



**SANDFIRE RESOURCES NL**

A QUALITY COPPER-GOLD COMPANY ASX Code - SFR

27 April 2018

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

**LODGEMENT OF MARCH 2018 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 2018 Quarterly Activities Report
2. March 2018 Quarterly Update Powerpoint Presentation

In addition, a teleconference and live webcast on the March 2018 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: Friday, 27 April 2018

Access this webcast at: <http://webcasting.brrmedia.com/broadcast/5aaaaef8271b41638bdc7495>  
<http://www.sandfire.com.au>

Yours sincerely,

**Matt Fitzgerald**  
**Chief Financial Officer**  
**and Company Secretary**



## QUARTERLY REPORT

### For the period ended 31 March 2018

#### Highlights

#### Production & Operations

Contained metal production	September 2017 Quarter	December 2017 Quarter	March 2018 Quarter	FY2018 Guidance
<b>Copper (t)</b>	15,258	16,263	<b>15,531</b>	63,000 – 66,000
<b>Gold (oz)</b>	10,669	8,130	<b>10,926</b>	38,000 – 40,000
<b>C1 cost (US\$/lb)</b>	0.95	1.02	<b>0.97</b>	0.95 – 1.00

- Strong mine production and milling rates maintained for the Quarter.
- Minor plant maintenance shut-downs completed in February and March. Copper recovery slightly below forecast towards the end of the Quarter due to treatment of lower grade stopes. Installation of additional concentrate thickener and filter underway with commissioning on track for Q4 FY2018.
- FY2018 guidance: 63-66kt Cu (maintained); 38-40koz Au (increased); C1 US\$0.95-1.00 (reduced).
- Updated DeGrussa Mine Plan, Mineral Resource and Ore Reserve (*refer to separate ASX Announcement lodged today*) including conversion of previously unconverted Underground Measured and Indicated Mineral Resources to Ore Reserves – underpinning mine life through until CY2022.

#### Development Projects

- Monty development works progressing on schedule with surface infrastructure completed and Monty decline and lateral development advanced to 1,322m at Quarter-end, ahead of target 1,276m. First ore from Monty is on track to be delivered in Q2 FY2019.
- Environmental Impact Statement (“EIS”) progressing for the 78%-owned Black Butte Copper Project in central Montana, USA. Tintina Resources completes name change to Sandfire Resources America Inc. New Project Director Rob Scargill appointed to drive the Black Butte project development.

#### Exploration

- 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 6,276km<sup>2</sup>.
- Major airborne VTEM™ Max survey completed at the new farm-in project, Morck’s Well East, targeting potential base metal deposits similar to DeGrussa and Monty. First-pass analysis of the survey data has identified several VTEM anomalies across the survey area.
- Strong porphyry copper-gold mineralisation encountered in the first of two holes drilled to understand the structure and upside potential in the resource at the Mandamah deposit, at the Temora Copper Project, NSW. Intercepts included 165m at 0.51% Cu and 0.37g/t Au from 168m including 56m at 0.8% Cu and 0.54g/t Au from 218m.

#### Corporate

- Farm-in agreements secured with Auris Minerals Limited over the Morck’s Well East Project and the Doolgunna Project in the Bryah Basin.
- Group cash on hand as at 31 March 2018: \$188 million.

## 1.0 SAFETY PERFORMANCE

The Total Recordable Injury Frequency Rate (TRIFR) for the Sandfire Group at the end of March was 6.4 (December 2017 Quarter: 4.6). Recordable injuries include those that result in any days away from work (Lost Time Injuries), those where an employee or contractor cannot perform all or any part of their normal shift (Restricted Duty Injuries), as well as any injury that requires services that only a medical practitioner can provide (Medical Treatment Injuries).

Safety system developments continue to focus on the prevention of incidents and principal hazard management, with the implementation of new software to assist in managing and improving the safety culture of both employees and contractors.

## 2.0 OPERATIONS OVERVIEW

Copper production for the March Quarter was 15,531 tonnes (December Quarter: 16,263 tonnes). C1 cash operating costs for the Quarter were US\$0.97/lb (December Quarter: US\$1.02/lb).

Mine production for the Quarter was 409,457 tonnes grading 4.2% Cu. During the Quarter, production was sourced from all lenses at DeGrussa.

A total of 398,985 tonnes of ore grading 4.3% Cu was milled for the March Quarter, with copper recovery averaging 91.0%.

## 3.0 MINING & PRODUCTION

### 3.1 Overview

March 2018 Quarter – Production Statistics		Tonnes	Grade (% Cu)	Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)
Concentrator	Mined	409,457	4.2	1.8	17,111	23,380
	Milled	398,985	4.3	1.9	17,069	24,496
	<b>Production</b>	<b>64,051</b>	<b>24.2</b>	<b>5.3</b>	<b>15,531</b>	<b>10,926</b>

**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.

### 3.3 Processing

Mill throughput for the Quarter was as planned with minor planned maintenance shut-downs completed in February and March. Copper recovery was slightly below forecast towards the end of the Quarter due to treatment of lower grade stopes and some minor operational issues following the shutdowns. This should return to average levels through the remainder of FY2018.

### 3.4 Projects

The solar farm has been actively producing into the DeGrussa electrical network, providing on average 20.5% of the overall power usage for the March Quarter.

### 3.5 Guidance – FY2018

Targeted copper production for FY2018 remains unchanged with production expected to be within the range of 63-66,000 tonnes of contained copper metal. Guidance for gold production has been increased to within the range of 38-40,000 ounces.

Guidance for headline C1 cash operating costs has been reduced to within the range of US\$0.95-1.00/lb, reflecting the improved cost performance of the operation and higher gold production and price (impacting by-product credits).

## 4.0 SALES AND MARKETING

### 4.1 Copper Concentrate Shipments

A total of 62,666 dry metric tonnes of concentrate containing 15,180 tonnes of copper (14,532 tonnes payable) and 9,922 ounces of gold (9,244 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

Further strong progress was achieved with the development of the new satellite Monty Copper-Gold Project during the Quarter, with site infrastructure works nearing completion and underground development advancing ahead of schedule.

By Quarter-end, completed infrastructure items included the bulk earthworks and civils work around the site, the haulage road from DeGrussa and the fully-commissioned permanent power stations (see Figure 1).



**Figure 1: Aerial view of the Monty Project development showing completed infrastructure at Quarter-end.**

Other development and construction projects were on schedule at Quarter-end, including: achieving practical completion of the site office buildings, waste-water and water treatment plants, fuel storage facility, minor components to the electrical reticulation, ore haulage contracts and installation of permanent underground ventilation.

The underground development has also made excellent progress with the underground mining contractor, Byrncut Australia Pty Ltd, remaining ahead of the Feasibility Study Plan.

By Quarter-end, the underground decline had advanced to 664 metres, which was ahead of the schedule in the Feasibility Study of 711 metres.

Total development advance (including the decline) was 1,322 metres, compared to the Feasibility Study budget of 1,276 metres. This includes development of the ventilation shaft, which has been sunk to a depth of approximately 38 metres.





Figure 2: Aerial drone shot of the surface infrastructure at the new Monty copper-gold mine, showing the new power station (foreground), office and services infrastructure and the box-cut (top).



Figure 3: Underground ventilation pumping station, Monty underground mine.

## 5.2 DeGrussa Oxide Copper Project

The initial column test work set up in the previous Quarter has shown encouraging results to support further ongoing work focused on the use of glycine in the processing route. These tests were devised to reproduce a heap leach environment.

During the Quarter, the test work program on the oxide stockpiles has been expanded utilising samples taken from a drilling program of the oxide stockpiles. This phase of work has had 15 samples fully characterised by assay and sequential copper and 33 new columns produced and under agitation.

Bottle roll test work on two samples from the Enigma deposit also proved encouraging, allowing for planning to be undertaken on a small drilling program and further glycine test work for the next Quarter.

Planning is in progress to commence ore sorting test work at DeGrussa during the next Quarter to investigate the capability of pre-concentration of the oxide stockpiles to reduce operating and capital costs in a heap leach environment.

### **5.3 Black Butte Copper Project, USA (Sandfire: 78%)**

*Sandfire holds a 78% interest, via North American-listed company Sandfire Resources America Inc. (formerly Tintina Resources Inc.) (SFR.V: SFR) in the premier, high-grade Black Butte Copper Project, located in central Montana in the United States. The project is being permitted by Tintina Montana Inc., a 100%-owned subsidiary of Sandfire Resources America Inc and 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.*

Following receipt of the Draft Operating Permit for the Black Butte Copper Project last September, an independent third party contractor (Environmental Resources Management) has been appointed to produce an Environmental Impact Statement ("EIS"). The Scoping Period for the EIS concluded on 16 November 2017, clearing the way for the EIS to proceed.

The current tentative schedule anticipates issuance of a draft EIS from the Montana Department of Environmental Quality ("MT DEQ") in mid-2018, followed by a public comment period, and a Final EIS and Record of Decision before the end of CY2018.

This will allow construction and development of the underground mine to commence on private ranch land in Meagher County.

In addition to the EIS, Tintina is required to obtain a number of ancillary permits which will be incorporated in to the Final EIS and Record of Decision. To date, the Company has received a 301 Permit for stream crossings from the Meagher County Conservation District, a 318 and 401 permit, and a Storm Water Pollution Plan Prevention permits from the MT DEQ.

A 404 wetlands permit, the only federal permit required for the project, was received from the United States Army Corp of Engineers. The 404 permit was issued following consultation with four Montana based tribal organisations which concluded that the project will have no adverse effects on potential cultural resources located within the project area.

The proposed underground mine at Black Butte is designed to provide economic opportunity to Central Montana while fully protecting the Smith River Watershed.

A 17-hole 2,249 metre metallurgical drilling program was completed in April. The program was designed to produce representative core samples for metallurgical testing which will be undertaken at Base Metal Laboratories in BC, Canada.

## 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 during the March Quarter included:

- Completion of a major AC drilling program comprising 126 holes for 12,821m, representing a continuation of the in-fill AC drilling targeted at prospective mafic-sedimentary horizons within the Ruby Well-White Well area. This program was designed to aid geological interpretation and provide quality geochemical coverage of the interpreted Karalundi Formation, which hosts both the DeGrussa and Monty copper-gold deposits.
- RC drilling (five holes for 1,287m) within the Ruby Well and White Well prospect areas to test a number of anomalies identified by a previous aeromagnetic survey completed in 2017.
- Diamond drilling (two holes) to test the prospective stratigraphy through the Homestead and Vulcan West prospect areas.
- Reverse Circulation drilling to follow-up on copper anomalism associated with a previous sulphide intercept in the Jenkins prospect area within the Doolgunna Project.
- AC drilling comprising 72 holes for 4,324m targeting the narrow sediment packages in the Homer prospect area and to in-fill previous AC drilling within the Southern Volcanics area, both of which form part of the Springfield Joint Venture with Talisman Mining.
- Completion of a VTEM MAX survey over the Morck's Well tenements, part of the new farm-in agreement with Auris Minerals (see below).
- UTS Geophysics were engaged to complete a VTEM MAX survey over the Yerrida and Bryah Basin tenements, with the survey expected to commence in Q2 CY 2018.

The aggregate exploration metres drilled on Sandfire's wholly-owned and JV tenements during the March 2018 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%)	-	3,240	5,785	2,348	11,373
Ned's Creek (SFR 100%)	-	-	-	-	-
Springfield JV (SFR 70%)	6,148	-	-	2,884	9,032
Enterprise JV (Earn-in)	34,953	2,560	-	1,004	38,517
<b>TOTAL Q3FY2018</b>	<b>41,101</b>	<b>5,800</b>	<b>5,785</b>	<b>6,236</b>	<b>58,922</b>

\* Includes 1,034m of Environmental and Metallurgical Drilling.

### 6.2 Greater Doolgunna

*The Greater Doolgunna Project, which includes the Talisman Joint Venture, the Ned's Creek Project, the Enterprise Metals Farm-in, the Great Western Exploration Farm-in and the new Morck's Well East and Auris Minerals farm-ins secured during the Quarter, provides an aggregate contiguous exploration area of 6,276km<sup>2</sup>. 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 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.*

Diamond, RC and AC drilling continued at the Enterprise Project throughout the March Quarter.



Aircore drilling was conducted to in-fill the prospective mafic-sedimentary horizons within the White Well – Ruby Well area. This is designed to assist geological interpretation and provide quality bottom-of-hole and saprolite dispersion geochemistry over the interpreted Karalundi Formation within the Enterprise Farm-In tenement block.

Five RC drill holes were completed within the Ruby Well and White Well prospect areas, and were drilled as part of a programme to test a number of low-order anomalies identified in the AEM survey completed by NRG in 2017.

Two diamond drill holes were completed and another was ongoing at Quarter-end to test the prospective stratigraphy along the Homestead and Vulcan West trend. An aggregate of 2,559m were drilled in the period, with no significant mineralisation observed.

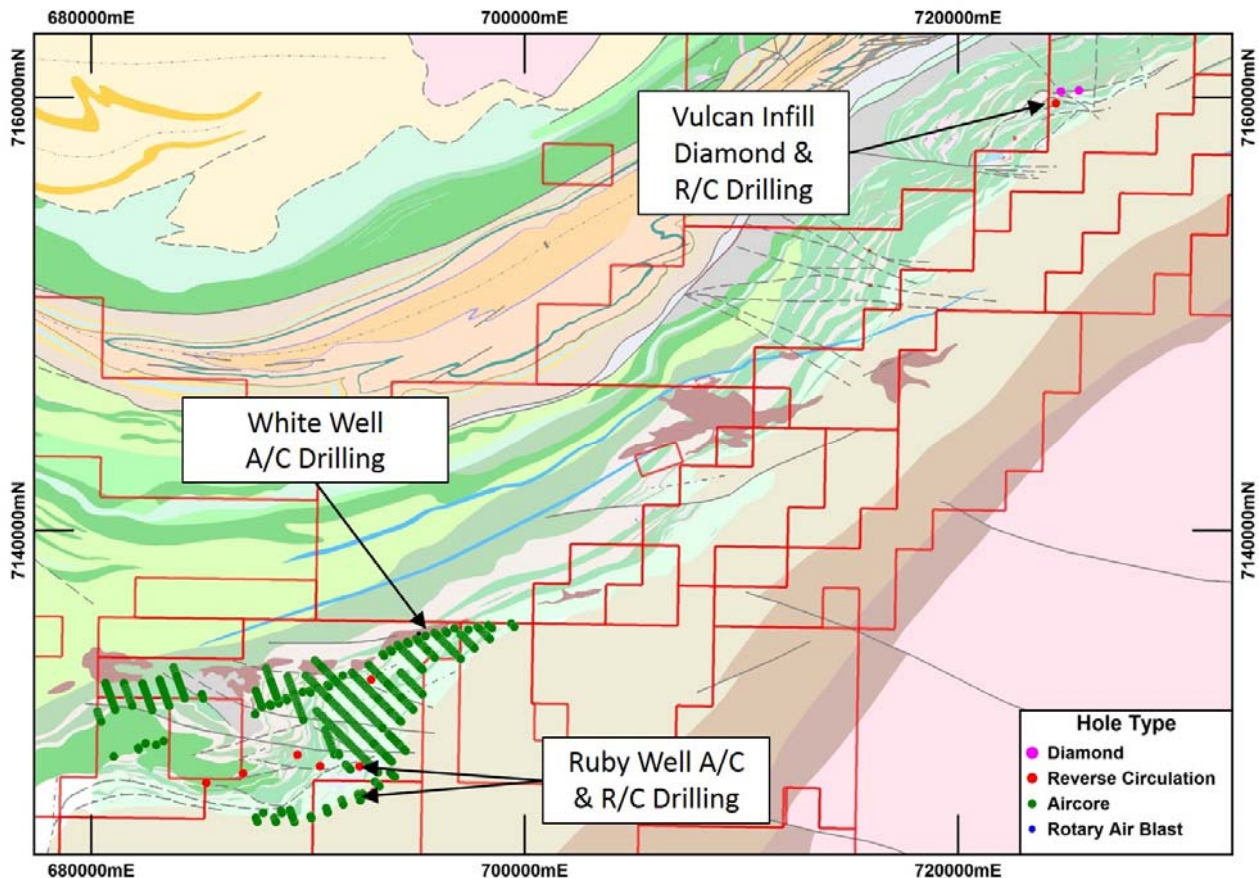


Figure 4: Completed drilling across the ENT farm in JV tenements during the Quarter.

### 6.2.2 Doolgunna Project – 100% Sandfire

RC and Diamond drilling continued at the Doolgunna Project during the March Quarter.

RC drilling was designed to follow-up on copper anomalism associated with a previous sulphide intersection within the Jenkins prospect area. The holes predominantly intersected dolerite and basalt of the Narracoota Formation, with only DGRC903 containing a narrow sediment interval. No mineralisation was observed and DHEM surveys will be completed in due course.

Diamond holes were completed to test the prospective stratigraphy through the Homestead and Vulcan West prospect areas and test down-dip of copper anomalism in DGAC475, approximately 2km west of DeGrussa.

Geological interpretation through the area is currently ongoing.



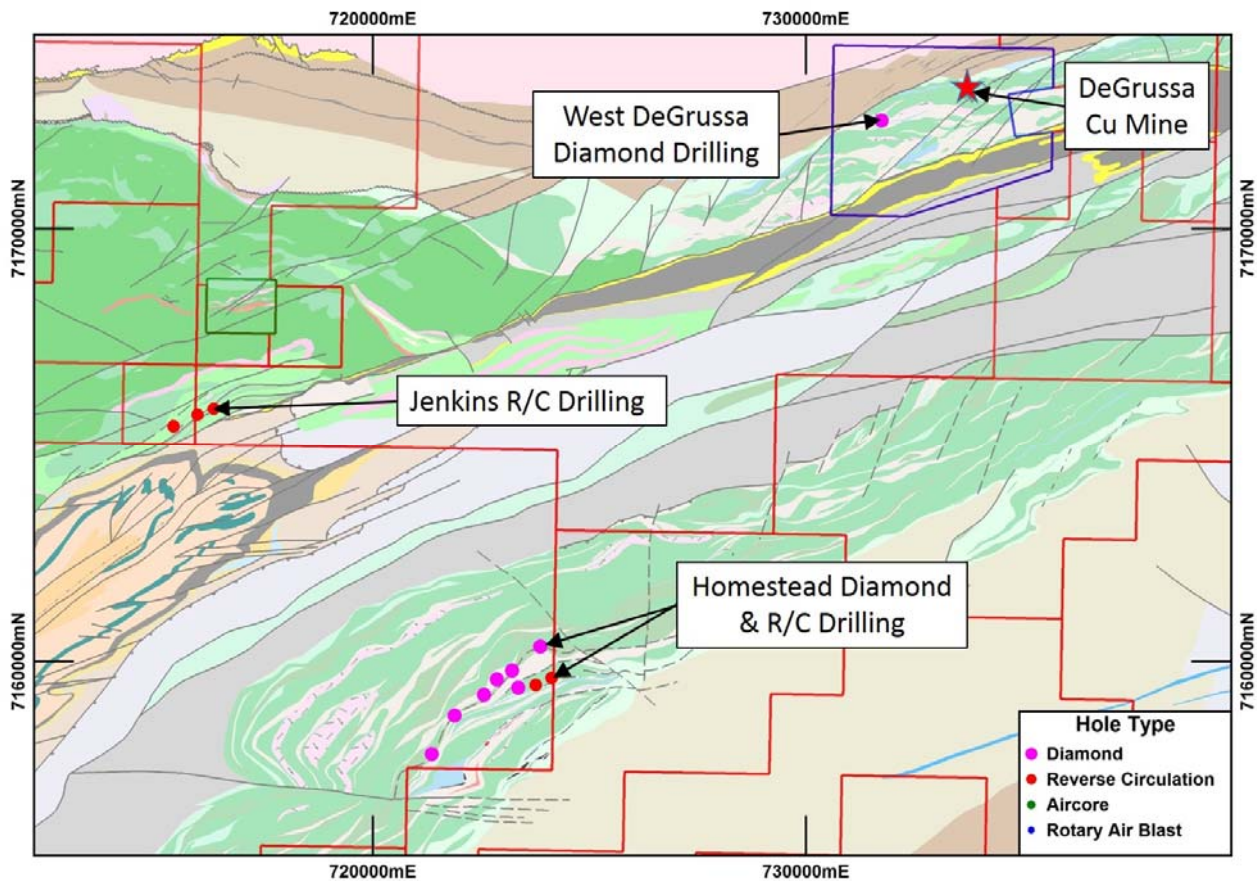


Figure 5: Completed drilling across the SFR Doolgunna tenements during the Quarter.

### 6.2.3 Springfield Joint Venture – 70% Sandfire

The Springfield Joint Venture Project comprise the Springfield, Halloween and Halloween West Projects, which about 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.

Aircore drilling was conducted at the Springfield JV Project during the March Quarter to target the narrow sediment packages in the Homer prospect area and in-fill previous Aircore drilling conducted within the Southern Volcanics prospect area. This drilling will inform the geological interpretation and results from assaying will be reviewed to determine if any follow-up work is required.

At Monty North-east, one diamond drill hole was completed during the Quarter for a total advance of 784.8m. The hole was completed to an end-of-hole depth of 893m. This hole was designed to test below the sulphide intersection and associated geochemistry anomaly in previously drilled hole TLRC0057.

At the Monty East prospect, one diamond drill hole (commenced in the previous quarter) was completed during the Quarter for a total advance of 674.2m. The hole was completed to an end-of-hole depth of 786.40m. The hole was designed to test the extension of the Monty host horizon to the east. No significant mineralisation was observed in either drill hole.

Seven resource definition drill holes were completed into the Upper Zone of Monty during the period for a total advance of 1,425m. These holes were completed to in-fill areas between drill intersections in the existing Monty Upper Zone Mineral Resource.

All holes intersected Monty Upper Zone mineralisation. These holes will be assayed and the mineralisation wireframes updated and compared to the existing interpretation. Additional work will be completed on these holes for geotechnical and metallurgical assessment.

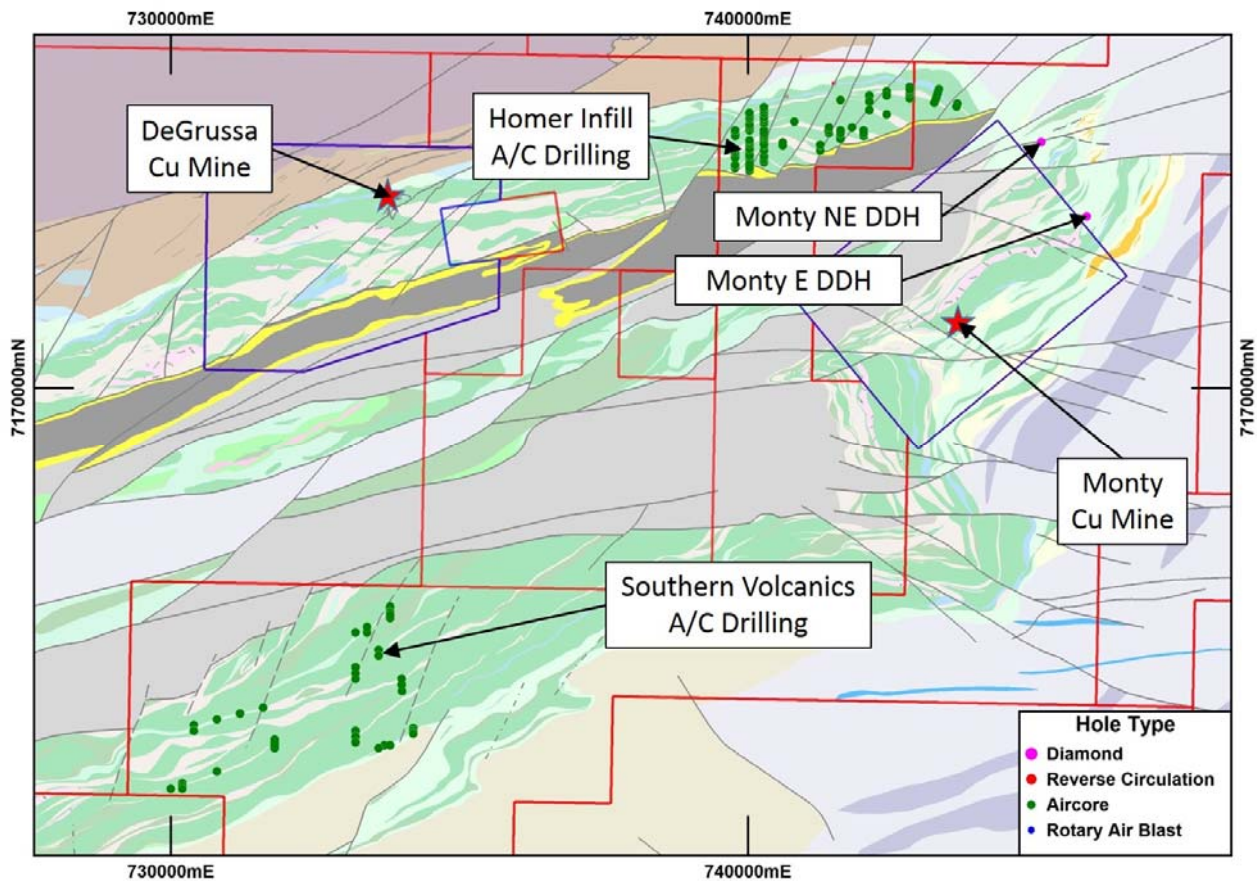


Figure 6: Completed drilling across the SFR-TLM Joint Venture tenements during the Quarter.

#### 6.2.4 Morck's Well East Project

Sandfire entered into a farm-in agreement for the Morck's Well East JV Project in February 2018 (see below).

In March, the Company commenced an airborne VTEM™ Max survey over the project area with the aim of identifying potential base metal accumulations.

This survey was completed subsequent to the end of the Quarter, with preliminary interpretation of unlevelled VTEM survey data identifying two clusters of potentially prospective late-time EM anomalies. Both clusters are interpreted to be located within the Karalundi Formation, which hosts the DeGrussa and Monty VMS orebodies.

Neither locality has been previously subjected to surface geophysical investigation or drill-testing.

Field investigation and follow-up ground fixed-loop EM surveys will now be conducted to verify the anomalies.

#### 6.2.5 Ned's Creek Project (including Thaduna)

*The Ned's Creek Project comprises over 900km<sup>2</sup> 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.*

No field work was undertaken at Ned's Creek during the March Quarter.

A new set of geophysical inversion were completed on the existing VTEM data sets to aid targeting for drilling, which is planned for the coming quarter.

## 7.0 AUSTRALIAN EXPLORATION

Sandfire has a number of exploration interests and 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.

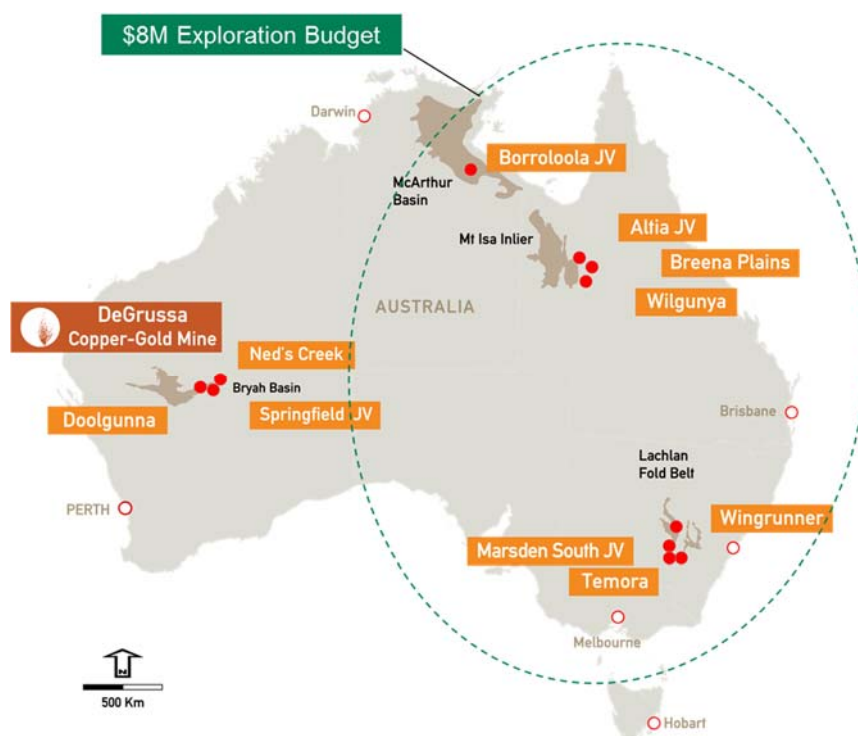


Figure 7: Sandfire's Eastern Australian Projects.

### 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.

#### 7.1.1 Temora Exploration (100% Sandfire)

Drilling has continued through the Quarter at the Temora Project with diamond and aircore drilling targeting a number of prospects in the northern Mandamah alteration zone. Nine diamond holes for 4,215m and seventy-five aircore holes for 5,833m were completed in the quarter.

At the Donnington prospect, follow-up holes were targeted at extensions to the mineralisation. Significant copper mineralisation associated with intense porphyry-style quartz-magnetite-chalcopyrite sheeted veining was intersected in two of the holes, TMMRD017 and TMMRD019, however no improvement in grade has been encountered. Indications are that the higher grade portion of the system is now likely to be deeper beneath the intersected mineralisation.

Drill testing has also been completed at Horsetail, Punch North and Lawrence South prospects with no significant mineralisation intersected in TMMRD020, TMMRD021 and TMMRD024.

Two holes, TMMRD022 and TMMRD023, were completed at the Mandamah deposit to better understand the structure and mineralised core to the system and test for a north-western extension. Strong vein-hosted and disseminated mineralisation was encountered in TMMRD022, with clear structures offsetting the high-grade mineralisation. The rocks are highly fractured, which is attributed to both faulting and gypsum being leached from initial anhydrite veining in the upper portion of the deposit. Results have included: **165m @ 0.51% Cu and 0.37 g/t Au** from 168m, including **56m @ 0.8% Cu and 0.54 g/t Au** from 218m.

Full results are presented in Table 1 below and on a cross-section in Figure 9.

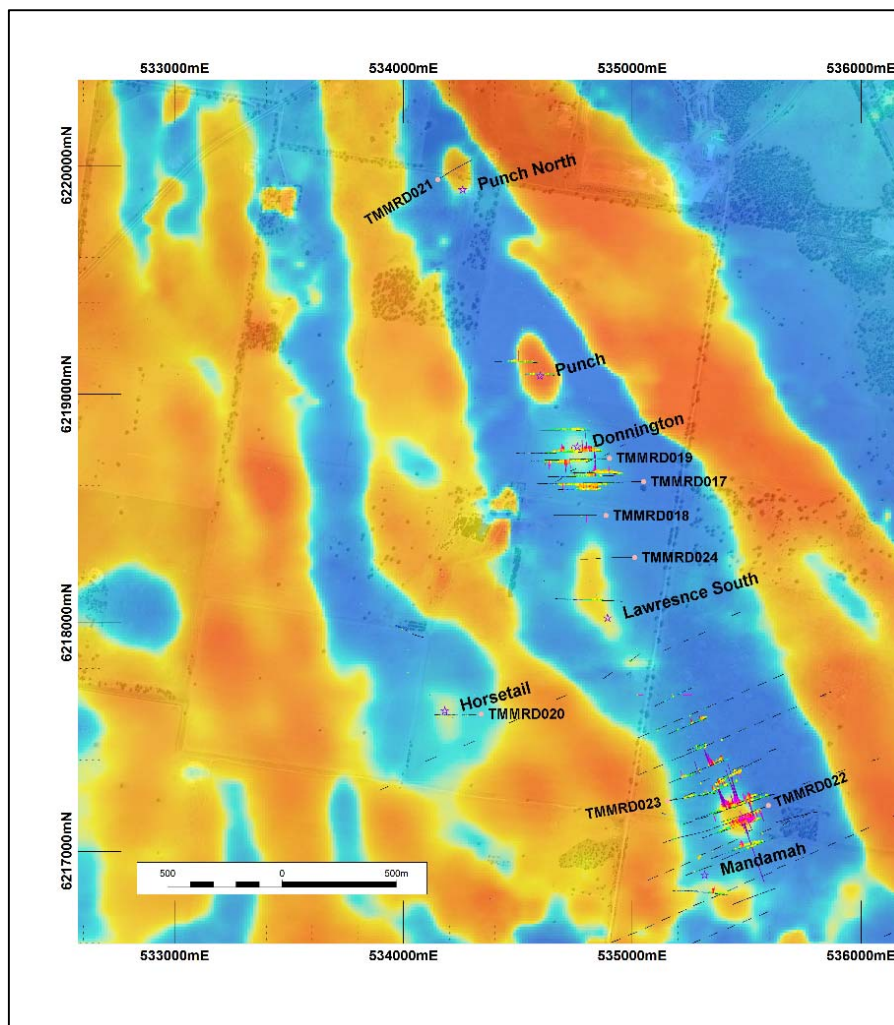


Hole TMMRD023, targeting a north-western extension, did not intersect significant mineralisation. Final assay results are pending. The Mandamah resource was previously reported (26Mt @ 0.34% Cu and 0.38g/t Au – see ASX release 19<sup>th</sup> October 2017).

**Table 1: Results from Drilling at the Temora Project in the March Quarter.**

Prospect	Hole Number	Easting (m)	Northing (m)	total depth (m)	azimuth	dip	Depth From (m)	Interval (m)	Cu (%)	Au (g/t)
Donnington	TMMRD017	535049	6218617	822	270	-60	355	69	0.25	0.33
	including						370	15	0.34	0.42
							435	100	0.21	0.26
							631	24	0.20	0.27
	TMMRD018	534890	6218475	459	270	-60	NSR			
Mandamah	TMMRD019	534900	6218720	675	270	-60	342	108	0.27	0.33
	including						380	15	0.52	0.77
							505	21	0.30	0.51
	including						515	10	0.45	0.85
Horsetail	TMMRD020	534340	6217600	440	270	-60	NSR			
Punch North	TMMRD021	534150	6219940	352	060	-60	NSR			
Mandamah	TMMRD022	535595	6217200	470	250	-60	80.6	14.4	0.36	0.19
							113	26	0.31	0.30
	including						127	10	0.44	0.46
	including						168	165	0.51	0.37
	including						218	56	0.80	0.54
	TMMRD023	535155	6217220	501	070	-60	Results Pending			
Lawrences South	TMMRD024	535010	6218285	549	270	-60	Results Pending			

Reported Mineralisation at >0.3 % CuEq (Cu x 0.55 Au) with up to 10m internal dilution, including at >0.5 % CuEq with up to 3m internal dilution. Intercepts <10m excluded. Hole collars at 236mRL in MGA94 zone 55.



**Figure 8: Drill traces of holes TMMRD017-23 with copper assays from the 2018 drilling at Temora on an aeromagnetic background image showing the northern Mandamah alteration demagnetised zone overlaying an aerial photo.**

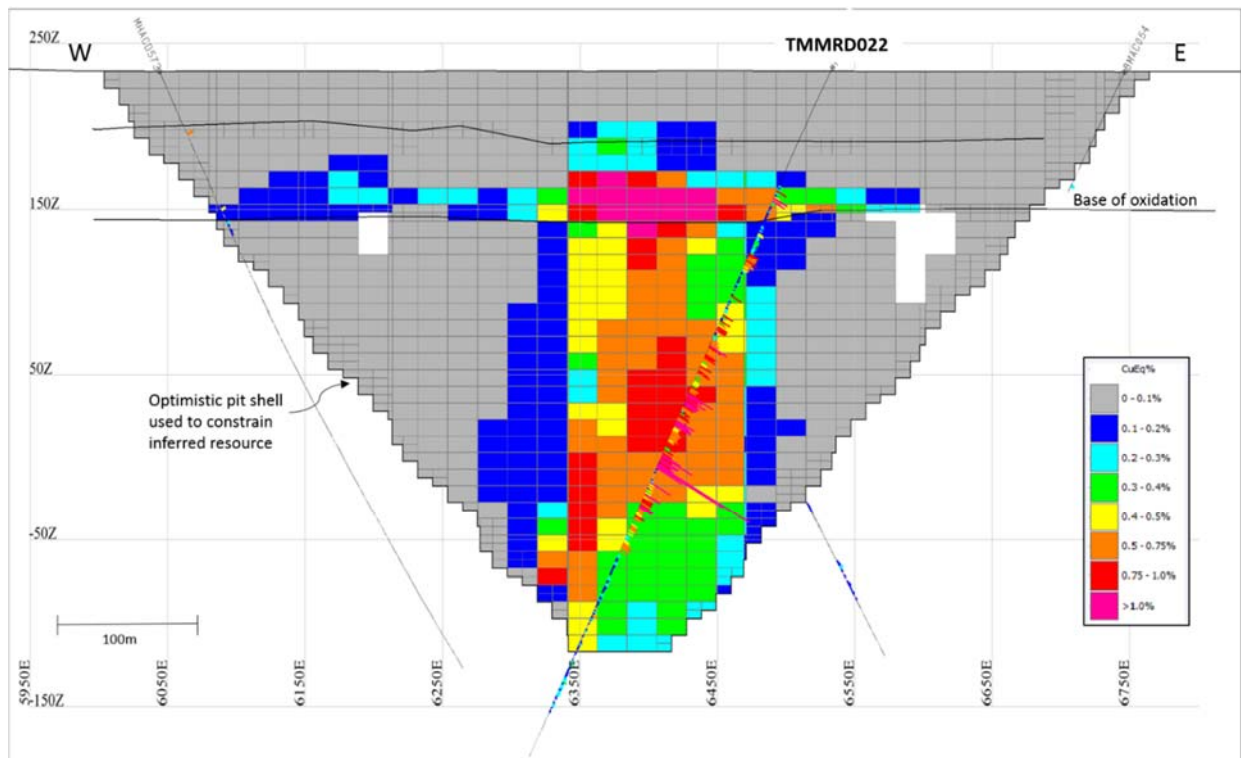


Figure 9: Cross-section through the Mandamah block model showing the location of TMMRD022, block model and drill-hole assays displayed as % CuEq (Cu x 0.55 Au).

Ground gravity and drone magnetics geophysical surveys are being completed at the Temora and Bland Creek project areas. Access arbitration continues to gain access to high priority targets next year at the Temora project close to the Rain Hill monzonite.

## 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.*

Drilling is planned to commence by Pacifico at the Borroloola Project in April 2018, weather permitting. The Aircore program will test strike extensions of previously intersected oxide copper mineralisation and for indications of significant down-dip primary sulphide mineralisation at the Lorella Creek copper anomaly. Reverse Circulation (RC) and diamond drilling may then be planned to establish an Inferred Resources.

MMG are planning an IP program followed by a significant deep drilling program at the Rosie Creek prospect and a number of other potential prospects for layered zinc deposits.

## 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%.*

Current exploration activities on the projects involve detailed planning for the drill program with geochemical sampling, ground magnetic and gravity geophysical surveys at Altia South, Breena Plains, Cannington West, Blackrock and Kennedy Highway.

Diamond drilling programs are planned to test the Breena North prospect, as well as following up on an anomalous conductor at the Wilgunya prospect. This diamond drilling will be followed up by a significant RC drilling campaign designed to test a number of high-priority targets.

## 8.0 CORPORATE

### 8.1 Farm-in to Morck's Well East and Doolgunna Projects

During the Quarter, Sandfire entered into farm-in agreements with Auris Minerals Limited/Fe Limited for the Morck's Well East JV Project and with Auris Resources Minerals for its Doolgunna Project.

Under the terms of the agreements, Sandfire has issued shares to the value of \$1.2 million to Auris and \$0.3 million to Fe Limited as consideration for the acquisition. In addition, Sandfire must incur a minimum of \$2.0 million in exploration expenditure within two years. Full terms of the Joint Venture agreements are outlined in Auris' (ASX: AUR) ASX Announcement dated 27 February 2018.

### 8.2 Interim Dividend

Sandfire announced an interim fully franked dividend of 8 cents per share for the 2018 Financial Year. The record date to determine entitlement to the dividend was 6 March 2018, and dividend payments commenced on 20 March 2018.

### 8.3 Cash position

Company cash on hand as at 31 March 2018 totalled \$181 million (unaudited). Group cash on hand as at 31 March 2018 totalled \$188 million (unaudited).

### 8.4 Finance Facility

Sandfire's financing arrangements continue to be provided under a secured loan facility with ANZ and are secured by a fixed and floating charge over the Company's assets. Aside from minor borrowings under a bonding facility there is no debt drawn under these facilities and the available amount to be drawn remains nil. The facilities expire on 4 May 2018 unless extended by mutual agreement.

### 8.5 Investor Call and Webcast

A teleconference on the Quarterly results will be held for the investment community on Friday 27<sup>th</sup> April 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:** 889754

[Please refer to attached for a full list of international dial-in numbers.](#)

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

A live webcast of the teleconference and synchronised slide presentation will also be available via the BRR Media service website at <http://webcasting.brrmedia.com/broadcast/5aaaaeaf8271b41638bdc7495>.

**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 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 DeGrussa**

The information in this report that relates to Mineral Resources is based on information compiled by Mr Callum Browne who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Browne 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 Browne 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/cm<sup>3</sup> to 4.9g/cm<sup>3</sup>, with an average density reading of 3.7g/cm<sup>3</sup>. 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	<ul style="list-style-type: none"> <li>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 down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling method is half-core sampling of NQ3 or HQ3 core diamond drilling (DD).</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling is guided by Sandfire protocols as per industry standard.</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sample size reduction is through a Jaques jaw crusher to -10mm and all samples Boyd crushed to -4mm and pulverised via LM5 to nominal 90% passing -75µm using wet sieving technique.</li> <li>Samples are assayed using Mixed 4 Acid Digest (MAD) 0.3g charge and MAD Hotbox 0.15g charge methods with ICPOES or ICPMS.</li> <li>Fire Assay is completed by firing 40g portion of the sample with ICPMS finish.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>DD is completed using NQ3 and HQ3 size coring equipment. With a Mud rotary (MR), precollar to a maximum depth of 120m.</li> <li>All 2017/18 drill collars are located using a differential gps receiver.</li> <li>All core where possible is oriented using a gyroscope based orientation tool.</li> <li>Downhole surveying is undertaken using a magnetic single or multi shot survey instrument. Holes reported were surveyed with downhole gyro for greater accuracy.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond 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.</li> </ul>
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Samples are routinely captured into the central secured database.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No sample recovery issues have impacted on potential sample bias.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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 NL geologic codes. Data is imported into Sandfire NL's central database after validation in LogChief™.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Logging is both qualitative and quantitative depending on field being logged.</li> <li>All cores are photographed.</li> </ul>



Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All drillholes are fully logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul style="list-style-type: none"> <li>Core orientations are completed where possible and all are marked prior to sampling. Half core samples are produced using an automated core saw.</li> <li>Duplicate samples are taken as quarter core.</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>All samples are half-core.</li> </ul>
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>1:20 grind quality checks are completed for 90% passing 75µm criteria to ensure representativeness of sub-samples.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling is carried out in accordance with Sandfire protocols as per industry best practice.</li> <li>Quarter core field duplicates are taken every 20 samples.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled</li> </ul>	<ul style="list-style-type: none"> <li>The sample sizes are considered appropriate for the Porphyry Copper and Gold as well as epithermal mineralisation types.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are assayed using Mixed 4 Acid Digest (MAD) 0.25g 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 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</li> <li>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.</li> <li>The analytical methods are considered appropriate for this mineralisation styles.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No geophysical tools are used in the analysis.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Significant intersections have been verified by alternative company personnel.</li> </ul>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>None of the drillholes in this report is twinned.</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>The primary data is always kept and is never replaced by adjusted or interpreted data.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral</li> </ul>	<ul style="list-style-type: none"> <li>All drill collars are located using a DGPS system with sub 1m accuracy.</li> <li>Downhole survey are completed by downhole magnetic single shot or multishot methods at regular</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>Resource estimation.</i></p> <ul style="list-style-type: none"> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<p>intervals.</p> <ul style="list-style-type: none"> <li>All diamond holes have been downhole surveyed with a MEMS gyroscopic system by the drill contractor on 10m spacings for improved accuracy.</li> <li>Coordinate and azimuth are reported in MGA 94 Zone 55.</li> <li>Topographic control was established from dgps readings.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drillholes are spaced to define geological targets to discover significant extensions to the imineralisation</li> <li>No resource classification is applied to these results given the early stage of exploration. Hole TMMRD022 was drilled within the Mandamah resource to understand the structure and mineralisation</li> <li>No sample compositing have been applied to the Exploration Results.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drillholes were designed to intersect the geological features at a high angle to a predominantly vertical system. The drillholes may not necessarily be perpendicular to the orientation on the intersected mineralisation.</li> </ul>
	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>No significant orientation based sampling bias is known at this time. The drillholes may not necessarily be perpendicular to the orientation of the intersected mineralisation. All reported intervals are downhole intervals not true widths.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Appropriate security measures are taken to dispatch samples to the laboratory. Chain of custody of samples is being managed by Sandfire Resources NL. Samples are stored onsite and transported to laboratory by Sandfire employees or a licence transport company in sealed bulka bags. The laboratory receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No external audits or reviews of the sampling techniques and data have been completed.</li> </ul>

## Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Temora project encompasses EL5864, EL6845, EL8397, EL8292 and EL8025 which are wholly owned by Sandfire Resources Limited, with no known third party encumbrances.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All tenements are current and in good standing.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Aside from Sandfire Resources Limited there has been no recent exploration undertaken on the Temora Project.</li> <li>Exploration work completed prior to Sandfire's tenure included AC, RC and Diamond drilling throughout the project. Significant geophysical surveys including IP, Magnetic, EM and gravity Surveys have been completed throughout the history of the tenure by multiple parties. Only AC drilling has previously been completed at the Donnington Prospect.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Temora Project lies within the Ordovician Macquarie Island Arc, which is historically highly prospective for Porphyry copper gold deposits and epithermal gold.</li> <li>The principal exploration targets at the Temora project is a porphyry copper gold system within the Macquarie Arc in NSW.</li> </ul>
Drill hole information	<p>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:</p> <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar;</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres);</li> <li>of the drill hole collar;</li> <li>dip and azimuth of the hole;</li> <li>down hole length and interception depth; and</li> <li>hole length.</li> </ul> <p>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.</p>	<ul style="list-style-type: none"> <li>Refer to Table 1 of this accompanying document.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Intersections are based on standard intercept of greater than 0.3% Cu equivalent (CuEq). Intercepts may include up to a maximum of 10m of consecutive dilution.</li> <li>Significant intersections are based on greater than 0.5% Cu equivalent (CuEq). Intercepts may include up to a maximum of 3m of consecutive dilution</li> <li>CuEq is based on the formula <math>CuEq = Cu\% + 0.55 * Au \text{ g/t}</math>. The underlying values for this are: <ul style="list-style-type: none"> <li>A copper price of A\$3.53/lb and a Cu recovery of 90%</li> <li>A gold price of A\$1,600/Oz and a recovery of 0.75%</li> </ul> </li> <li>The formula is <math>CuEq = Cu\% + \frac{Au \text{ price} / 31.1035 * Au \text{ recovery}}{Cu \text{ price} * 22.04} * Au \text{ g/t}</math></li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Reported intersections are based on a regular sample intervals of 1m in regular drilling subject to location of geological boundaries.</li> <li>Minimum and maximum sample intervals used for intersection calculation are 0.3m and 1.2m respectively.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Metal equivalents are only used in the cut-off grade for the intersection calculation.</li> <li>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.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>Downhole intercepts of mineralisation reported in this release are from drillholes orientated at a high angle to the predicted mineralisation dip. The drillholes may not necessarily be perpendicular to the mineralised zone. All widths reported are downhole intervals.</li> </ul>
	<ul style="list-style-type: none"> <li><i>If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>The geometry of the mineralisation, relative to the drillhole, is interpreted at this stage.</li> </ul>
	<ul style="list-style-type: none"> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>All intersections reported in this release are downhole intervals. True widths are not known.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps are included within the body of the accompanying document.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The accompanying document is considered to represent a balanced report.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>No additional drilling is currently in plan. Planned future work includes geochemical evaluation.</li> </ul>