Sandfire Resources NL ABN 55 105 154 185
Level 1, 31 Ventnor Ave, West Perth Western Australia 6005
Phone: +61 8 6430 3800 **Fax:** +61 8 6430 3849
Email: info@sandfire.com.au **Web:** www.sandfire.com.au

24 October 2013

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

Dear Sebastian,

LODGEMENT OF SEPTEMBER 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. September 2013 Quarterly Activities Report
2. September 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 September 2013 Quarterly Report at 10.00am (AWST) / 1.00pm (AEST) today. Details of the call are provided in the September 2013 Quarterly Activities Report.

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

Access this webcast at: http://www.brrmedia.com/event/116580
http://www.sandfire.com.au

Yours sincerely,

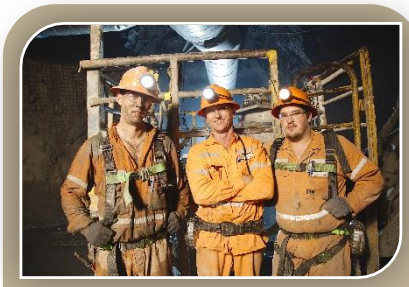
Matt Fitzgerald
Chief Financial Officer
and Company Secretary

For further information contact:

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

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



Underground Service Crew, DeGrussa

ASX Code:

SFR

Issued Capital:

Ordinary Shares 155.6M
Options 8.1M

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

Date:
24 October 2013

SANDFIRE RESOURCES NL

QUARTERLY REPORT

For the period ended 30 September 2013

HIGHLIGHTS

Production & Operations

Contained metal production	June 2013 Quarter	Sept 2013 Quarter	FY2014 Guidance
COPPER			
Concentrator	14,293	16,446	65-75,000
Total copper (t)	**14,293**	**16,446**	**65-75,000**
GOLD			
Concentrator	7,762	8,613	35-45,000
Oxide gold	3,522	-	-
Total gold (oz)	**11,284**	**8,613**	**35-45,000**

- 16,446t of copper and 8,613oz of gold produced at a C1 cash operating cost of US$1.28/lb.
- Ramp-up of underground mine to 1.5Mtpa nearing completion with larger stopes commenced – 1.4Mtpa rate achieved for month of September 2013.
- 1.5Mtpa plant nameplate maintained: open pit blend completed and copper recovery increasing with removal of open pit ore from the blend.
- FY2014 production guidance maintained: 65-75,000t of copper, 35-45,000oz of gold, weighted towards the second half of the financial year due to feed grade and recovery profile; FY2014 C1 cash operating costs US$1.05-1.15/lb.

Exploration

- Underground exploration of the C4 orebody commenced at the end of the Quarter and will accelerate as further drill positions become available from the C4/C5 Decline.
- Strong ongoing focus on near-mine and regional exploration targeting mine life extensions.

Corporate

- Finance facility repayment profile amended following revised Life-of-Mine Plan, further strengthening the Company's working capital position.
- $270M remaining facility balance at 30 September 2013; $101M cash and deposits.

30 September 2013 Quarterly Report Presentation and Update to be webcast live at 10.00am (WST) / 1.00pm (AEDT) today, Thursday 24 October 2013, with a simultaneous investor conference call (see details inside this Quarterly Report).

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1.0 OVERVIEW

Copper production for the September Quarter increased to 16,446 tonnes (June 2013 Quarter: 14,293 tonnes), which was at the upper end of guidance due to the strong average head grade of 5.3% Cu. The DeGrussa Copper Mine either achieved or exceeded most of its key performance indicators (KPI's) for the Quarter. C1 cash operating costs for the Quarter reduced, in line with increased metal production, to US$1.28/lb (June 2013 Quarter: US$1.37/lb).

Mill throughput was maintained at an annualised rate of 1.5Mtpa (million tonnes per annum) with 377,719 tonnes milled for the Quarter. Average copper recovery increased to 82%, with recoveries still restricted as further batches of transitional open pit material were processed on a campaign basis. This material continued to achieve recoveries of 60-65% compared with 85-92% for primary underground sulphide ore.

Underground mining progressed on schedule with six stopes now in various stages of development and production. A total of 320,492 tonnes of underground sulphide ore was mined for the Quarter, with a continued strong focus on underground mine development. The ramp-up of the underground mine towards the targeted ore production rate of 1.5Mtpa (125,000 tonnes per month) remains on track to be achieved in Q2FY2014. A mining rate of 1.4Mtpa was achieved in the month of September 2013. Development of the Conductor 1 Decline and the Conductor 4/5 Decline continued with total underground development reaching over 15km at Quarter-end.

The Company confirms 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 at a headline C1 cash operating cost in the range of US$1.05-1.15/lb. Production will be weighted towards the second half of FY2014 due to expected variability in mined head grade across different stopes as part of the underground mine plan between the December 2013 Quarter (lower head grade in the range of 4.5-5.0% Cu) and the March and June 2014 Quarters (higher head grade in the range of 5.0-6.0% Cu).

During the Quarter, Sandfire further strengthened its working capital position with a reduction in repayments and reserve account requirements for FY2014 for the now remaining $270 million balance of the DeGrussa Project Finance Facility. The implementation of this revised repayment profile followed the adoption of the new Life-of-Mine Plan including extensions to Conductors 4 and 5.

The DeGrussa Copper Mine was officially opened by Western Australian Premier, the Hon Colin Barnett MLA, on Sunday, 4 August 2013 at a ceremony attended by over 200 dignitaries and key stakeholders.

Figure 1 – WA Premier Hon. Colin Barnett MLA (right) unveiling the official opening plaque with Sandfire Chairman Derek La Ferla (left) and Managing Director Karl Simich (middle)

1.1 Safety

The lost time injury frequency rate (LTIFR) (per million hours worked) stabilised at 4.4 at the end of the Quarter (compared to 4.4 at the end of the June Quarter). The overall safety performance for the Quarter was in line with the DeGrussa Safety Plan. Injury rates are showing a positive downward trend following a visible leadership initiative being undertaken by Management.

The development and implementation of safe systems of work and training in Back Care and Manual Handling during the Quarter also made a positive contribution to the good safety outcome. The development of the Sandfire Safety System also continued, with additional work being undertaken with respect to developing the Operations/Production Plan for FY2014, of which Safety was a significant component.

2.0 MINING & PRODUCTION

2.1 Overview

September 2013 Quarter – Production Statistics		Tonnes	Grade (% Cu)	Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)
Concentrator	Mined	320,492	5.4	1.9	17,510	19,511
	Milled	377,719	5.3	1.6	20,060	19,511
	Production	**68,018**	**24.2**	**3.9**	**16,446**	**8,613**
	Copper and gold sales	70,194	24.2	3.9	16,962	8,743

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 Underground Mining

Underground mining progressed on schedule with six stopes on-line during the Quarter. The ramp-up of the underground mine towards the targeted ore production rate of 1.5Mtpa (125,000 tonnes per month) remains on track to be achieved in Q2FY2014. A mining rate of 1.4Mtpa was achieved in the month of September 2013. A total of 1,108,205 tonnes of sulphide ore at a grade of 5.1% Cu has been mined and delivered to the ROM (run-of-mine) pad since stoping commenced in October 2012.

The performance of the paste-fill plant stabilised and improved steadily, with filling of the Primary stopes in the Conductor 1 deposit completed during the Quarter. Secondary stopes adjacent to these paste-filled Primary stopes are expected to come on-line during Q2FY2014 and will be a predominant source of production for the next four months.

A total of 320,492 tonnes of underground sulphide ore was mined for the Quarter, with a continued strong focus on underground mine development in both the Conductor 1 and Conductor 4/5 Declines. Underground development is proceeding on schedule, with both of these new declines progressing to plan.

The Conductor 1 Decline, which had advanced 244m from the junction at Quarter-end, will enable the large Conductor 1 deposit to be fully developed and extracted. The Conductor 4/5 Decline, which had advanced 298m from the junction at Quarter-end, will enable development and mining of the deeper high-grade Conductor 4 and 5 deposits to occur. This Decline is expected to reach Conductor 4, located approximately 400m east of Conductor 1, 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 locations, providing stability and consistency of production in the long term. It is also facilitating the establishment of underground diamond drilling platforms 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 control drilling to define mining shapes in Conductor 4 and 5 and to conduct in-fill drilling to enable conversion of Inferred Mineral Resources to Ore Reserves in these deposits. Underground drilling commenced in the last week of the Quarter (*see Exploration Section below*). Total development for the underground mine to date is over 15km.

2.3 Processing

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

- 377,719 tonnes milled at an average head feed grade of 5.3% Cu (June Quarter: 373,375 tonnes at 4.7% Cu), with the plant maintaining an annualised throughput rate of 1.5Mtpa;
- increased overall copper recovery of 82% (June Quarter: 81%), reflecting the continuing impact of blending open pit transitional material with primary underground sulphide ore;
- a 13% increase in concentrate production to 68,018 tonnes (June Quarter: 59,939 tonnes); and
- a 15% increase in contained metal production to 16,446 tonnes of contained copper (June Quarter: 14,293 tonnes of contained copper).

As outlined previously, 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 25-33% of the ore feed blend to the Concentrator during the Quarter. Recovery continued 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 at 24-25% Cu.

Campaign processing of open pit sulphide material has now ceased with 100 per cent of ore feed from the Concentrator expected to comprise primary sulphide ore from the underground mine from Q2FY2014 onwards. Approximately 40,000 tonnes of open pit sulphide ore remains stockpiled for future processing if and when required.

Further optimisation programs, in line with plant ramp-up, were completed during the Quarter including the installation of control system upgrades to allow implementation of the expert control system, repairs to cyclone feed pumps and replacement of SAG mill grate plates.

2.4 Guidance – FY2014

Concentrate and metal production is expected to be weighted towards the second half of FY2014 due to expected variability in mined head grade across different stopes as part of the underground mine plan between the December 2013 Quarter (lower head grade in the range of 4.5-5.0% Cu) and the March and June 2014 Quarters (higher head grade in the range of 5.0-6.0% Cu). Refer to Sandfire's September 2013 Quarterly Presentation (released today) for further detail and guidance on operating parameters, production guidance, unit costs and capital expenditure.

3.0 SALES AND MARKETING

3.1 Copper Concentrate Shipments

A total 70,431 tonnes of plant concentrate grading 24.2% Cu containing 17,016 tonnes of copper was shipped for the Quarter (June Quarter: 62,898 tonnes of plant concentrate grading 23.8% Cu shipped containing 14,948 tonnes of copper). Gold shipped totalled 9,012 ounces (June Quarter: 13,705oz including sales from oxide gold production).

4.0 FEASIBILITY STUDIES & METALLURGY

4.1 Oxide copper

Oxide copper

Sandfire is currently undertaking a Feasibility Study on the Oxide Copper Project to understand the financial suitability of this Project for the Company. Currently, the Project has been developed to provide 6,000-7,000 tonnes of copper cathode per year for 5 years. The proposed layout for the oxide copper plant was completed during the Quarter, with the following sections of the Project now defined, namely:

- The scrubbing and resultant tailings deposition design;
- The heap leach design and stacking methods;
- The solvent extraction and electro-winning (SX-EW) design; and
- Ancillary infrastructure (i.e. power-lines).

Ongoing technical development work is limited to the following:

- Hydrodynamic column testing to evaluate the geotechnical suitability of the material under leach conditions (to be completed by the end of November 2013); and
- Bottle-roll testing to determine the optimum acid concentrations, extractions and acid consumptions for modelling purposes (also to be completed by the end of November 2013).

In anticipation of a positive outcome from the Feasibility Study, the Company will submit a mining proposal and works approval to the regulators by the end of October 2013 to minimise the timeline to implementation once Board approval is received.

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 (volcanogenic massive sulphide) deposits.

Detailed geological interpretation and analysis has resulted in a much improved understanding of the stratigraphic controls on mineralisation and subsequent disruption by geological structures. These advances have resulted in a significant reduction in the priority exploration search-space on mine, tenement and regional scales and the definition of a highly prospective mine stratigraphic corridor. The improved focus resulting from this reduction in the priority exploration search-space is now being complemented by cutting-edge geophysical and geochemical studies within the mine stratigraphic corridor, aimed at vectoring exploration towards potential accumulations of VMS mineralisation.

A comprehensive review of the mine stratigraphic corridor within Sandfire's tenement package was completed during the Quarter. This review has identified prospective areas that have been untested, or poorly tested, during previous exploration activity. Integrated drilling/geophysical/geochemical programmes have been designed to evaluate these areas during the December 2013 Quarter.

Within the near-mine environment, 3-D orebody modelling and pre-faulting reconstruction has highlighted the potential to increase the DeGrussa Mineral Resource through extensional exploration. 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.

Integration of tenement- and regional-scale geoscientific datasets suggests that the southern portion of the Sandfire tenement package is underlain by stratigraphic equivalents of the sequence that hosts the DeGrussa deposit within the mine stratigraphic corridor. This area is largely overlain by transported alluvial material and is essentially unexplored. Aircore drilling has commenced in this highly prospective area. The breakdown of metres drilled for the Quarter is shown below:

Drilling	AC/RAB Drilling (m)	RC Drilling (m)	UG Diamond Drilling (m)	Total Drilling (m)
Q1FY2013	36,238	1,002	1,550	38,790

5.2 DeGrussa Mine Extensional Exploration

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

- Underground diamond drilling targeting strike and dip extensions to the Conductor 1 East Zone, which has allowed the Company's exploration team to refine the geological model and subsequent mine design on the periphery of the orebody. Drilling targeting the Conductor 1 Zone down-dip will proceed as drilling positions become available; and

- The establishment of new underground drilling positions from the Conductor 4/5 Decline, which will continue to be an important focus for the Company during the second half of CY2013. This allowed underground diamond drilling to commence in the last week of the Quarter. The initial target zone for underground diamond drilling is the stratigraphically contiguous zone immediately down-plunge from Conductor 4. Surface drilling in this area in 2010 only partially closed the resource potential, as shown in Figure 2 below. The first hole of the C4 down-plunge extensional drilling program, DGUE0012, intersected a total of **8.7m (true width) of massive sulphides grading 2.7% Cu and 2.7g/t Au**. The second hole of the program, DGUE0013, intersected halo mineralisation of **3.5m (true width) at 3.4% Cu and 1.8g/t Au**, while subsequent holes DGUE0014 and DGUE0015 failed to intersect mineralisation. Further work will continue define the down-plunge extent of the mineralisation and to in-fill these extensions. Once this work is completed, the resource models for Conductor 4 will be updated.

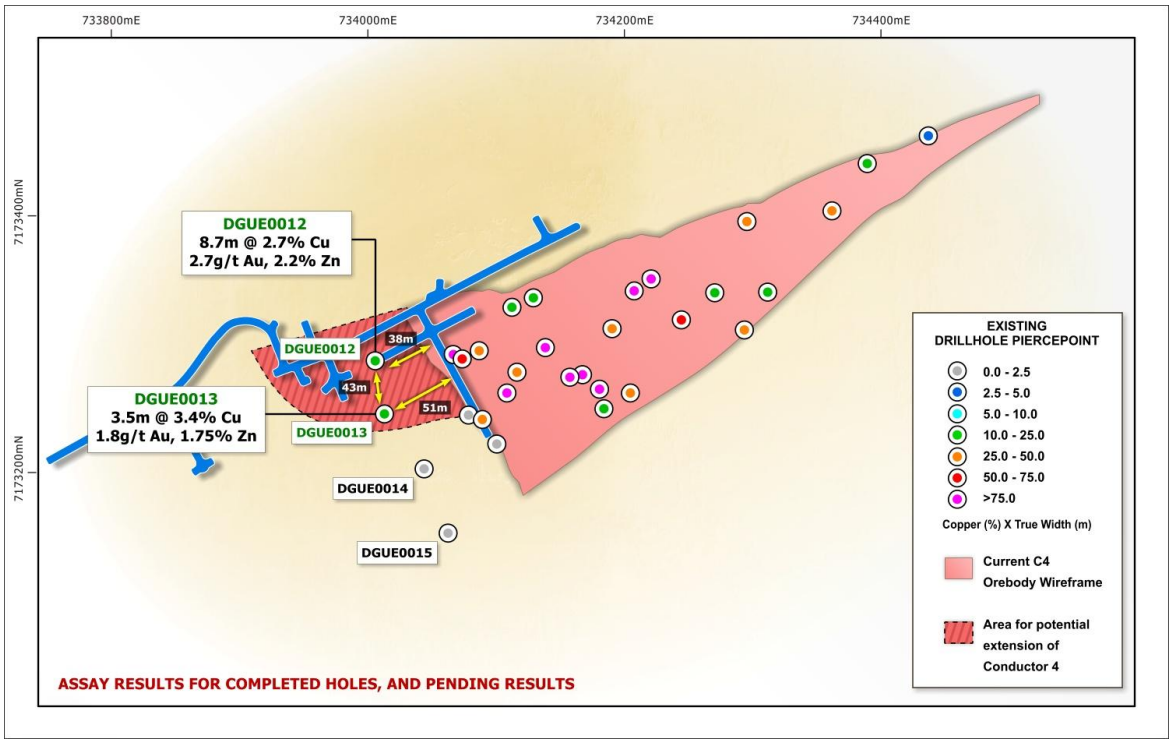

Figure 2 – Conductor 4 down-plunge underground diamond drilling program

5.3 DeGrussa Regional Exploration

The DeGrussa regional land-holding is made up of over 400km^2 of contiguous tenements, many of which have never been explored using a modern understanding of the regolith. In the southern extents of the land-holding little work has been completed while the Company focused on testing potential DeGrussa extensions in the immediate mine corridor.

Drilling during the Quarter has seen the first-pass of systematic drilling at the Shed Well and South Robinson Range prospects. This drilling has penetrated transported material (up to 80m thick) and, for the first time, allowed detailed geological interpretation of this area to be undertaken. Drilling on 800m x 100m reconnaissance lines has identified a number of horizons of jasperoidal chert, some with sulphides, and numerous geochemical anomalies that require follow-up work. Key areas of focus for this regional drilling campaign undertaken during the Quarter are shown in Figure 3 below:

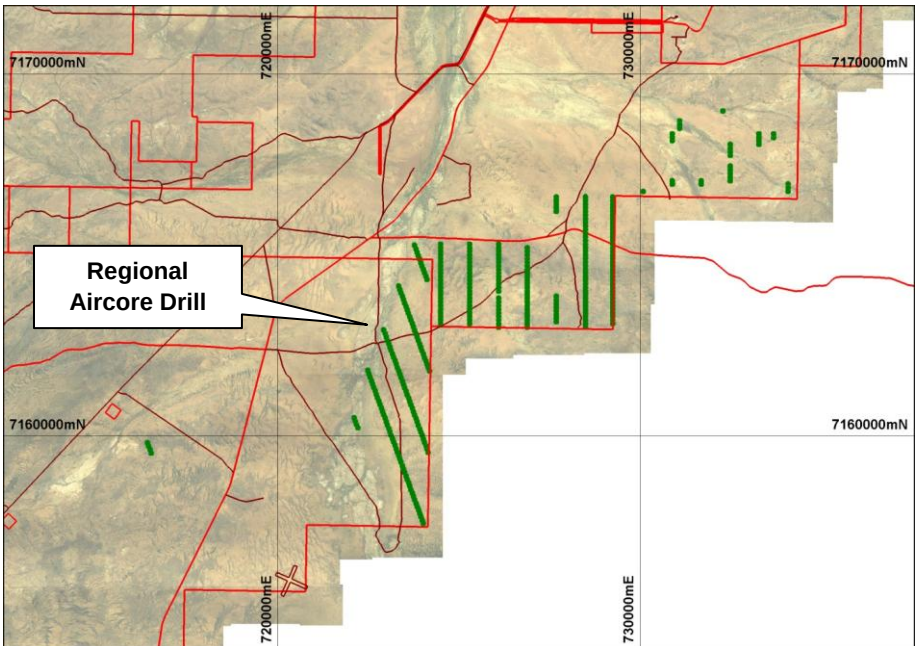

Figure 3 – Aerial photograph showing lines of Aircore drilling completed during the Quarter

Work on these prospects will continue into the next Quarter as the Company's geological team continues to develop an enhanced geological understanding of this area.

6.0 AUSTRALIAN EXPLORATION

6.1 Borroloola Project

The Borroloola Project comprises a total area in excess of 10,000km^2 of tenements and tenements under application in the Northern Territory. The tenements are located north of the McArthur River Mine (Xstrata), that initially contained 230Mt at a grade of 13% combined lead and zinc. The Borroloola tenements are also prospective for sedimentary manganese mineralisation, copper and iron ore. Sandfire has signed two farm-out Joint Venture agreements to advance the Borroloola Project. The Batten Trough JV covering the eastern portion of the tenements is under an option and joint venture agreement with MMG Exploration Pty Ltd, which can earn up to an 80% interest. The Boroloola West JV covering the western portion is under an agreement with Pacifico Minerals Ltd in alliance with Cliffs Natural Resources, which has the right to earn up to an 80% interest.

Planning continues for a short drill program to test the Hells Gate iron ore prospect located on 100%-owned Sandfire tenements. During the Quarter, Pacifico Minerals completed a short and shallow drill program to understand the stratigraphy in the Borroloola West JV for its manganese potential.

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). The project includes an option agreement for a Joint Venture on EPM15948 with Global Resources Corporation Ltd, where Sandfire can earn up to an 80 per cent interest by funding exploration.

Drilling commenced following the end of the Quarter at the Lillyvale prospect located on 100%-owned Sandfire tenements to test a large gravity anomaly that is associated with prospective stratigraphy and hydrothermal alteration under cover. The target is prospective for lead-zinc and copper-gold systems with the hole located approximately 1km from previous drilling which targeted a large magnetic high.

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 km^2 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 commenced during the Quarter with a combination of Reverse Circulation and diamond drilling to test geophysical and geochemical targets. Eighteen holes were completed during the Quarter for over 6,500m of drilling that intersected the prospective horizon at the Capricorn, Boralis, Altia North and Altia South prospects. Evaluation of all results is ongoing with future programs dependent on this interpretation.

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). A farm-in agreement to earn up to 80% is held with Straits Resources Ltd (ASX:SRQ) on EL 5792, surrounding tenements and applications are 100% owned by Sandfire.

Detailed planning is being finalised for an aircore program to in-fill a broad copper and molybdenum anomaly at Sao Paulo to define a potential deeper target. The follow-up drilling program is planned for the December Quarter in the Joint Venture area. A number of new applications have been made and work programs are being assessed.

6.5 Alford Project

The Alford Project on the Yorke Peninsula lies 20km NE 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 (ASX: ARE) to earn up to 75% of the project.

Detailed planning is underway for a gravity and IP survey for the December Quarter to follow up on the work completed in the last field season especially in the Alford East trend. Targets defined will be further tested with aircore and diamond drilling during the March Quarter.

7.0 CORPORATE

7.1 Finance Facility

Sandfire further strengthened its working capital position with a reduction in repayments and reserve account requirements for the 2014 financial year for the remaining $285 million balance of the Project Finance Facility for its DeGrussa Copper Mine.

The improved repayment profile has been achieved with the Company's financiers following the transition of DeGrussa to steady-state operations as well as a realignment of the funding model in line with the recently announced DeGrussa Mine Plan. The previous DeGrussa bank funding model was derived from an Ore Reserve-only mine plan, which included a shorter implied mine life and a reduced underground development and exploration profile.

Scheduled quarterly repayments under the revised schedule commenced in late September 2013 (first repayment of $15 million) and are more evenly spread over the facility repayment period, which remains fixed ending December 2015.

As a result, the Company's working capital position will be strengthened for the period ended June 2014 with a reduction in repayments ($40 million) and debt service reserve account requirements ($15 million).

Summary of revised repayment schedule

Period ended	Original schedule	Amendment	Revised schedule
	$M	**$M**	**$M**
June 2014	165	(40)	125
June 2015	90	(15)	75
December 2015	30	55	85
Total	**285**	**-**	**285**

Sandfire has completed three repayments of $50 million in March 2013, $45 million in June 2013 and $15 million in September 2013, reducing the outstanding facility balance from $380 million to $270 million as at the end of the September 2013 Quarter.

7.2 Investor Call and Webcast

An investor conference call on Sandfire's September 2013 Quarterly Report will be held today (Thursday, 24 October 2013) for investors and analysts, commencing at 10.00am (WST)/1.00pm (AEDT). 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: **728896**

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/116580.

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)

Competent Person's Statement – Exploration Results
The information in this report that relates to Exploration Results is based on information compiled by Mr. Shannan Bamforth who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Bamforth 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 Bamforth consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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.

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.

Figure 4 – DeGrussa Copper-Gold Project Location

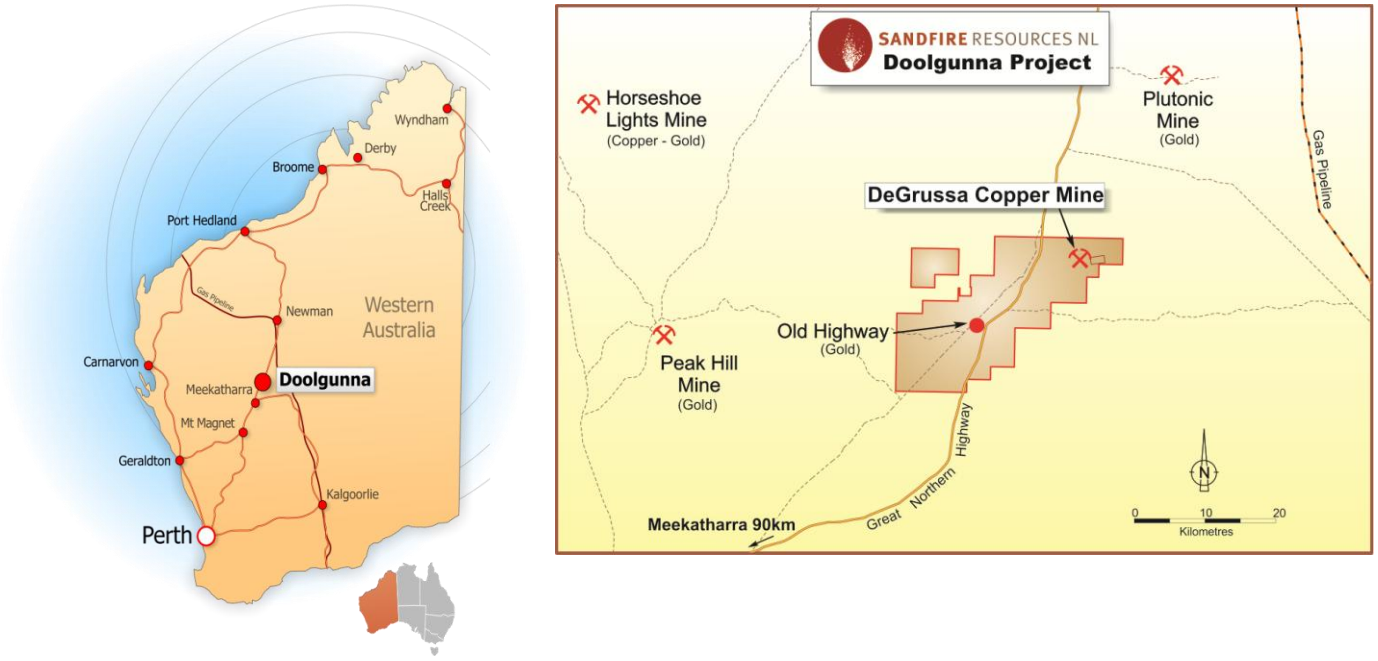

Figure 5 – Australian Joint Venture and Exploration Project Locations

JORC Compliance Statement - *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/cm^3 to 4.9g/cm^3, with an average density reading of 3.7g/cm^3. 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 guidelines.

Appendix 1 – Exploration Drilling Results

C4 UG EXPLORATION DRILLHOLES

			MGA Zone 50 Co-ordinates				
Drillhole ID	**Target**	**Drill Hole Type**	**East**	**North**	**Mine RL**	**Azimuth**	**Inclination**
DGUE0012	Conductor 4	Diamond	734071	7173268	2198	286.8	-70.3
DGUE0013	Conductor 4	Diamond	734071	7173268	2198	249.2	-73.9
DGUE0014	Conductor 4	Diamond	734086	7173240	2198	226.1	-76.3
DGUE0015	Conductor 4	Diamond	734086	7173240	2198	195.0	-71.0

	Intersection				Mineralisation			
Drillhole ID	**From**	**To**	**Intercept**	**Approx True Width**	**Cu [pct]**	**Au [ppm]**	**Zn [pct]**	**Pb [pct]**
DGUE0012	197.3	206.8	9.5	**8.7**	2.68	2.67	2.22	0.55
DGUE0013	218.3	222.0	3.7	**3.5**	3.39	1.80	1.75	0.23
DGUE0014	No Intersection							
DGUE0015	No Intersection							

TABLE 1: EXPLORATION RESULTS - JORC 2012

DEGRUSSA COPPER MINE

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Sampling is through underground diamond drilling (DD) on half-core samples of NQ2 core size. • Sampling is guided by Sandfire DeGrussa protocols and QAQC procedures as per industry standard. • 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. • Pulp samples are fused into a glass bead by the combination of 0.4g of assay sample plus 9.0g flux. • Core results are used for SG determination.

Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drilling is completed by underground DD rig with a core size of NQ2. • 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 from the drilling position. • All core where possible is oriented using a Reflex ACT II RD orientation tool with stated accuracy of +/-1% in the range 0 to 88°.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Core is meter marked and orientated to check against the driller's blocks, ensuring that all core loss is taken into account. • Diamond core recovery is logged and captured into the database with weighted average core recoveries greater than 97%. • Samples are routinely weighed and captured into the central secured database. • No sample recovery issues have impacted on potential sample bias.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• 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 the central database after validation in LogChief™. • Logging is both qualitative and quantitative depending on field being logged. • All cores are digitally photographed and stored.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Core orientation is completed where possible and all are marked prior to sampling. Half core samples are produced using Almonte Core Saw. Samples are weighed and recorded. • Sample preparation occurs at the onsite laboratory.The original sample is dried at 80° for up to 24 hours and weighed on submission to laboratory. Sample is then crushed through Jaques crusher to nominal -10mm. Second stage crushing uses Boyd crusher to nominal -4mm. Where required samples are 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 pulp packets are retained for on-site laboratory services whilst the pulverised residue is shipped to Ultra Trace in Perth for further analysis. • 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. • The sample size is considered appropriate for the Massive Sulphide mineralization style.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• 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 with ICPOES or ICPMS. The samples are digested and refluxed with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and 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). • 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 completed annually.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections have been verified by alternative company personnel. • There are no twinned holes drilled for the DeGrussa deposit. • 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 points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Sandfire DeGrussa Survey team undertakes survey works under the guidelines of best industry practice. • 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. • Downhole survey 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 and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• This is an extensional drilling with the closest drillhole approximately 60m from the nearest Mineral Resource definition drillhole. • Data spacing and distribution are sufficient to establish geological and grade continuity. This latest drilling has not been included in the Mineral Resources. • No sample compositing have been applied to the Exploration Results.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The majority of the drillholes are orientated to achieve intersection angles as close to perpendicular to the mineralisation as practicable. • No significant sampling bias occurs in the data due to the orientation of drilling with regards to mineralised bodies.
Sample security	• *The measures taken to ensure 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 results of any audits or reviews of sampling techniques and data.*	• The sampling techniques and data collection processes are of industry standard and have been subjected to multiple internal and external reviews.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• M52/1046 is wholly owned by Sandfire Resources N.L. with no known third party ownership encumbrances. • Tenure is current and in good standing. • Mining Lease 52/1046 is currently subject to 2 Native Title Claims by the Gingirana (WC06/002) and the Yungunga-Nya People (WC99/046). Sandfire currently has Land Access Agreements in place with the Gingirana and Yugunga-Nya Native Title Claimants which overlay the DeGrussa Copper deposit and has allowed mining and exploration activities to commence on their traditional land.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• There has been no known previous historical drilling by parties other than Sandfire Resources N.L. within M52/1046.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Degrussa Copper Mine is a Volcanogenic Massive Sulphide deposit located with the Proterozoic Bryah Basin of Western Australia.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to Appendix 1 of this accompanying document. • All drillholes are downhole gyroscopically surveyed at completion with Total Station survey pickup of drill collars.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Significant intersections are calculated using a 0.5% Cu cut-off grade and may include up to a maximum of 3.0m of internal dilution, with a minimum composite grade of 1.0% Cu. • Cu grades used for calculating significant intersections are uncut. • Reported intersections are based on a regular sample interval of 1m subject to the location of geological boundaries. • Minimum and maximum sample intervals used for intersection calculations are 0.3m and 1.3m respectively. • No metal equivalents are used in the intersection calculation. • Where core loss occurs; the average length-weighted grade of the two adjacent samples are attributed to the interval for the purposes of calculating the intersection. The maximum interval of missing core which can be incorporated with the reported intersection is 1.0m.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Estimated true width is presented in the Table in Appendix 1 on page 11 of this report. • Underground drilling is based on the DeGrussa local mine grid. • Where the geometry of the mineralisation is known; estimated true widths of mineralisation will be estimated and reported. Where the geometry is unknown; no true width of mineralisation will be estimated or reported.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate maps and cross-sections with scale are included within the body of the accompanying document
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• The accompanying document is considered to represent a balanced report.

Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Other exploration data collected is not considered as material to this document at this stage. Further data collection will be reviewed and reported when considered material.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Exploration drilling will continue to target projected lateral and depth extensions of known mineralisation.