



SANDFIRE RESOURCES NL

A QUALITY COPPER-GOLD COMPANY ASX Code- SFR

27 April 2017

ASX Limited
Level 40, Central Park
152-158 St George's Terrace
Perth WA 6000

**LODGEMENT OF MARCH 2017 QUARTERLY REPORT, QUARTERLY UPDATE PRESENTATION
AND INVESTOR CONFERENCE CALL AND WEBCAST**

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

1. March 2017 Quarterly Activities Report
2. March 2017 Quarterly Update Powerpoint Presentation

In addition, a teleconference and live webcast on the March 2017 Quarterly Report will be held for the investment community at 10.00am (AWST) / 12.00pm (AEST) today.

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

Live date: Thursday, 27 April 2017

Access this webcast at: <http://webcasting.boardroom.media/broadcast/58e584458ac6f038fedd5fc0>
<http://www.sandfire.com.au>

Yours sincerely,

Matt Fitzgerald
Chief Financial Officer
and Company Secretary



QUARTERLY REPORT

For the period ended 31 March 2017

Highlights

Production & Operations

Contained metal production	September 2016 Quarter	December 2016 Quarter	March 2017 Quarter	FY2017 Guidance
Copper (t)	15,610	18,130	16,256	65,000 – 68,000
Gold (oz)	9,731	10,183	8,988	35,000 – 40,000
C1 cost (US\$/lb)	1.06	0.81	0.94	0.95 - 1.05

- Strong mine production and milling rates maintained for the Quarter.
- FY2017 production guidance maintained: 65-68kt Cu and 35-40koz gold at lower end C1 ~US\$0.95-1.05/lb.

Development Projects

- Positive Feasibility Study completed for the Monty Copper-Gold Project (Springfield JV, SFR 70%:TLM 30%), with the study confirming the deposit's suitability to be developed as an underground satellite source of high grade ore feed supplementing copper production from the existing DeGrussa mining operation.
- Permitting continues for the Black Butte Copper Project, Montana, USA.

Exploration

- New copper-gold porphyry system intersected at Temora in NSW (part of the Company's East Coast base metals initiative). First diamond hole at the Donnington prospect intersected 125m grading 0.3% Cu and 0.5g/t Au, including intervals of 44m and 28m at 0.4% Cu and 0.6g/t Au. Follow-up drilling is underway.
- Multi-pronged exploration programs continuing across Sandfire's Greater Doolgunna Project which, including Joint Venture and Farm-in Agreements, now covers a total area of 5,846km².
- Deep diamond drilling has commenced along strike from Monty with three 1,200m holes planned to provide a platform for deep electro-magnetic (EM) surveys.
- Major aircore drilling program planned at the Enterprise Metals farm-in project, targeting 10 strike kilometres of the interpreted favourable host sequence which hosts the DeGrussa and Monty copper-gold deposits. Drilling commenced subsequent to Quarter-end.

Corporate

- Farm-in agreement signed with Great Western Exploration (ASX: GTE) to secure an initial 70% interest in the North Yerrida Project, located 25km south of the DeGrussa mining operation.
- Payment of interim dividend of 5 cents per share (fully franked).
- Sandfire debt-free following the repayment of the \$50M balance in its Revolver Facility on 31 January 2017, nearly 12 months ahead of schedule.
- Group cash on hand as at 31 March 2017: \$90 million.

1.0 SAFETY PERFORMANCE

The Total Recordable Injury Frequency Rate (TRIFR) for the Sandfire Group at the end of March was 5.7 (Dec Quarter: 6.8). Recordable injuries include those that result in any days away from work (Lost Time Injuries), of which there were none in the Quarter, and those where an employee or contractor cannot perform all or any part of their normal shift (Restricted Work Day Injuries), as well as any injury that requires services that only a medical practitioner can provide (Medical Treatment Injuries).

Safety systems development continues to focus on prevention of incidents and improving the culture of employees and contractors, with principal hazard management a key theme.



Figure 1: The DeGrussa mining operation, Western Australia

2.0 OPERATIONS OVERVIEW

Copper production for the March Quarter was 16,256 tonnes (December Quarter: 18,130 tonnes). C1 cash operating costs for the Quarter were US\$0.94/lb (December Quarter: US\$0.81/lb).

Mine production for the Quarter was 402,784 tonnes grading 4.4% Cu. During the Quarter, production was sourced from all lenses at DeGrussa.

A total of 405,025 tonnes of ore grading 4.4% Cu was milled for the March Quarter, with copper recovery averaging 91.3%.

3.0 MINING & PRODUCTION

3.1 Overview

March 2017 Quarter – Production Statistics		Tonnes	Grade (% Cu)	Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)
Concentrator	Mined	402,784	4.4	1.5	17,795	19,911
	Milled	405,025	4.4	1.6	17,815	20,276
Production		66,762	24.3	4.2	16,256	8,988

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.

3.2 Underground Mining

During the Quarter, production was sourced from all lenses at DeGrussa with the mine remaining in balance between production and back-fill.

Decline development and the primary ventilation system is largely complete with the contractor decreasing its development equipment. Work also continued on the main underground pump station, which is targeted for completion in the June 2017 Quarter.

3.3 Processing

Mill throughput in the March Quarter was impacted by two planned maintenance shut-downs. During the January shut-down, the SAG mill was re-lined and several changes were implemented to increase the utilisation of the pebble crusher, reduce total power consumption and further stabilise the grinding circuit.

Additional major tasks undertaken during the planned shut-down included replacement of the secondary cyclone distributor – which was designed to improve cyclone efficiency – and by-passing of the flotation conditioning tank in preparation for installation of the rougher column cell. In March, the Company conducted a scheduled full plant maintenance shut-down which ran on target at 30 hours of outage.

Copper recovery for the March Quarter was in line with the predicted recovery based on the resource copper grade and Cu:S ratio.

Sandfire continues to pursue opportunities for further improvements in copper recovery. Installation of additional rougher flotation capacity has commenced and is due for completion in late June 2017.

The DeGrussa solar project has experienced periods of downtime since initial commissioning commenced. Following further integration works completed by external contractors, the solar farm has recommenced full time operation and is providing power to meet underground mine and concentrator requirements in conjunction with the DeGrussa diesel power facility.

3.4 Guidance – FY2017

Targeted copper production for FY2017 remains unchanged with production expected to be in the range of 65-68,000 tonnes of contained copper metal with gold production within the range of 35-40,000 ounces. Headline, C1 cash operating costs are expected to be at the lower end of the range US\$0.95-1.05 per lb.

C1 unit costs are reporting marginally higher in 2HFY2017 due to the planned and guided reduction in underground development capital work. This will result in increased mining overheads per unit of copper production.

Mine production is forecast at 1.53Mt with the processing of 1.63Mt of ore achieved via the pull-down of ROM stocks in 1HFY2017.

4.0 SALES AND MARKETING

4.1 Copper Concentrate Shipments

A total of 63,507 dry metric tonnes of concentrate containing 15,160 tonnes of copper (14,524 tonnes payable) and 8,222 ounces of gold (7,616 ounces payable) was sold for the Quarter. Six shipments were completed from Port Hedland and Geraldton.

5.0 DEVELOPMENT PROJECTS

5.1 Monty Copper-Gold Project

During the Quarter, the Feasibility Study on the Monty Copper-Gold Project, located 10km east of DeGrussa, was completed and approved by the Springfield Joint Venture. The Springfield Unincorporated Joint Venture comprises participating interests of Sandfire (manager – 70% interest) and Talisman Mining (ASX: TLM; “Talisman”) (30% interest).

The Study was compiled by Sandfire with input from a number of key contributors, consultants and industry experts, as well as in-house Sandfire personnel.

The robust technical and financial outcomes of the Study confirm the Monty Project's suitability to be developed as an underground satellite source of high grade ore feed to supplement copper production from the existing DeGrussa mining operation. Early works have commenced for the development of the Monty deposit, including statutory approvals, design work and tendering for contracts.

The Mining Lease and all other tenure has been granted with final development approvals expected by end-FY2017. Development of the box-cut is expected to commence during Q2 FY2018. Ore production is expected to commence in Q2 FY2019, with first stoping to follow soon after.

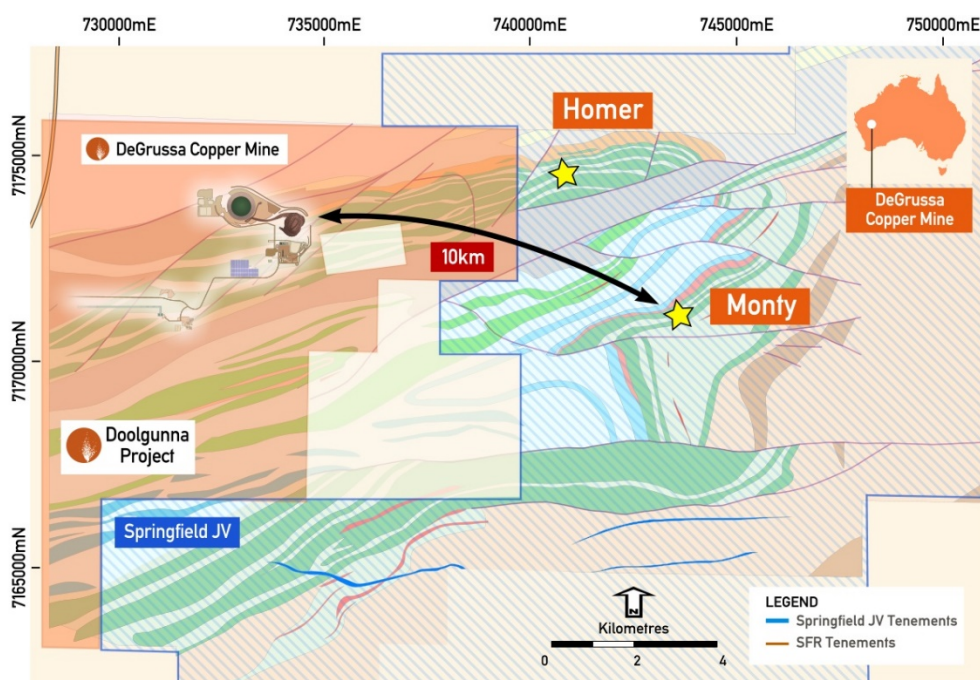


Figure 2: Monty Copper-Gold Project Location (WA)

Monty Mineral Resource, Ore Reserve and Mine Plan

The maiden Monty Mineral Resource was announced on 14 April 2016. Following completion of the Study, the maiden Ore Reserve and Mine Plan is set out in Table 1 below.

Table 1: Monty Mineral Resource, Ore Reserve and Mine Plan (100% basis)

	Mt	Cu (%)	Au (g/t)	Contained Cu (t)	Contained Au (oz)
Mineral Resource	1.05	9.4	1.6	99,000	55,000
Ore Reserve	0.92	8.7	1.4	80,000	42,000
Mine Plan	0.80	9.4	1.5	74,000	38,000

The Mine Plan incorporates the mining of the Lower Zone, which is the higher grade portion of the Ore Reserve. The Upper Zone, while marginally economic, will be subject to further technical and economic assessment in due course.

Table 2: Capital expenditure and mine development

	Sandfire (70%) \$M	Monty Project (100%) \$M
Project capital	22	32
Pre-production costs	28	40
Sustaining capital	13	18
Total capital	63	90

Project capital includes surface infrastructure, access road and other facilities. Pre-production costs include mine development (70%: \$14 million), underground mine infrastructure (70%: \$6 million) and mine services and administration costs (70%: \$8 million).

Monty Mining

An underground mine will be developed comprising over 10km of lateral development and 500m of vertical development. As with DeGrussa, further drilling of the Monty orebody will be completed from access points along the decline to assist with grade control, mine development planning and further metallurgical testwork.

Sandfire has agreed to purchase Talisman's 30% share of Monty ore under an Ore Sale and Purchase Agreement (OSPA) utilising a weighbridge to be installed at the DeGrussa ROM.

Following purchase, 100% of Monty ore will be blended into the DeGrussa processing plant and Sandfire will incur production and operating costs post the DeGrussa weighbridge.

Monty ore will be purchased from Talisman on a sliding scale with recognition of the prevailing copper, gold and silver prices and annual indexed cost adjustments.

At Study commodity prices and exchange rates Sandfire would purchase each tonne of ore from Talisman for \$513/t (US\$2.02 per payable pound). The purchase price increases/decreases by ~\$67 per tonne for each 10% movement from Study prices (Cu US\$6,118/t at USD: AUD 0.72).

Mining cash operating costs at Monty are expected to be similar to DeGrussa on a costs per pound of payable copper production (C1) basis. Higher ore unit mining costs associated with narrower orebody width, smaller stope size and the use of cemented aggregate fill (rather than paste fill as used at DeGrussa) will be offset by the higher grade of the Monty deposit.

The existing 1.6Mtpa DeGrussa mining rate will progressively reduce from mid-FY2019, to allow capacity for ore from Monty to be blended and resulting in an alignment of the production profiles of the two mines through to 2021.

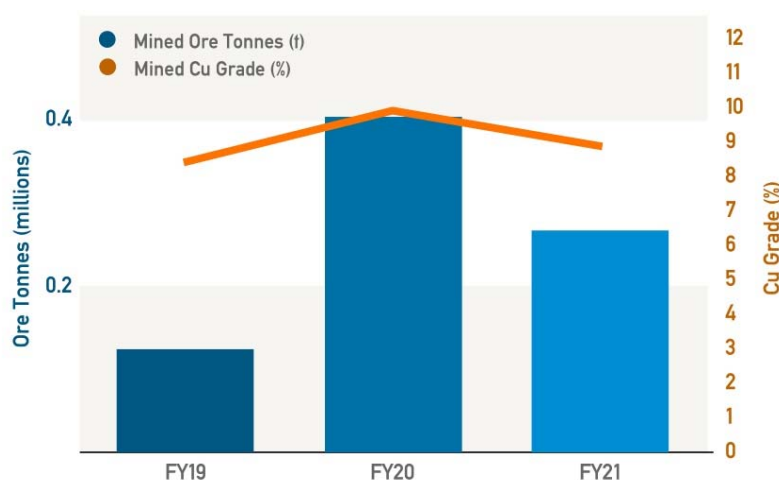


Figure 3: Monty Ore Production and Copper Grade

An updated DeGrussa Mineral Resource, Ore Reserve and Mine Plan, incorporating the integration of the Monty Project, is expected to be available for release in Q4 FY2017.

DeGrussa Processing

Metallurgical test work completed on the Monty ore has demonstrated a continuation of the DeGrussa recovery curve, where recoveries typically increase in line with higher Cu:S ratio and associated copper grade. Monty ore is expected to blend well with DeGrussa ore and increase overall head grade, recovery and concentrate production, with no material impact expected on concentrate quality or marketability.

As previously announced, the flotation capacity of the DeGrussa plant will be expanded with the addition of a second column cell and additional thickening and filter capacity (to allow peak 400,000tpa concentrate production). These additions will enhance DeGrussa recovery, facilitate the recovery of additional copper units from Monty ore and accommodate higher concentrate production rates.

Springfield Joint Venture Agreements

In addition to the OSPA outlined above, Sandfire and Talisman have also signed a more detailed Exploration Joint Venture Agreement (EJVA) over the Springfield Project as well as a Mining Joint Venture Agreement (MJVA) over the Monty deposit and immediate surrounding area. These agreements are based on the model forms published by the Australian Mining and Petroleum Lawyers Association (AMPLA).

Key terms include:

EJVA

- All decisions made by majority vote of percentage joint venture ownership interest except for a small number of items that must be made by unanimous decision;
- Day-to-day operation of the joint venture rests with the manager, with Sandfire appointed as initial manager of the joint venture;
- All budgets set by the manager and approved by majority vote; and
- Dilution provisions to apply if any joint venturer does not contribute its share of any budget.

MJVA

- Economic discoveries from the EJVA become subject to the MJVA (or a new MJVA depending on their scale) after completion of a bankable feasibility study;
- Monty deposit to be developed and mined under the MJVA;
- Majority of terms from the EJVA are repeated in the MJVA; and
- Sandfire has been appointed manager of the MJVA.

Key Project Fundamentals

FS Fundamentals		
Mining method	Long Hole Open Stopping (LHOS) with cemented aggregate fill (CAF) and loose rock fill (RF)	
Development	10km decline and lateral development, 0.5km vertical development	
Project construction	12 months (commencing start-FY2018)	
First ore production	Q2 FY2019	
Mine life	Three years plus one year access development	
Concentrator metal production (100%):	<u>Contained metal</u>	<u>Payable metal</u>
Copper production	70,000 tonnes	67,000 tonnes
Gold production	21,000 ounces	19,000 ounces
Silver production	288,000 ounces	187,000 ounces

Approvals

During the Quarter, Mining Lease 52/1071 was granted by the Department of Mines and Petroleum of Western Australia. The granted Mining Lease covers a total area of 16.42km² around the Monty deposit and has an initial term of 21 years. A Miscellaneous Licence which will accommodate a haul road between Monty and DeGrussa has also been granted by the Department of Mines and Petroleum.

As a result these regulatory milestones, all tenure in relation to the Monty Project has now been granted, allowing the remaining development approvals to be lodged. All remaining approvals are expected to be in place by around end-FY2017.

5.2 DeGrussa Oxide Copper Project

Negotiations continued with the holders of the non acid leaching technology to carry out a significant testwork program and study into the extraction of valuable metals from oxide copper-gold stockpiles at DeGrussa. It is anticipated that agreement may be reached in the June Quarter and testwork will commence shortly thereafter.

5.3 Black Butte Copper Project, USA (Sandfire: 61%)

Sandfire holds a 61% interest, via North American-listed company Tintina Resources (TSX.V: TAU), in the premier, high-grade Black Butte Copper Project, located in central Montana in the United States. The project is located close to existing road, power and rail infrastructure, with the ability to access a residential workforce located nearby and competitive sources of materials and power. Located on private ranch land, the Black Butte Project copper resource consists of three flat-lying sedimentary hosted copper deposits which have been extensively drilled by Tintina (over 53,000m of diamond drilling).

An Updated Technical Report and Preliminary Economic Assessment (PEA) completed by Tintina in July 2013 was based on reported NI 43-101 Measured and Indicated Resources totalling 15.7Mt grading 3.4% Cu, 0.1% Co and 14g/t Ag for 533,600t of contained copper and Inferred Resources totalling 2.3Mt grading 2.8% Cu, 0.09% Co and 14g/t Ag for 63,500t of contained copper (calculated using a 1.6% copper cut-off grade) for the

Johnny Lee Upper Zone and Lowry deposits, and a 1.5% Cu cut-off for the Johnny Lee Lower Zone. This makes Black Butte one of the top-10 undeveloped copper projects worldwide by grade.

The PEA confirmed that the deposit has the potential to underpin a robust underground mining operation with forecast life-of-mine production of ~30,000tpa of copper-in-concentrate over a mine life of ~11 years, based on total mill throughput of 11.8 million tonnes at an average head grade of 3.1% Cu.



Figure 4: The community of White Sulphur Springs, near the Black Butte Copper Project (left); exploration drilling at the main Johnny Lee deposit at Black Butte

Sandfire and Tintina are committed to ensuring the protection of the pristine natural environment in the surrounding area, with the proposed mine being wholly underground, with no open pit and minimal surface footprint. The underground workings have been designed so that water cannot run out of the mine.

Sandfire views the Black Butte Project as an excellent and complementary strategic fit with its flagship DeGrussa Copper-Gold Project in Western Australia and a key part of its longer term growth pipeline – and will continue to support Tintina both financially and by contributing its project development and operational expertise to assist with the permitting, financing and development of the project.

The Company's Managing Director, Karl Simich, and Chief Development Officer, Bruce Hooper, visited the Black Butte Copper Project in February and held meetings with a wide range of local and community representatives, legislators and other key stakeholders to discuss the project.

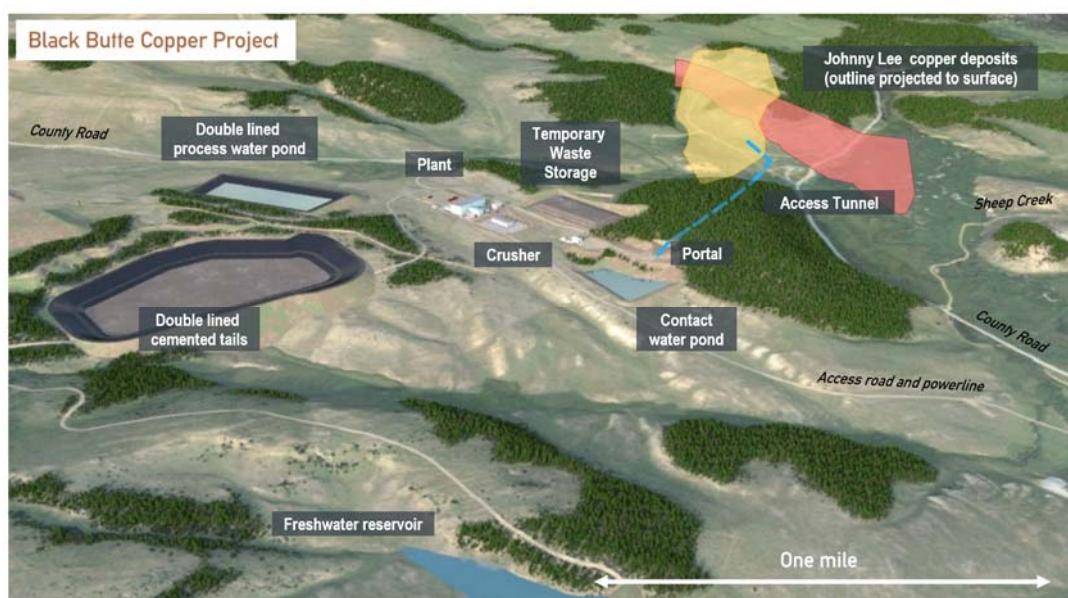


Figure 5: Black Butte Copper Project – Proposed Site Layout

6.0 EXPLORATION

6.1 Overview

Sandfire continues to progress a tightly focused, multi-disciplinary exploration campaign to test for extensions to the known cluster of VMS deposits at DeGrussa and Monty, and to unlock the broader potential of the Doolgunna region for additional VMS and structurally-hosted copper deposits.

Key components of the Company's exploration activity at Doolgunna during the March Quarter included:

- RC drilling at the Red Bore East Prospect to test the C5 host stratigraphy along strike from DeGrussa;
- The continuation of AC drilling at the Springfield Project targeting the South-Eastern Volcanics;
- Completion of RC pre-collars for diamond drilling tails to test for potential mineralisation at depth along strike from the Monty deposit;
- The planning of a major 600-hole AC drilling program at the Enterprise Metals farm-in project to test 10 strike kilometres of the favourable volcano-sedimentary sequence interpreted to belong to the Narracoota/Karalundi Formations, which host the DeGrussa and Monty copper-gold deposits; and
- AC drilling at the Ned's Creek project targeting fault systems that exist in close proximity to known epigenetic copper mineralisation.

The aggregate exploration metres drilled on Sandfire's wholly-owned and JV tenements during the March 2017 Quarter are summarised below:

Project	AC/RAB Drilling (m)	RC Drilling (m)	UG Diamond Drilling (m)	Surface Diamond Drilling (m)	Total Drilling (m)
Doolgunna (SFR 100%)	-	896	-	-	896
Ned's Creek (SFR 100%)	2,066	-	-	-	2,066
Springfield JV (SFR 70%)	12,606	2,425	-	-	15,031
Enterprise JV (Earn-in)	-	-	-	-	-
TOTAL Q3FY2017	14,672	3,321	-	-	17,993
TOTAL FY2017	91,570	16,551	5,567	7,119	120,807

6.2 Greater Doolgunna

The Greater Doolgunna Project, which includes the Talisman Joint Venture, the Ned's Creek Project, the Enterprise Metals Farm-in and the Great Western Exploration Farm-in (announced subsequent to the end of the Quarter - see Corporate section below), provides an aggregate contiguous exploration area of 5,846km². This includes over 90km of strike extent in host VMS lithologies. Much of this stratigraphy is obscured beneath transported cover and requires systematic aircore (AC) drilling to test the bedrock geochemistry and identify prospective areas.

6.2.1 Springfield Joint Venture – 70% Sandfire

The Springfield JV Project comprise the Springfield, Halloween and Halloween West Projects, which abut Sandfire's DeGrussa-Doolgunna tenements. The projects are being explored under a Joint Venture agreement with Talisman Mining Limited (ASX: TLM) under which Sandfire has earned 70%. All exploration expenditure at the Talisman Projects is now being jointly funded by Sandfire and Talisman on a 70:30 basis.

Exploration programs planned or currently in progress in the Springfield Joint Venture area include:

- Diamond drilling targeting potential depth extensions to the Monty deposit;
- Ongoing down-hole Electromagnetic (DHEM) surveying of deep RC and DDH holes; and
- Continued systematic AC drilling over the Southern Volcanics.

The discovery of the high-grade Monty deposit bolsters the eastern Bryah Basin as a highly prospective exploration district with excellent potential for additional VMS discoveries.

Regional RC and AC Geochemistry Programme

Regional aircore drilling continued at the Springfield Project during the reporting period, with a total of 167 holes completed for an advance of 12,606m. Drilling was targeted solely in the South-Eastern Volcanics Prospect.

Regional RC drilling also continued, with five exploration drill holes and two diamond pre-collars completed for an aggregate advance of 2,424m. These holes were drilled within the Monty North East, Monty South and the Southern Volcanics Prospects, targeting areas where initial AC and RC drilling conducted in previous quarters had identified anomalous multi-element geochemistry. The locations of the drill holes are shown in Figure 6.

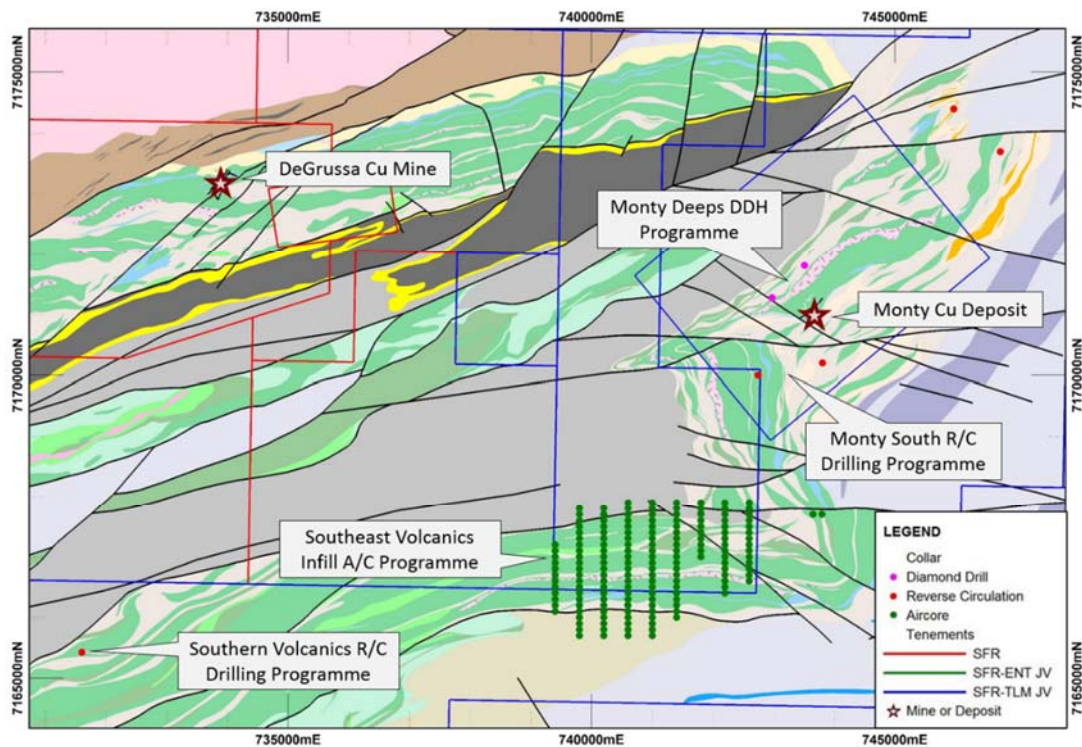


Figure 6: Completed drilling across the SFR-TLM Joint Venture tenements during the Quarter

Monty

A diamond drill rig arrived on site on 30 March to commence the Monty Deeps drill program, which will comprise three diamond holes with estimated depths of up to 1,400m. These holes are designed to test areas at depth along strike from the Monty orebody that have not been tested either directly by drilling or indirectly by DHEM surveys.

Drilling commenced subsequent to Quarter-end.

6.2.2 Doolgunna Project – 100% Sandfire

Regional Reverse Circulation drilling at the Doolgunna Project was focused on the Red Bore East Prospect, and was designed to test the C5 host stratigraphy along strike of the DeGrussa Mine, as well as to test the immediate footwall stratigraphy to the dolerite observed in previous drilling.

Two drill holes were completed for an advance of 896m. DGRC884 intersected dolerite and a 39m interval of chloritic siltstone and quartz-rich sandstone as part of the C5 host stratigraphy. Minor fine, disseminated pyrite was intersected over 2m in the sediment horizon.

Both holes intersected the extension of the C5 host stratigraphy at its interpreted locations with assay results currently awaited. DHEM surveying will also be conducted on both holes to identify any potential off-hole conductors.

Poor weather conditions have hindered access to the Homestead Prospect during the Quarter. Drilling at this prospect will continue in the coming Quarter.

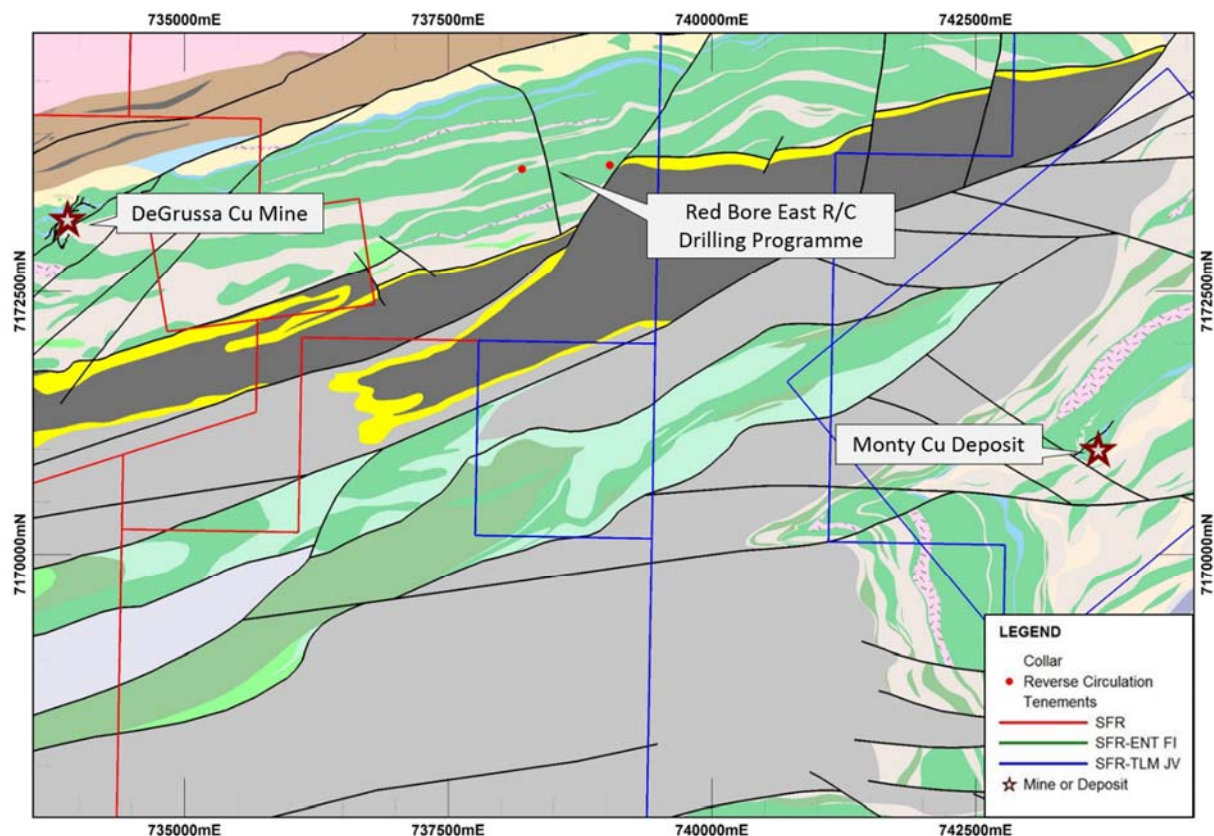


Figure 7: Completed drilling across the SFR Doolgunna tenements during the Quarter

6.2.3 Enterprise Project

Sandfire entered into a Farm-in Agreement with Enterprise Metals Limited (ASX: ENT) in October 2016 to earn up to a 75% interest in Enterprise's Doolgunna Project, which adjoins Sandfire's Doolgunna tenements to the south. The Enterprise tenements cover over 60km of strike of the southern boundary of the Bryah Basin and the northern part of the Yerrida Basin. The southern Bryah Basin contains the Narracoota/Karalundi Formations which host the DeGrussa and Monty copper-gold deposits. The Company considers that the Enterprise tenements offer the potential for new copper-gold discoveries.

Data acquisition and validation of the Enterprise Metals dataset commenced during the Quarter and continued throughout the reporting period. First stage drill planning and targeting was also completed, and aircore drilling commenced in April (subsequent to the end of the Quarter) along the southern margin of the Bryah Basin, north-east of the Doolgunna homestead.

The drilling program will comprise approximately 600 AC drill holes on a 400m x 100m spacing, and will cover 10 strike kilometres of the favourable volcano-sedimentary sequence interpreted to belong to the Narracoota/Karalundi Formations, which host the DeGrussa and Monty copper-gold deposits.

The program is designed to assist with geochemical targeting and detailed geological interpretation throughout the prospect area.

A further two 600m-deep drill holes are also planned, with one hole to further test the Vulcan West EM target area and one hole to test the Vulcan Regolith target (for details regarding these prospects, please refer to the Enterprise Metals announcements Vulcan West Priority Sulphide Target Confirmed By Infill EM, 10/11/15).

Planning has also been completed for an aerial electro-magnetic (AEM) survey along a section of the Karalundi Formation not previously covered by AEM. This survey is expected to commence in the June Quarter.

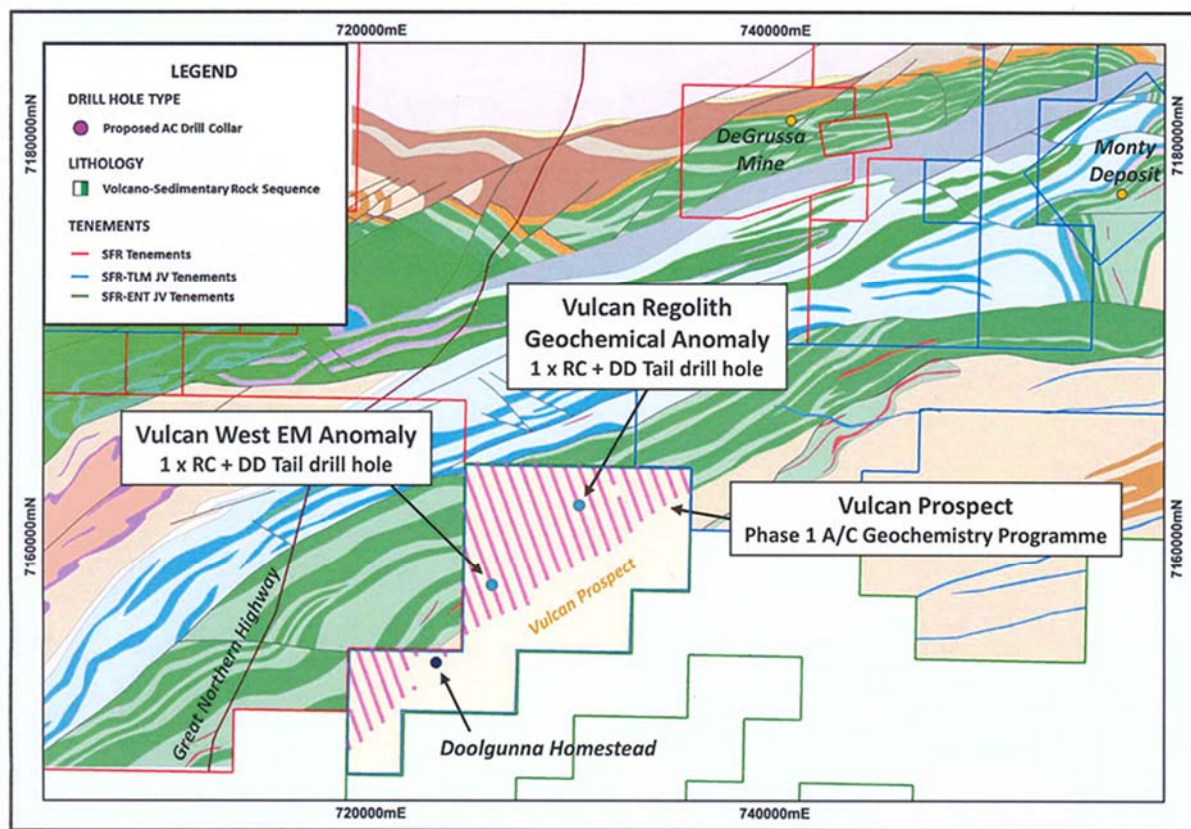


Figure 8: Proposed drilling at the Vulcan Prospect

6.2.4 Ned's Creek Project (including Thaduna)

The Ned's Creek Project comprises over 900km² of prospective geology and surrounds the historical Thaduna Project, which is located 40km east of DeGrussa and represents the largest copper resource in the Doolgunna-Bryah Basin Region outside of Sandfire's DeGrussa-Doolgunna Project.

Aircore drilling continued at the Ned's Creek project in the early part of the reporting period, targeting fault systems that exist in close proximity to known epigenetic copper mineralisation. Drilling was targeted at the Rooney's Prospect before high rainfall forced the program to be suspended.

A total of 36 drill holes were completed at Rooney's for a total advance of 2,066m. The geology intersected consisted of Thaduna Formation lithic wackes, siltstones and thin conglomerate beds. A number of the drill holes intersected faults with proximal carbon alteration and distal chlorite alteration. Of these, a number contained trace copper-bearing minerals (malachite and chrysocolla).

The drill programme was designed to test identified fault systems and understand the orientation and thickness of the structures, as well as their potential to host economic copper mineralisation.

Detailed interpretation is underway to understand the systems intersected in recent drilling, with further drilling to be conducted as weather conditions allow.

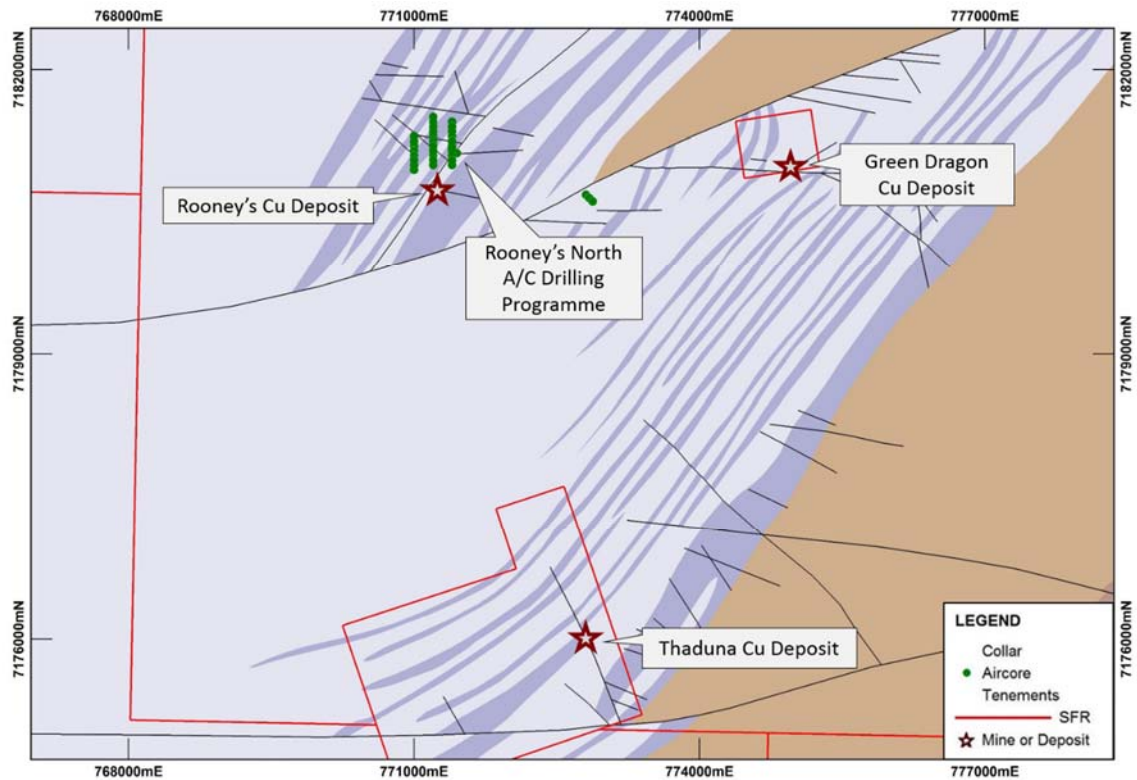


Figure 9: Completed drilling across the SFR Ned's Creek tenements during the Quarter

7.0 AUSTRALIAN EXPLORATION

Sandfire has a number of exploration joint ventures around Australia exploring for base and precious metals. The exploration programs are focused on prospective terranes with the potential for discovery of a significant new deposit that can be developed.

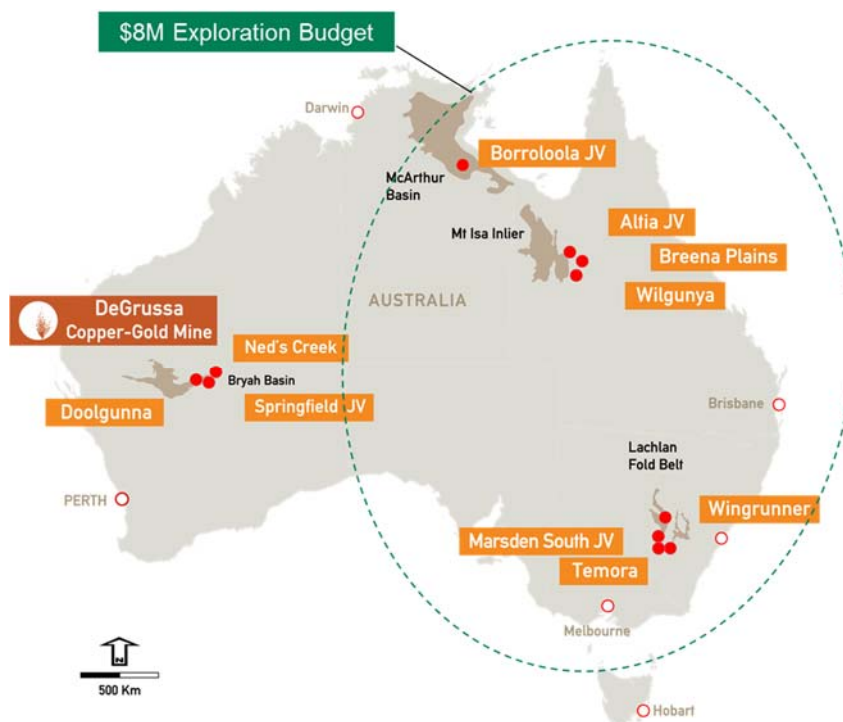


Figure 10: Sandfire's Eastern Australian Projects

7.1 New South Wales Projects

A number of 100%-owned project areas are held in the Lachlan Fold Belt of New South Wales which are prospective for porphyry copper-gold mineralisation as found at Northparkes (China Moly), Cadia (Newcrest) and Cowal (Evolution). A farm-in agreement to earn up to 80% is held with Gold Fields Australasia Pty Ltd on the Marsden South Project.

The Temora Project has been a significant focus throughout the Quarter with work also completed at the Wingrunner Project.

7.1.1 Temora Exploration (100% Sandfire)

Exploration at Temora has focused on discovery of a porphyry copper-gold deposit with targets drilled at the Gidginbung, MagH1, Horsetail, Rain Hill, Yiddah West, LR23 and Donnington prospects.

Aircore drilling, gravity and Induced Polarisation electrical (IP) surveys were completed across multiple targets within at Temora. These programs highlighted targets for follow-up diamond drilling which is currently underway at the Donnington prospect.

Very encouraging results for a new discovery have been made at Donnington, with substantial porphyry mineralisation intersected in the first diamond hole (TMMRD006) at the prospect (Figure 13).

The hole reported: 125m @ 0.3% copper and 0.5g/t gold from 287m downhole

with internal zones of: 44m @ 0.4% copper and 0.6g/t gold from 314m and
28m @ 0.4% copper and 0.6g/t gold from 364m

Table 3: Intercepts from the Donnington and nearby Punch prospects

Prospect	Hole Number	Easting (m)	Northing (m)	Total Depth (m)	Azimuth	Dip	Depth from (m)	Interval (m)	Cu (%)	Au (g/t)
Donnington	TMMRD006	534604	6218741	460	090	-60	287	125	0.32	0.46
							314	44	0.41	0.62
							364	28	0.39	0.61
Punch	MHACD208	534533	6219084	250	0	-90	64	15	0.11	0.32

Reported at >0.3% CuEq (Cu x 0.55 Au), including at >0.5% CuEq with up to 3m internal dilution.
Holes at 236m RL in MGA94 Zone 55.
Downhole intervals are not true widths.

The Donnington Prospect is located in Late Ordovician volcanics on the eastern margin of the Rain Hill monzodiorite batholith (Figure 11). Alteration is associated with the venting of hydrothermal fluids along this batholith margin. The mineralisation is associated with chlorite-sericite-magnetite altered diorites and andesitic volcanics. The prospect was highlighted by geochemical, geophysical and clay alteration temperature vectoring studies as a large untested alteration system.

The strongest mineralisation, from 314m to 392m down-hole, is characterised by quartz-magnetite-pyrite-chalcopyrite veined stockwork. The original high temperature potassic alteration appears to have been overprinted by a later low temperature sericitic dominated phyllic alteration event.

There has been no previous deep drilling at this prospect and the mineralisation is open both up- and down-dip as well as along strike both north and south of the hole. Mineralisation is associated with a weak magnetic anomaly and a number of further weak magnetic anomalies with associated geochemistry require testing. A previous sole diamond hole (MHACD208) drilled 400m to the north at the historical Punch prospect magnetic anomaly intersected weak mineralisation associated with magnetite, indicating the excellent potential along strike and at depth of the latest drilling. The Mandamah deposit lies over 1km to the south. The prospect is covered by variable recent cover and weathering up to 80m in depth, masking the system.

Follow-up drilling has commenced and will aim to define the extents of the Donnington mineralisation.

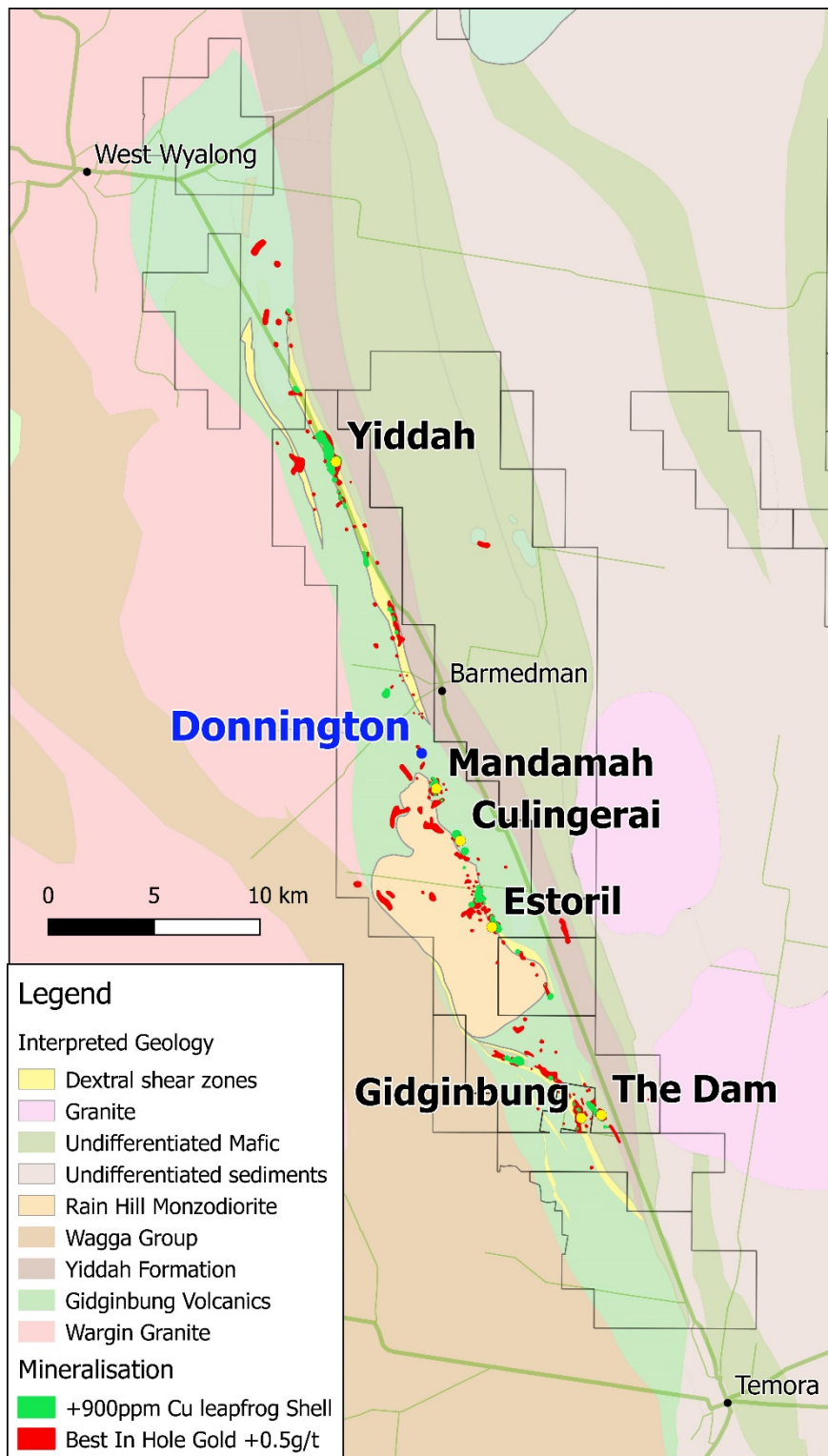


Figure 11: Temora Project in NSW showing highly prospective areas and targets including Donnington

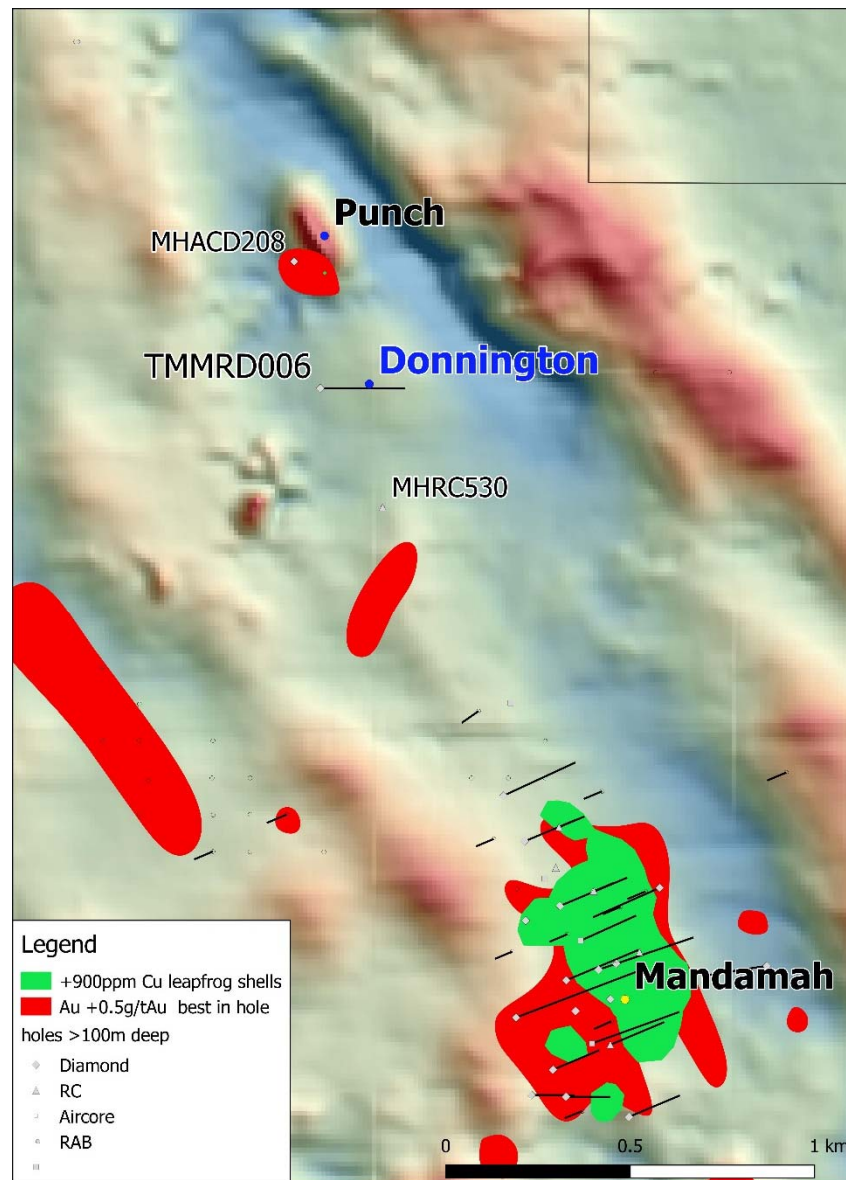


Figure 12: Location of TMMRD006 at the Donnington prospect on regional aeromagnetic, with the plan showing holes greater than 100m depth

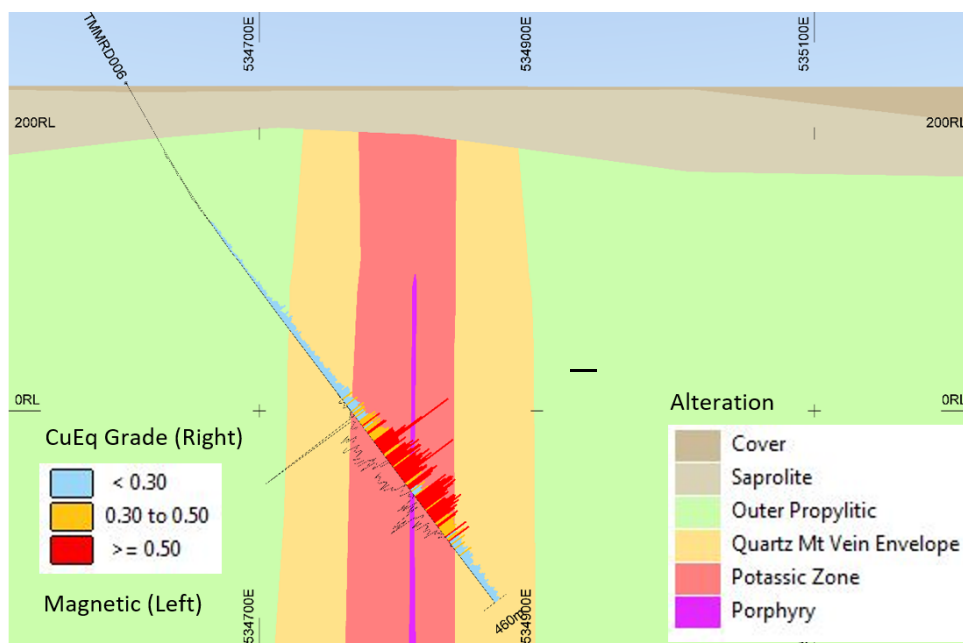


Figure 13: Section 6218740N of TMMRD006 at the Donnington prospect, with interpreted alteration

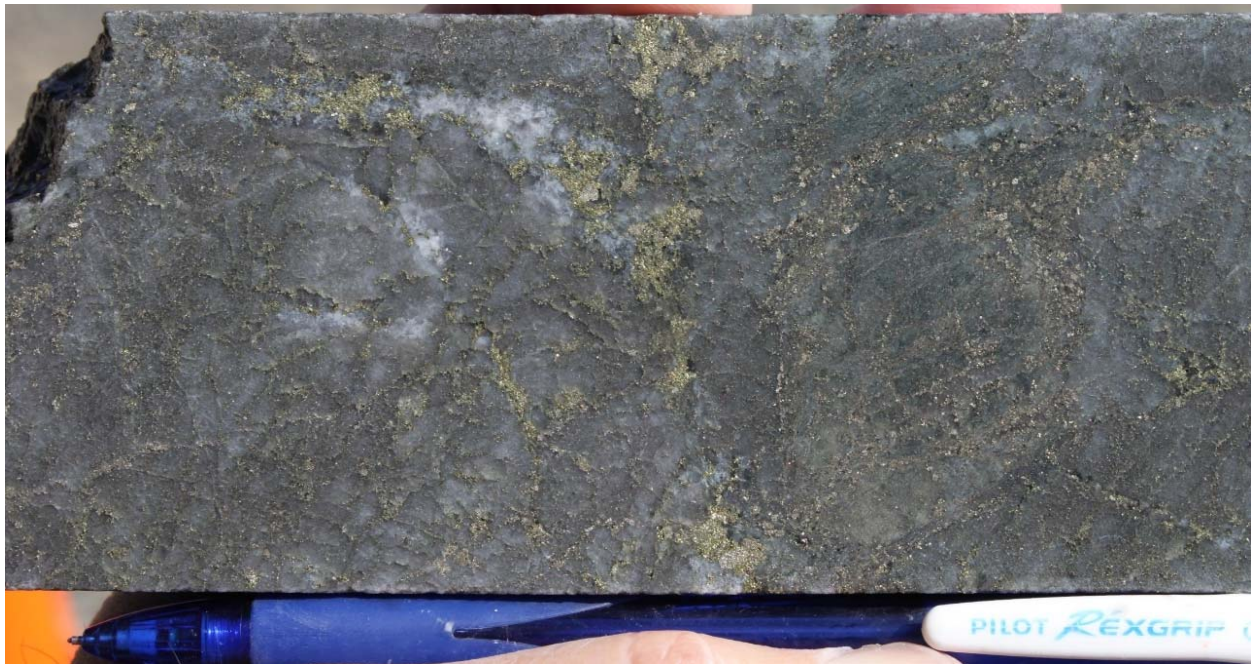


Figure 14: Core photo at 347m down-hole showing the mineralisation style intersected in TMMRD006

7.1.2 Wingrunner Exploration

Diamond drill testing of the chargeable anomaly at the SE Bogan prospect intersected primary pyrite within sediments, explaining the anomaly which is not related to mineralisation. Drill testing of a magnetic apophyse at the same prospect identified weak potentially porphyry-style alteration. Assay results are awaited.

7.1.3 Wellington North

Negotiations continue with land-holders to gain access to the Wellington North Project to carry out a program of aircore drilling.

7.2 Borroloola Project

The Borroloola Project is located north of the McArthur River Mine (Xstrata), and is prospective for base metals and sedimentary manganese. Sandfire has signed two farm-out 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 Borroloola West JV covering the western portion is under an agreement with Pacifico Minerals Ltd, which has now earned a 51% interest in the Project and Sandfire is a contributing 49% JV partner.

Conductivity testing of mineralisation identified at the Coppermine Creek (copper-cobalt-silver) prospect within the Borroloola West JV has confirmed the potential for ground EM to delineate this body.

A ground EM survey is planned to commence in the dry season to identify targets for further drilling. Target delineation work continues at the Mariner (zinc-lead) and Berjaya (zinc-lead) prospects to allow for the planning of follow up drilling.

Modelling of the recent drilling at Rosie Creek in the Batten Trough JV, by MMG has identified a Zn mineralised zone in the middle of the Barney Creek formation. Both the McArthur River and Teena deposits are reported as occurring at the base of the Barney Creek.

This newly identified zone will be targeted with further drilling by MMG in the 2017 field season.

7.3 Queensland Projects

A number of projects are held in the eastern succession of the Mount Isa region south and east of Cloncurry in northwest Queensland which are prospective for Broken Hill type (BHT) lead-zinc-silver deposits such as the Cannington deposit (South 32) and the Ernest Henry iron oxide-copper-gold (IOCG) deposits (Xstrata). A Joint Venture is held over the Altia Project with Minotaur Exploration Ltd (ASX: MEP) with the right to earn 80%.

The exploration focus for the quarter has been on defining the best targets for further work in the coming field season through data compilations and external reviews. This work has confirmed the prospectivity of the Breena Plains and Cannington West Projects, for Broken Hill type lead-zinc-silver mineralisation, while identifying targets for IOCG style copper-gold mineralisation at both the Altia and Kennedy projects.

Work in the coming quarter will focus on refining these targets and preparing for the coming field season with a concerted community engagement program.

8.0 CORPORATE

8.1 Farm-in Agreement with Great Western Exploration

Subsequent to the end of the Quarter, Sandfire signed a Farm-In Agreement with Great Western Exploration Limited (ASX: GTE) to earn an initial 70% interest in GTE's Northern Yerrida tenements, located 25km south of the DeGrussa mining operation. Sandfire has the right to farm into 11 of GTE's Exploration Licenses in the Northern Yerrida basin, Western Australia, covering a total area of 1,560km².

The key commercial terms are as follows:

Minimum Commitment

- a) Sandfire will pay the equivalent of \$500,000 in Sandfire shares based on the volume weighted average price ("VWAP") 5 trading days before the Farm-In Agreement goes unconditional;
- b) Sandfire must incur a minimum of \$1.7 million in exploration expenditure over 3 years. If Sandfire wishes to withdraw prior to meeting the minimum expenditure it is obligated to pay a cash consideration equal to the minimum expenditure amount less the actual expenditure made on the tenements.

First Earn-In – 70%

Sandfire to sole fund exploration expenditure on the tenements to define a mineral resource of 50,000 tonnes of contained copper or copper equivalent under the JORC 2012 code to earn 70% interest in the tenements.

Second Earn-In – 80%

Sandfire can elect to earn a further 10% by sole funding the completion of a Feasibility Study.

Pre-Emptive Rights

Both companies have pre-emptive rights to the other party's interest where an interest has been offered for sale to a third party.

Area of Influence

An area of influence has been defined whereby any tenements acquired by either company inside of this area must be offered for inclusion in the Farm-In.

Conditions Precedent

The Agreement is conditional upon:

- a) Any consent or approval required under the Mining Act.
- b) Sandfire completing a due diligence review in respect of the tenements within 30 days of the date of the Agreement executed on 11th April 2017.

8.2 Interim Dividend

Sandfire announced an interim fully franked dividend of 5 cents per share for the 2017 Financial Year. The record date to determine entitlements was 7 March 2017, and dividend payments commenced on 21 March 2017 via electronic funds transfer.

8.3 DeGrussa Finance Facility

During the Quarter, Sandfire paid the \$50 million outstanding balance in its Revolver Facility, nearly 12 months ahead of the scheduled repayment date. This means that the original \$380 million DeGrussa Finance Facility which was secured in 2011 to fund the DeGrussa Copper-Gold Project, has now been fully repaid.

The Company retains the undrawn \$85 million Revolver and \$25 million working capital facilities with ANZ.

8.4 Cash position

Company cash on hand as at 31 March 2017 totalled \$86 million. Group cash on hand as at 31 March 2017 totalled \$90 million.

8.5 Investor Call and Webcast

A teleconference on the Quarterly results will be held for the investment community on 27 April 2017 commencing at 10.00am (AWST) / 12.00pm (AEST). Investors, brokers, analysts and media can join the teleconference by dialling the following numbers:



Within Australia (Toll Free):	1 800 558 698
Alternate Australia Toll Free:	1 800 809 971
International:	+61-2 9007 3187
Conference ID:	164234

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

A live webcast of the teleconference and synchronised slide presentation will also be available via the BRR Media service by clicking [here](#).

A recording of the webcast will be available at the same link shortly following the conclusion of the conference call.

ENDS

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Mobile: +61 419 929 046 (Nicholas Read)

Competent Person's Statement – Exploration Results Doolgunna

The information in this report that relates to Exploration Results at Doolgunna 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.

Competent Person's Statement – Exploration Results Temora

The information in this report that relates to Exploration Results at Temora is based on information compiled by Mr Bruce Hooper who is a Registered Professional Geoscientist (RPGeo) of The Australian Institute of Geoscientists. Mr Hooper 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 Hooper consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Person's Statement – Mineral Resources

The information in this report that relates to Mineral Resources 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 NL and has sufficient experience that is relevant to the style of mineralisation 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 – Ore Reserves

The information in this report that relates to Ore Reserves is based on information compiled by Mr Neil Hastings who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hastings is a permanent employee of Sandfire Resources NL and has sufficient experience that is relevant to the style of mineralisation 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 Hastings 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.

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/cm³ to 4.9g/cm³, with an average density reading of 3.7g/cm³. Geotechnical and structural readings recorded from diamond drilling include recovery, RQD, structure type, dip, dip direction, alpha 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.

Regional drilling has been completed using a combination of RC and AC drilling. A majority of the drilling is preliminary in nature and starts with 800m x 100m AC drilling where the geology and geochemistry is revaluated to determine the requirement for follow 400m x 100m drilling. If significant anomalism is identified in the AC drilling then follow up RC drilling will be conducted to determine the opportunity for delineating potentially economic mineralisation. Whilst the main aim of the exploration at Doolgunna is to identify additional VHMS mineralisation in some areas of regional land holding it is currently interpreted that there is shear zones located on the contact between dolerite and sediments hosting auriferous quartz vein stockworks with some coincident copper.

AC and RC regional samples are prepared at Ultra Trace in Perth with the original samples being dried at 80° for up to 24 hours and weighed, and 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 results file. Pulverising is completed using LM5 mill to 90% passing 75µm. Assaying is completed using a 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. 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 are then determined by ICPOES or ICPMS finish. Samples are analysed for Au, Pd and Pt by firing a 40g of sample with ICP AES/MS finish.

JORC 2012 TABLE 1 – EXPLORATION RESULTS TEMORA

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	- Results are from half-core sampling of NQ3 or HQ3 core diamond drilling (DD). - Reverse Circulation (RC) drill samples are rifle split on a 1 metre basis to retain an approximate 3-4kg sample. - No geophysical or handheld XRF results are reported.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	- Sampling is guided by Sandfire protocols as per industry standard. - Sampling techniques undertaken by previous owners include half core sampling of DD core; RC samples collected by riffle splitter for single metre samples or sampling spear for composite samples; Aircore (AC) samples collected using riffles splitters or a sampling spear. - Sampling was undertaken by the then current owner's protocols and QAQC procedures as per the prevailing industry standards.
	- 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	- Sample size reduction is through a jaw crusher and pulverised via LM5 to nominal 85% passing -75µm using wet sieving technique. - Samples are assayed using Mixed 4 Acid Digest (MAD) 0.3g charge and MAD Hotbox 0.15g charge methods with ICPOES or ICPMS. - Fire Assay is completed by firing 40g portion of the sample with ICPMS finish.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	- DD is completed using NQ3 and HQ3 size coring equipment. With a Mud Rotary (MR), AC, RC or combination pre collar to a maximum depth of 200m. AC drilling is completed to blade refusal, usually ~70m. RC drilling is conducted with a 140mm diameter face sampling hammer. - All drill collars are located using a GPS receiver. - All core where possible is oriented using a gyroscope based orientation tool. - Downhole surveying is undertaken using a magnetic single shot or multi shot survey instrument.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	DD core recovery is logged and captured into the database. Core recoveries are measured by drillers for every drill run. The core length recovered is physically measured for each run and recorded and used to calculate the core recovery as a percentage core recovered.

Criteria	JORC Code Explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	- Appropriate measures are taken to maximise sample recovery and ensure the representative nature of the samples. This includes diamond core being reconstructed into continuous intervals on angle iron racks for orientation, metre marking and reconciled against core block markers. - In broken ground core is transferred from the HQ3 splits to PVC pipe then wrapped in plastic to maintain sample integrity. - Samples are routinely captured into the central secured database.
	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.	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.	Geological logging is completed for all holes and representative across the orebody. The lithology, alteration and structural characteristics of core are logged directly to a digital format following procedures and using Sandfire geologic codes. Data is imported into Sandfire's central database after validation in LogChief™.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	- Logging is both qualitative and quantitative depending on the fields being logged. - All core is photographed.
	The total length and percentage of the relevant intersections logged.	All holes are fully logged.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	- Core orientations are completed where possible and all are marked prior to sampling. - Half core samples are produced using an Almonte Core Saw.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC samples are riffle split, historical and AC samples were riffle split or speared when dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	All samples are sorted, and weighed. Samples are then crushed to a nominal -4 - 8 mm. Pulverising is completed using LM5 mill to 85% passing 75µm using wet sieving technique.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	1:20 grind quality checks are completed for 85% passing 75µm criteria to ensure representativeness of sub-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.	- Sampling is carried out in accordance with Sandfire protocols as per industry best practice. - Quarter core field duplicates are taken every 20 samples.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered appropriate for the Porphyry Copper-Gold and Epithermal mineralisation types.
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.	Samples are assayed using a Mixed 4 Acid Digest (MAD) 0.25g charge 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 Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr.

Criteria	JORC Code Explanation	Commentary
		- Samples are analysed for Au by firing a 30g sample with an ICP AES/MS finish. This is a classical FA process and results in total separation of Au in the samples. - The analytical methods are considered appropriate for this mineralisation style. - Historical assays reported were completed at ALS Orange, using their technique IC581 for As, Bi, Cu, Fe, Mo, Ni, Pb and Zn; and PM209 for Au.
	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.	No geophysical tools are used in the analysis.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Sandfire's 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.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have been verified by alternative company personnel.
	The use of twinned holes.	None of the drill holes in this report are twinned.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	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.
	Discuss any adjustment to assay data.	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.	- All drill collars are located using a GPS system within +/-5m of horizontal accuracy (X, Y) and 20m vertical (Z). - Downhole survey completed by downhole magnetic single shot or multi shot methods at regular intervals.
	Specification of the grid system used.	Coordinate and azimuth are reported in MGA 94 Zone 55.
	Quality and adequacy of topographic control.	Topographic control was established from GPS readings.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	TMMRD006 is the first deeper drill hole to intersect this mineralisation.
	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.	No resource classification is applied to these results given the early stage of exploration.
	Whether sample compositing has been applied.	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.	Drill holes were designed to intersect the geological features at a high angle. The drill holes may not necessarily be perpendicular to the orientation on the intersected mineralisation.

Criteria	JORC Code Explanation	Commentary
	<i>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.</i>	No significant orientation based sampling bias is known at this time. The hole may not necessarily be perpendicular to the orientation of the intersected mineralisation. All reported intervals are downhole intervals not true widths.
Sample security	<i>The measures taken to ensure sample security.</i>	Appropriate security measures are taken to dispatch samples to the laboratory. Chain of custody of samples is being managed by Sandfire. Samples are stored onsite and transported to laboratory by a licence transport company in sealed bulk bags. The laboratory receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audits or reviews of the sampling techniques and data have been completed.

Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<i>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.</i>	The Temora project encompasses EL5864, EL6845, EL8397, EL8292 and EL8025 which are wholly owned by Sandfire Resources NL, with no known third party encumbrances at the Donnington Prospect.
	<i>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.</i>	All tenements are current and in good standing.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	- Sandfire have completed all recent exploration on the Temora Project. - Only AC drilling has previously been completed at the Donnington Prospect. - Exploration work completed prior to Sandfire's purchase included AC, RC and DD drilling throughout the project area and defined resources under previous JORC codes. - Significant geophysical surveys including IP, Magnetic, EM and Gravity have been completed throughout the history of the tenure by multiple parties.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	- The Temora Project lies within the Ordovician Macquarie Island Arc, which is historically highly prospective for Porphyry copper-gold deposits and Epithermal gold. - The principal exploration targets at the Temora project is a Porphyry copper gold system within the Macquarie arc in NSW.
Drill hole information	<i>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:</i> <i>easting and northing of the drill hole collar;</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres);</i> <i>of the drill hole collar;</i>	- Refer to Table 1 of this accompanying document. - All co-ordinates are MGA 94 Zone 55 - The hole collar RL are 236m - All intercepts are reported as downhole lengths

Criteria	JORC Code Explanation	Commentary
	- dip and azimuth of the hole; - down hole length and interception depth; and - 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.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	- Significant intersections are based on standard intercept of greater than 0.3% Cu equivalent (CuEq) and a high grade intercept of greater than 0.5% CuEq. Intercepts may include up to a maximum of 3.0m of consecutive dilution, with a minimum composite grade of 0.3% Cu - CuEq is based on the formula $CuEq = Cu \% + 0.55 * Au \text{ g/t}$. The underlying values for this are; - A copper price of A\$3.53/lb and a Cu recovery of 90% - A gold price of A\$1,600/Oz and a recovery of 0.75% - The formula is $CuEq = Cu \% + \frac{Au \text{ price}/31.1035 * Au \text{ recovery}}{Cu \text{ price} * 22.04} * Au \text{ g/t}$
	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.	- Reported intersections are based on a regular sample interval of 1m in regular drilling subject to location of geological boundaries. - Minimum and maximum sample intervals used for intersection calculation are 0.3m and 1.2m respectively.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	- No metal equivalents are reported in the intersection results. - Where core loss occurs; the average length-weighted grade of the two adjacent samples are attributed to the interval for the purpose of calculating the intersection. The maximum interval of missing core which can be incorporated with the reported intersection is 1m.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Downhole intercepts of mineralisation reported in this release are from a drill hole orientated at a high angle to the predicted mineralisation dip. The drill hole may not necessarily be perpendicular to the mineralised zone. All widths reported are down hole intervals.
	If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.	The geometry of the mineralisation, relative to the hole, is unknown at this stage.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	All intersections reported in this release are down hole intervals. True widths are not known.
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 are included within the body of the accompanying document.

Criteria	JORC Code Explanation	Commentary
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.	- An association of mineralisation and higher magnetic susceptibility is noted in the reported drill holes that may be important for exploration targets - Further data collection will be reviewed and reported when considered material.
Further work	- The nature and scale of planned further work (e.g. 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.	Further work has commenced to define the extent of the discovery. The initial phase is a 100m step out north and south of TMMRCD006. Should this be successful further step outs will be completed to identify the extent of the mineralisation.