however all material contained within the Reserve is deemed to
	generate positive cash flow based on the economic input parameters.
Social	• To the best of the Competent Persons knowledge all agreements are in place and are current with all key stakeholders including traditional
	owner claimants.
Other	DeGrussa is currently compliant with all legal and regulatory requirements. To the best of the Competent Person's knowledge, there is no
	reason to assume any government permits and licenses or statutory approvals will not be granted.
Classification	The Ore Reserve has been broken into Proven and Probable categories.
	Only Measured material has been converted to a Proven Ore Reserve.
	Indicated material has been converted to a Probable Ore Reserve.
	• The Competent Person believes the classification of the Underground Mineral Resource and hence the conversion to Ore Reserve is appropriate.
Audits or reviews	The Ore Reserve has been peer reviewed internally and is in line with current industry standards.
Discussion of	• The Ore Reserve has been completed to a DFS standard; hence confidence in the resulting figures is high. Mining Operations have
relative	demonstrated the assumptions made are correct.
accuracy/ confidence	All modifying factors have been applied to designed mining shapes on a global scale as current local data reflects the global assumptions.

Competent Person's Statement - Mineral Resources and Open Pit Ore Reserves

The information in this report that relates to Mineral Resources and Open Pit Ore Reserves is based on information compiled by Mr. Ekow Taylor who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Taylor is a permanent employee of Sandfire Resources and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Taylor 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 Resources is based on information compiled by Mr Shane McLeay who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr. McLeay is a permanent employee of Entech Pty Ltd and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for 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 plac

Exploration and Resource Targets

Any discussion in relation to the potential quantity and grade of Exploration Targets 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 Mineral Resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.