SANDFIRE RESOURCES ASX Code- SFR

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Spreading our wings in Botswana

Beginning our transformation to a global, diversified and sustainable metals company

- Optimisation of T3 Feasibility Study underway
- Early exploration success

Investor Presentation - Cape Town, South Africa - February 2020

Sandfire | Moving to the Next Level as a Global Mining Company

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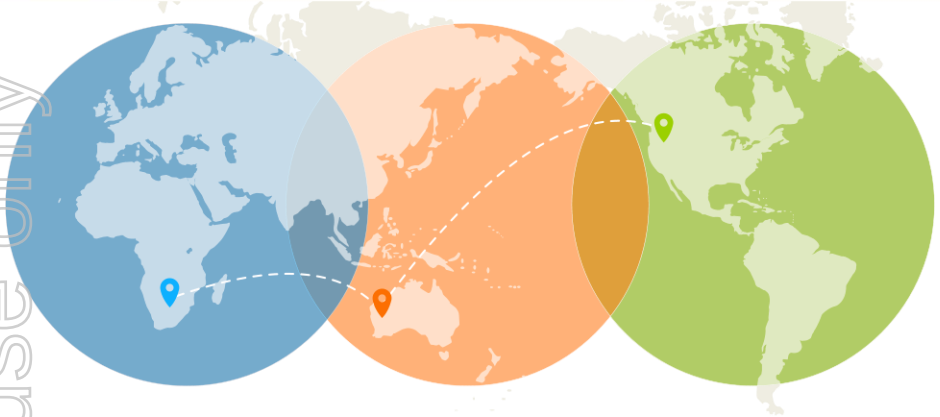

- **Leading ASX-listed copper producer** with strong track record of delivery
- **FY2020 guidance** 70-72kt Cu and 38-40koz Au at C1 costs ~US$0.90/lb
- **Strong balance sheet** with A$201.7m cash at 31 Dec 2019* and no debt
- **Clear vision** to create a diversified and sustainable metals company
- **Aggregating quality mid-tier copper** assets
- **New growth platform in Botswana** – optimisation of T3 project underway and early exploration success with significant new copper zone intersected only 8km from T3
- **Black Butte Copper Project, USA** – permitting imminent and FS well advanced
- **Strongly leveraged to copper market upside** as diversification and growth strategy advances

*Subject to auditor review

Corporate | Overview and Key Assets

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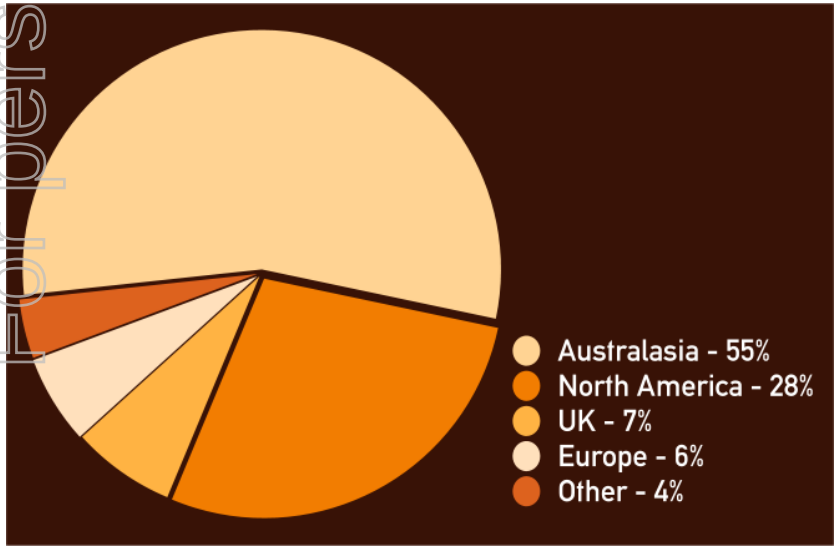
Key Corporate Data

Market Index	ASX 200
Issued Capital	178 million shares
Cash	$201.7 million (31/12/2019)
Debt	Nil
Market Capitalisation	~$1.1 billion at $6.00 share

Geographic Analysis of Investors



Key Assets

Building a diversified portfolio of high-quality base metal assets

Operating Mines

- DeGrussa Operations, WA
  - DeGrussa Copper-Gold Mine
  - Monty Copper-Gold Mine

Development Pipeline

- Tshukudu Operations, Botswana
  - T3 Copper-Silver Project
  - T1, A4 Expansion Projects
- Black Butte Copper Project, USA (85%)

Exploration Portfolio

- Greater Doolgunna Project, WA
- East Coast Portfolio (NSW, Qld)
- Kalahari Copper Belt, Botswana – 11,700km^2

Sandfire | A Clear Vision for Growth and Value Creation

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Corporate History – Strong track record of discovering, developing and delivering….

2004
Sandfire listed on the ASX

2008
Strategic alliance with POSCO

2009
Discovery of high-grade DeGrussa deposit

2010
Maiden Resource, Mining Lease granted

2011
DFS, development approval, $380m debt

2012
First shipment of DSO, commissioning of 1.6Mtpa

2013
Official opening of DeGrussa Mine, maiden profit

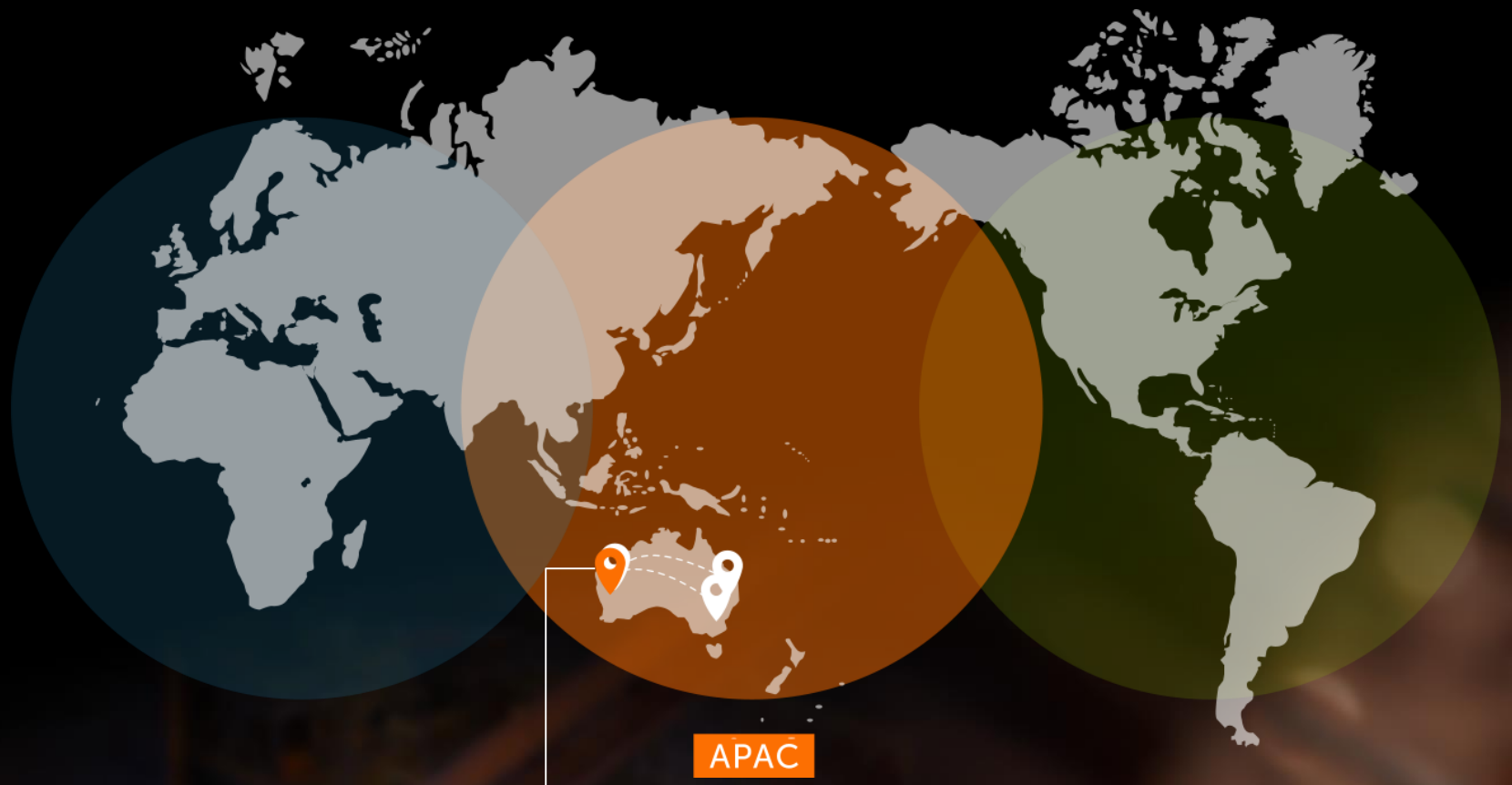
2015
Discovery of Monty deposit, construction of solar facility

2016
Millionth tonne of concentrate produced

2017
Debt repaid, Monty development starts, permitting advances for Black Butte Copper Project, USA

2019
Acquisition of MOD Resources Ltd, first ore from Monty Mine, EIS, Black Butte FS progressing

Sandfire APAC



DeGrussa Operations, WA
- DeGrussa Copper-Gold Mine
- Monty Copper-Gold Mine

Exploration
- Greater Doolgunna Project, WA
- East Coast Portfolio (NSW, Qld)

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Sandfire APAC | High-Grade, High-Margin Production Profile

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CUMULATIVE PRODUCTION TO END OF FY2019

over 470,000

TONNES OF CONTAINED COPPER

275,000

OUNCES OF CONTAINED GOLD

$3.6 billion

IN CUMULATIVE SALES REVENUE

$1.7 billion

IN CUMULATIVE OPERATING CASH-FLOW
(prior to exploration and evaluation expenditure)

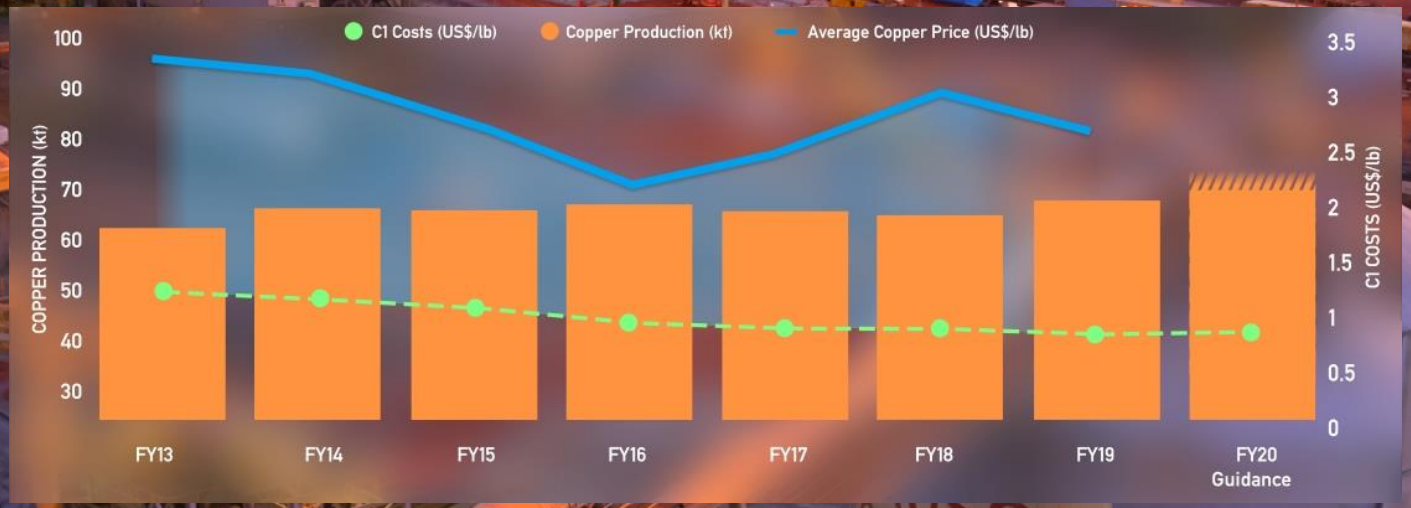
$163 million

($1.02 PER SHARE) IN CUMULATIVE DIVIDENDS TO SHAREHOLDERS

$566 million

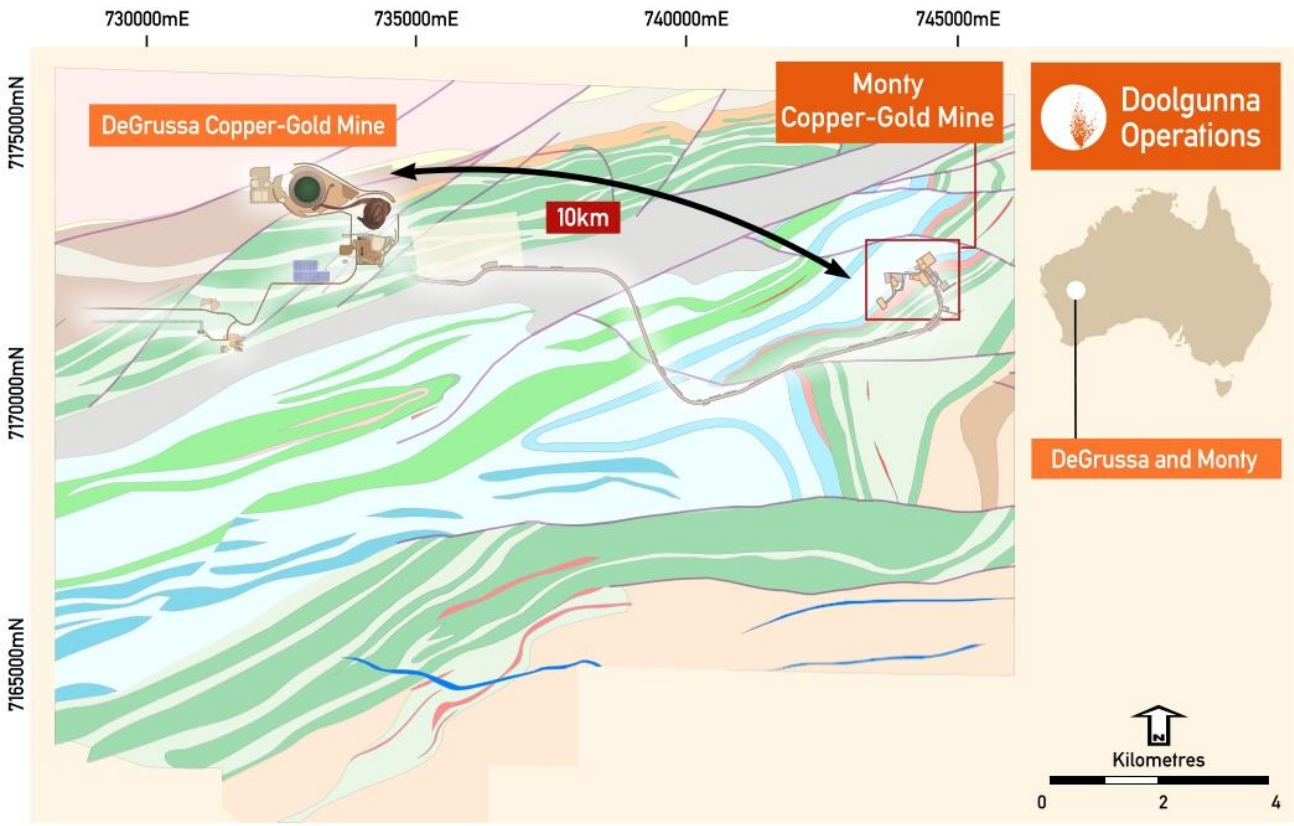
IN CUMULATIVE NET PROFIT AFTER TAX
(attributable to members)

Debt-free with a rising production profile and harvesting cash



Sandfire APAC | DeGrussa Operations

- 1.6Mtpa Concentrator fed by two underground mines – DeGrussa and Monty
- 7-year track record of consistent delivery
- High-grade Monty ore successfully introduced this year, tonnes and grade ramping up
- FY2020 guidance: 70-72kt Cu and 38-40koz Au
- Concentrator performing well with expected recoveries of 91% for Cu and 45% for Au



PRODUCTION OVERVIEW – Key Figures

		FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 (guidance)
Production	Copper (Cu)	64,017t	67,690t	67,154t	68,202t	67,088t	64,918t	69,394t	70-72kt
	Gold (Au)	42,679oz	33,893oz	37,386oz	37,612oz	38,623oz	39,273oz	44,455oz	38-40koz
C1 Cash - Operating Costs (US$/lb)		1.24	1.18	1.09	0.95	0.93	0.93	0.83	0.90

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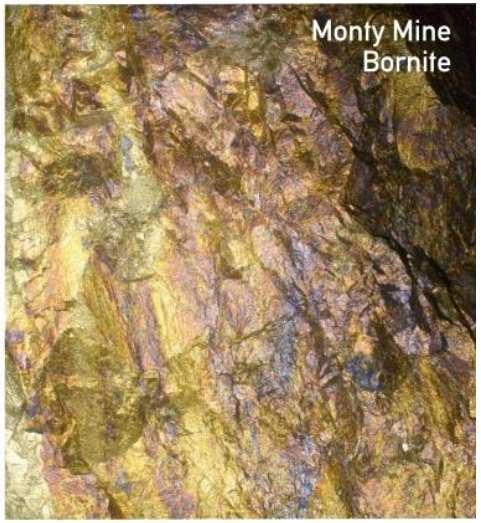
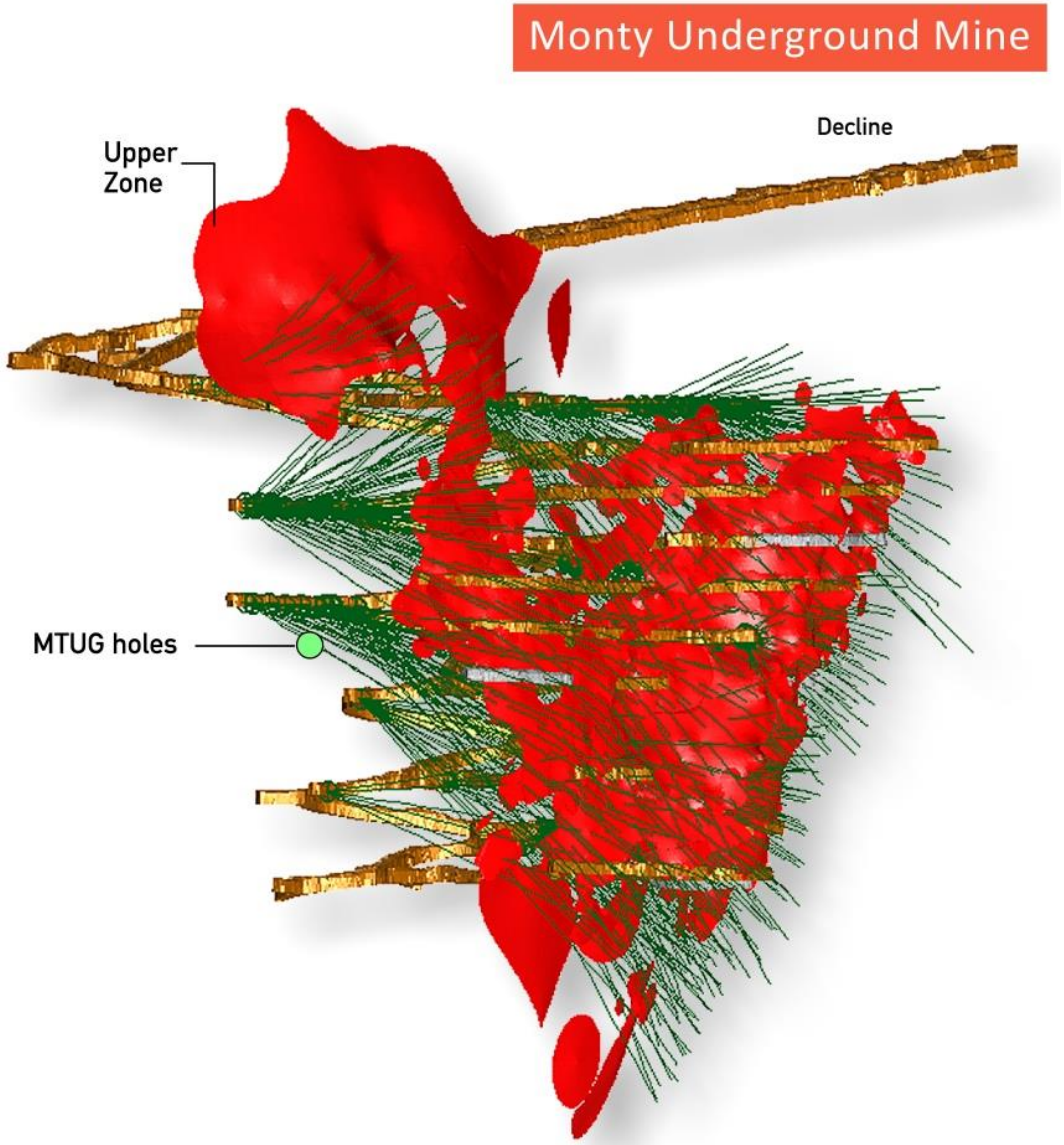
Sandfire APAC | Monty Copper - Gold Mine – Head Grade Increasing





- Extensive grade control drilling program completed recently on existing Ore Reserve of **0.92Mt at 8.7% Cu and 1.4g/t Au for 80kt Cu and 42koz Au**
- Geometry of ultra-high grade deposit and stope design now defined to high level of detail
- Updated Ore Reserve expected in June 2020 Quarter to underpin future mine plan

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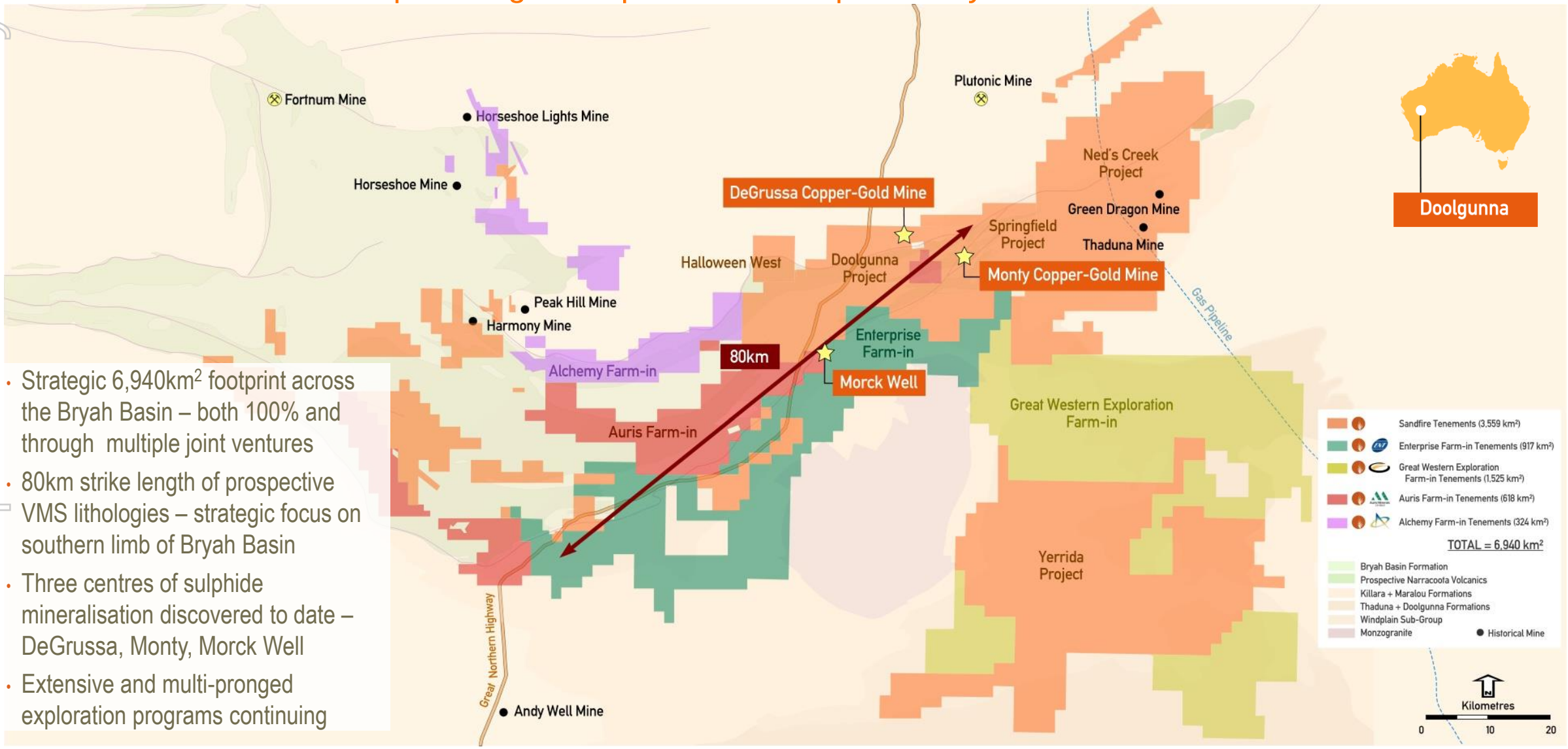
Sandfire APAC | Doolgunna Exploration

Sandfire has more than tripled its ground position in the past two years



- Strategic 6,940km² footprint across the Bryah Basin – both 100% and through multiple joint ventures
- 80km strike length of prospective VMS lithologies – strategic focus on southern limb of Bryah Basin
- Three centres of sulphide mineralisation discovered to date – DeGrussa, Monty, Morck Well
- Extensive and multi-pronged exploration programs continuing

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Sandfire APAC | Outlook for FY2020

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- Production guidance 70-72kt Cu, 38-40koz Au at C1 costs ~US$0.90/lb
- Continued evaluation and feasibility work on mine life extension projects:
  - DeGrussa Oxide Copper Project
  - Tailings Retreatment Project
  - Regional projects
- Continued expansive exploration commitment with ~$25m exploration budget for FY2020

Sandfire EMEA

Tshukudu Operations, Botswana

- T3 Copper-Silver Project
- A4, T1 Expansion Projects
- 11,700km^2 exploration portfolio

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Sandfire EMEA | Tshukudu Operations, Botswana

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- 100%-owned T3 Copper-Silver Deposit and dominant exploration licence-holding (~11,700km^2) in under-explored Kalahari Copper Belt, Botswana
- Safe, democratic, politically stable and mining-friendly jurisdiction
- Supportive Government (rated #1 in Africa and #32 globally by Fraser Institute Annual Survey of Mining Companies)
- Skilled workforce, good infrastructure and sound mining legislation and environmental controls
- Strong support for T3, with the project able to leverage off extensive local infrastructure – Government extending grid power to within 12km of T3
- T3 the first of what is targeted to be a strong pipeline of resource development projects

Sandfire EMEA | T3 – Advanced Development Asset

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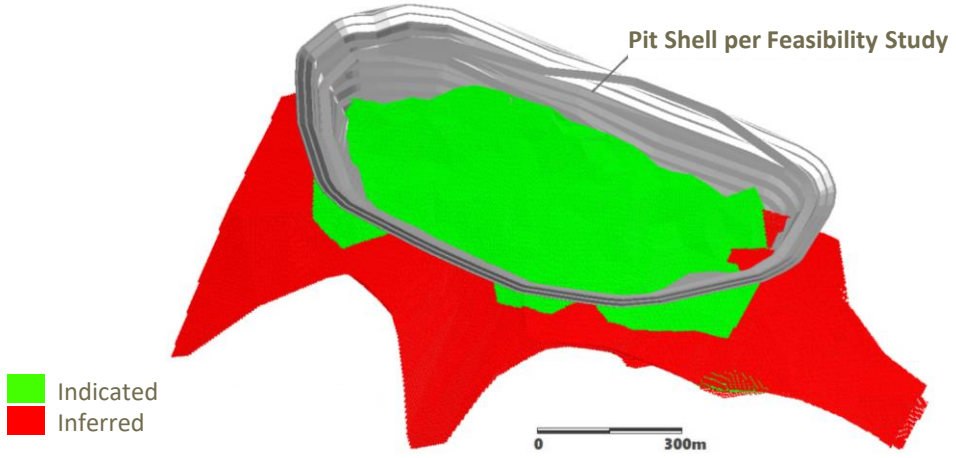
T3 Reserves & Resources

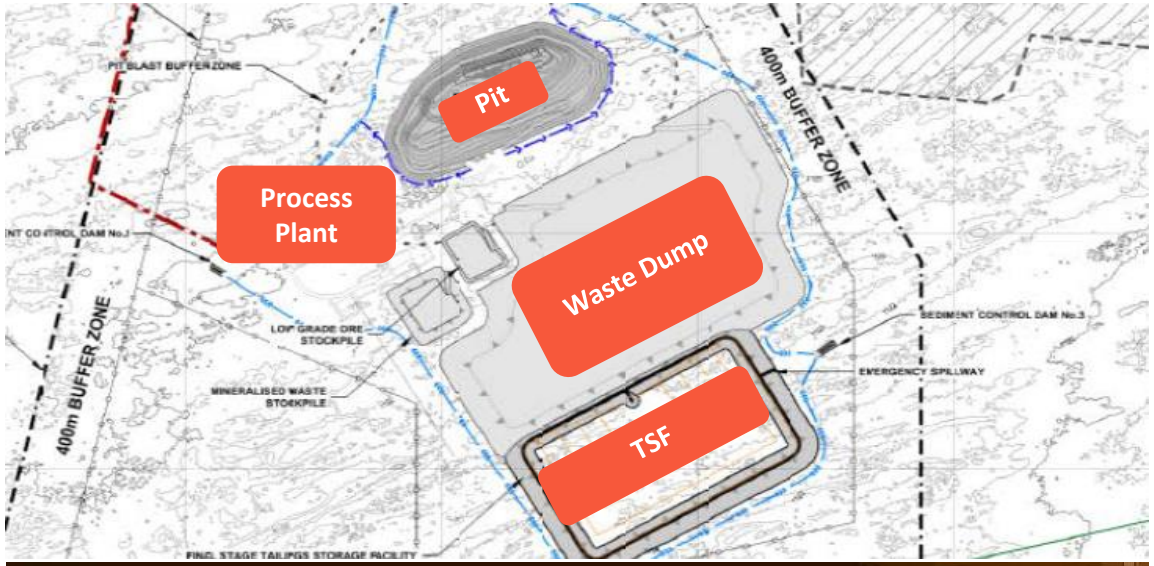
Ore Reserves[1]	Tonnes (Mt)	Copper		Silver	
		(%)	Kt	(g/t)	Moz
Proven	-	-	-	-	-
Probable	34.4	1.0	342.7	13.2	14.6
Total	**34.4**	**1.0**	**342.7**	**13.2**	**14.6**

Mineral Resource[2]	Tonnes (Mt)	Copper		Silver	
		(%)	Kt	(g/t)	Moz
Indicated	36.6	1.1	417.0	16.0	18.6
Inferred	23.5	0.7	173.3	11.0	8.3
Total[3]	**60.2**	**1.0**	**590.4**	**14.0**	**26.9**

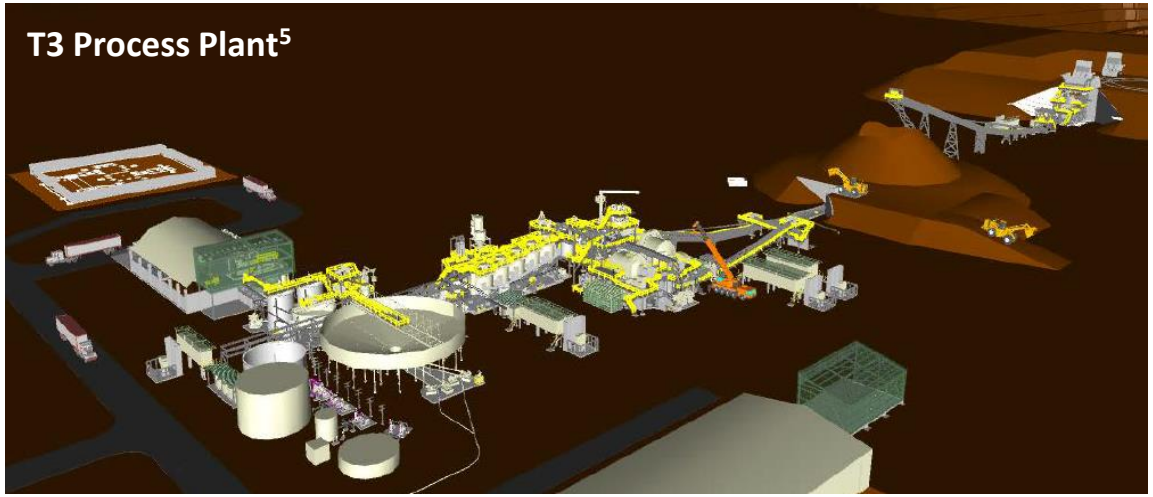
T3 Resource Classification



T3 Site Layout[4]



T3 Process Plant[5]



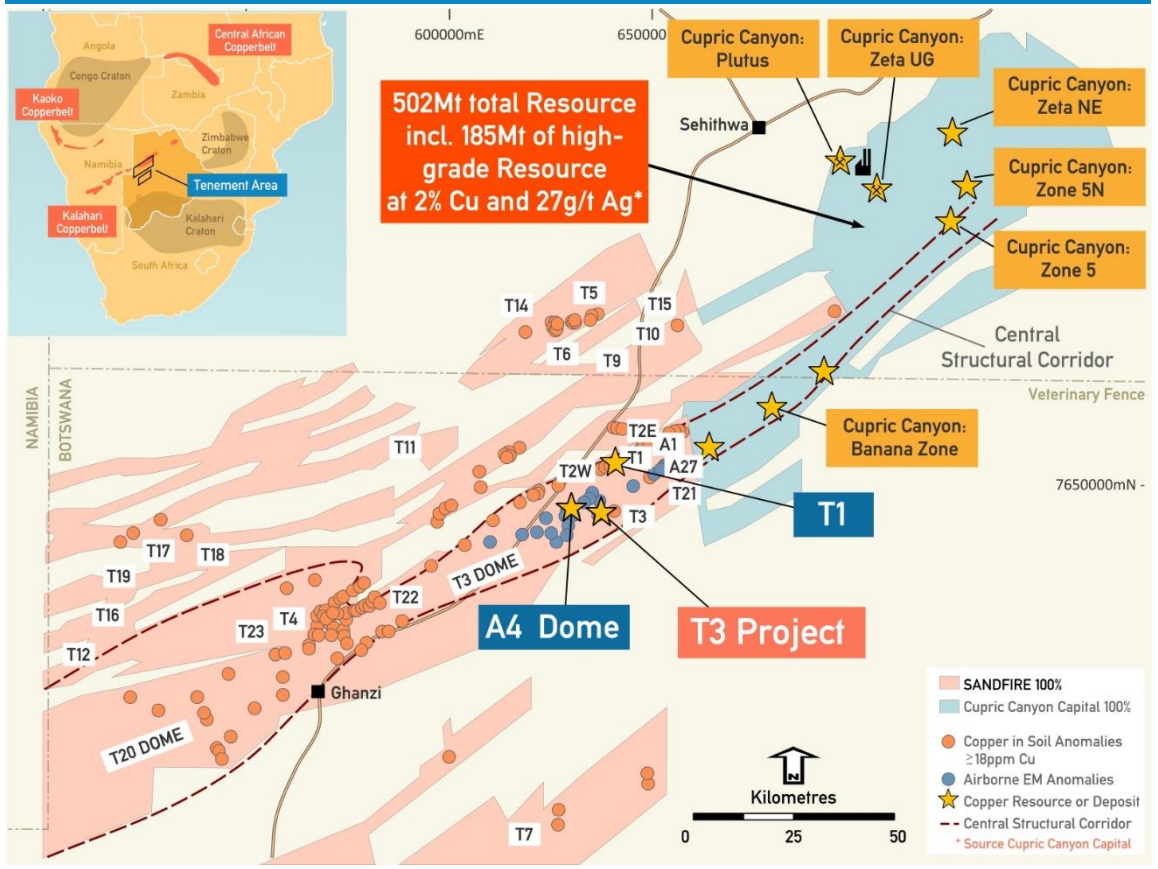
1 MOD ASX Announcement, dated 25 March 2019, Page 2.
2 MOD ASX Announcement, dated 16 July 2018 (Inclusive of ore reserves, 0.4% Cu cut-off).
3 Numbers may not add due to rounding.
4 MOD T3 Feasibility Study ASX Announcement, dated 28 March 2019, Page 28.
5 MOD T3 Feasibility Study ASX Announcement, dated 28 March 2019, Page 23.

Sandfire EMEA | Tshukudu – Belt-scale Exploration Opportunity

- Highly prospective, under-explored region containing sedimentary-style copper deposits (similar to Zambia/DRC Copper Belt)
- Outstanding near-mine growth potential:
  - T3 Expansion Project (~1,000km^2 area surrounding T3) – intercepts of up to 52m @ 1.5% Cu (A4)
  - T1 Resource (2.7Mt at 2% Cu)
- Exceptional pipeline of regional exploration projects:
  - T20 Exploration Project (~3,350km^2 target area, 100km west of T3)
  - Intercepts include 2m @ 6.1% Cu at T4
- Regional copper endowment highlighted by neighbouring Khoemacau Project, east of T3 (Cupric Canyon):
  - Total defined resources of **502Mt, including 185Mt of high-grade copper at +2% Cu and +27g/t Ag**[1]
- Development of modern underground copper-silver mine underway at Zone 5 (92Mt Measured and Indicated Resource) – targeting +60ktpa of Cu and 2Mozpa of Ag production[2]

[1] *Total Resource: 502Mt at 1% Cu and 17g/t Au, including High Grade NE Resources of 185Mt @ 2% Cu and 27g/t Ag*
[2] *Zone 5 Starter Project Resource: 92Mt @ 2.1% Cu and 22g/t Ag*
Source: Khoemacau Copper Mining, Botswana Resource Sector Conference Presentation, 10 June 2019

Significant Landholding (~11,700km^2)



Tshukudu represents a unique belt-scale exploration opportunity which covers almost two thirds of the Kalahari Copper Belt in Botswana. The significant endowment of the region is highlighted by the 502Mt of resources at the neighbouring Khoemacau Project.

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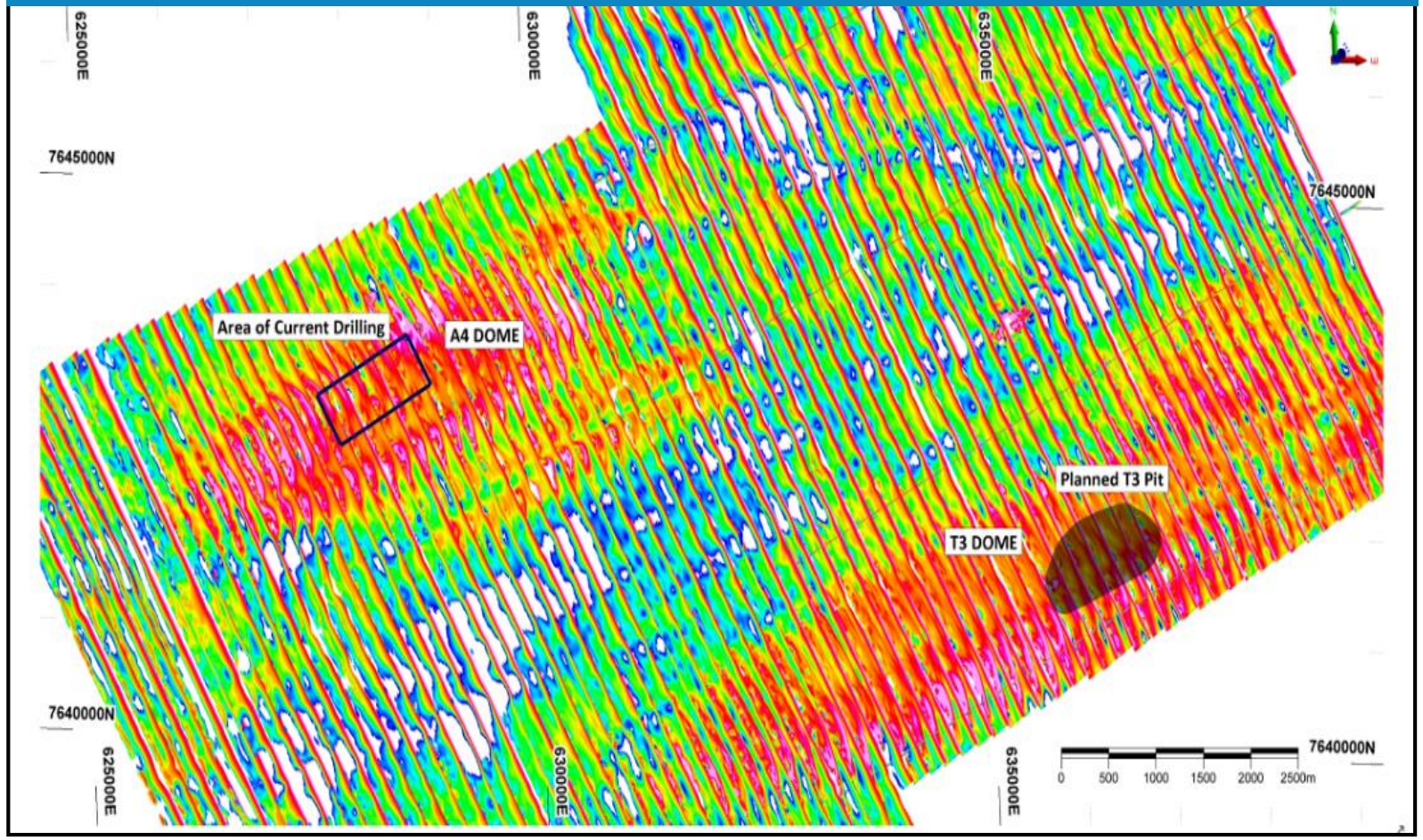
Sandfire EMEA | Tshukudu – Expanded Exploration Program

- Expanded exploration commenced in November 2019 with three key objectives:
  - To target high-grade satellite discoveries with potential to expand the scale of T3
  - To delineate additional resources with the potential to extend the mine life at T3
  - To target major new regional discoveries to unlock the belt's broader potential
- Initial focus within the ~1,000km^2 T3 Expansion Project
- Drilling currently focused on the A4 Dome, a >5km long target 8km west of T3
- A4 Dome identified by AEM and drilled initially by MOD in 2018
- Immediate success by Sandfire at A4 Dome with significant copper intersected at a new zone of shallow mineralisation

Image of stacked airborne EM CDI sections showing the conductive A4 Dome in proximity to the T3 Dome and the planned T3 Project open pit



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Sandfire EMEA | Tshukudu – Large-Scale "Near-Mine" Exploration Target at A4

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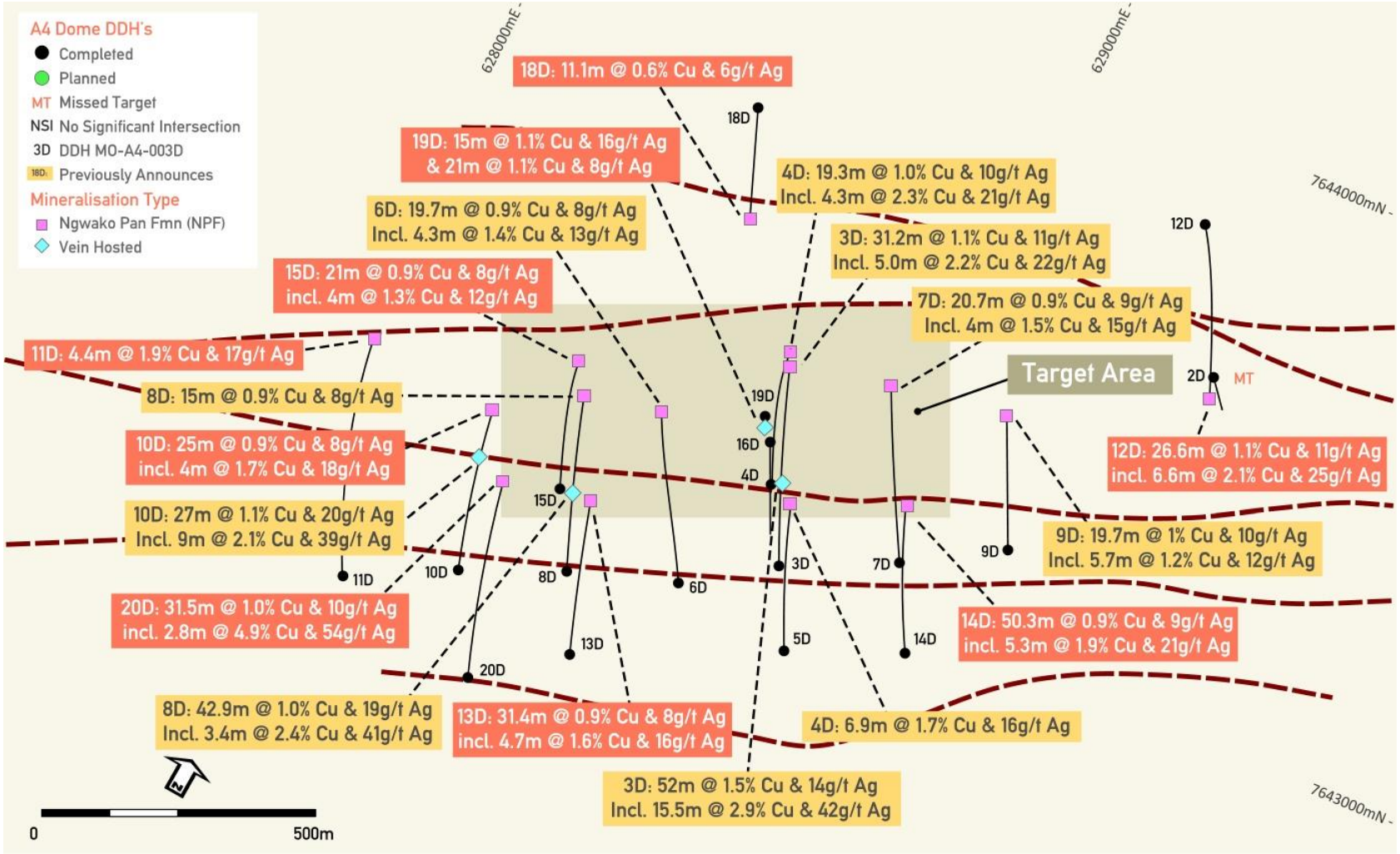
- Initial reconnaissance drilling (~20 holes) by MOD intersected good widths and grades
- Drilling defined a target area of 1,600m by 800m and successfully identified two types of mineralisation:
  - Vein-hosted mineralisation associated with the upper part of the dome
  - NPC Contact hosted mineralisation which appears to form a continuous blanket below the dome
- Sandfire commenced drilling in November in the central part of this target, with immediate success

A4 Dome – Significant intersections prior to Sandfire drilling



Sandfire EMEA | Tshukudu – Emerging Discovery at A4 Dome?

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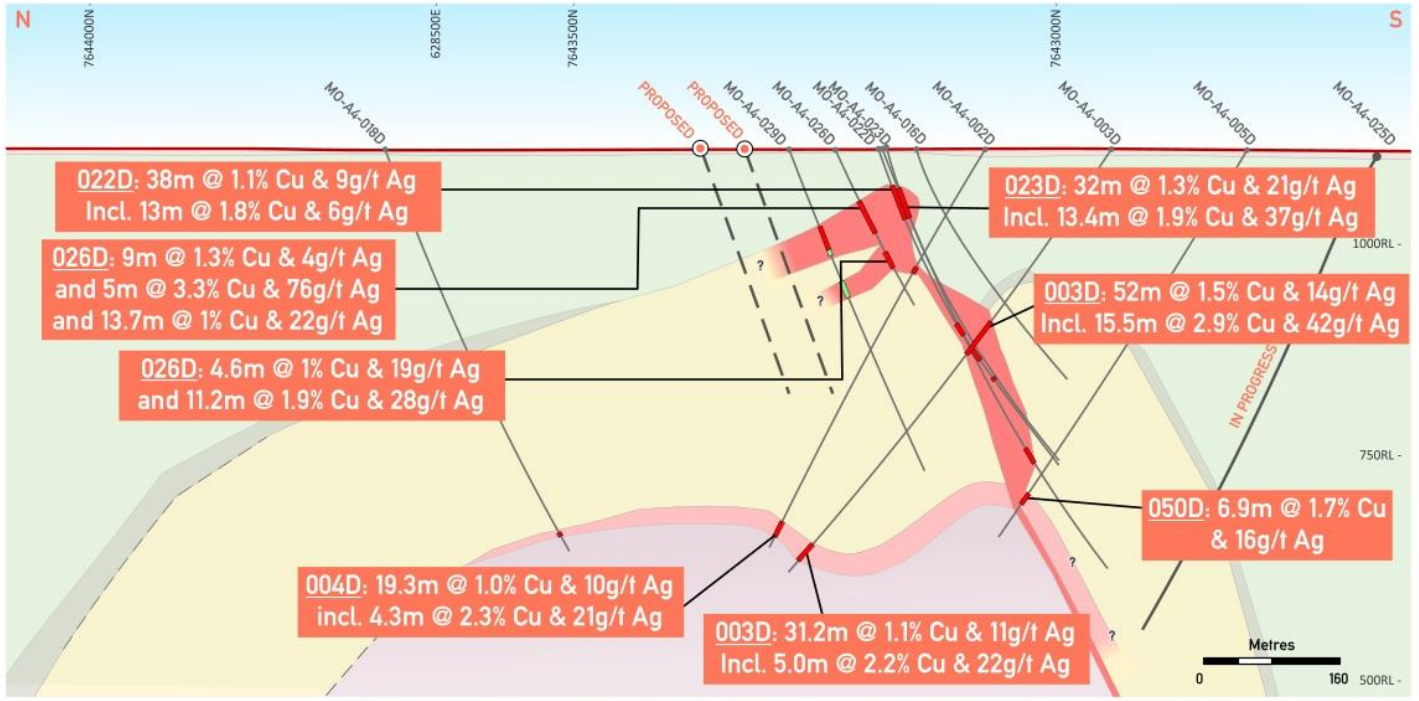
- Significant zone of vein-hosted and disseminated copper intersected at shallow depth with best intercepts in first 5 holes including:
  - **MO-A4-022D: 38m @ 1.1% Cu and 9g/t Ag** from 44m down-hole, including: **13m @ 1.8% Cu and 6g/t Ag** from 44m down-hole; and: **8.3m @ 1.4% Cu and 27g/t Ag** from 62m down-hole
  - **MO-A4-023D: 32m @ 1.3% Cu and 21g/t Ag** from 56m down-hole, including: **13.4m @ 1.9% Cu and 37g/t Ag** from 72m down-hole
  - **MO-A4-024D: 7.3m @ 2.6% Cu and 46g/t Ag** from 43m down-hole; and **6.7m @ 1.8% Cu and 5g/t Ag** from 69m down-hole
  - **MO-A4-026D: 9m @ 1.3% Cu and 4g/t Ag** from 67m-down-hole; and **5m @ 3.3% Cu and 76g/t Ag** from 84m down-hole; and **13.7m @ 1% Cu and 22g/t Ag** from 91.3m down-hole; and **4.6m @ 1% Cu and 19g/t Ag** from 131m down-hole; and **11.2m @ 1.9% Cu and 28g/t Ag** from 139m down-hole
  - **MO-A4-027D 3.8m @ 1.6% Cu and 3g/t Ag** from 83.8m down-hole; and **11m @ 1% Cu and 22g/t Ag** from 93m down-hole; and **5m @ 1% Cu and 22g/t Ag** from 115m down-hole

Cross Section through A4 Dome Located only 8km from T3



Sandfire EMEA | Tshukudu – Unlocking the Broader Opportunity

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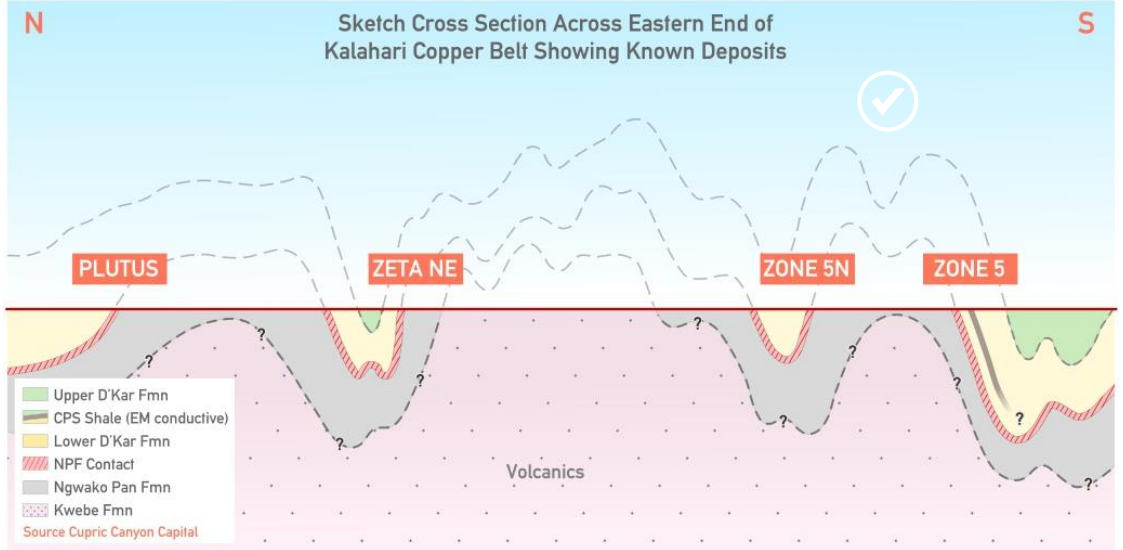
EASTERN END COPPER BELT – Khoemacau

Eroded domes & anticlines, partial calcrete cover, extensive oxidation, strong Cu soil anomalies

20 years exploration, >6Mt Cu in resources

Effective exploration tool : soil geochemistry

Khoemacau currently developing major underground mine at Zone 5



CENTRAL COPPER BELT – Sandfire

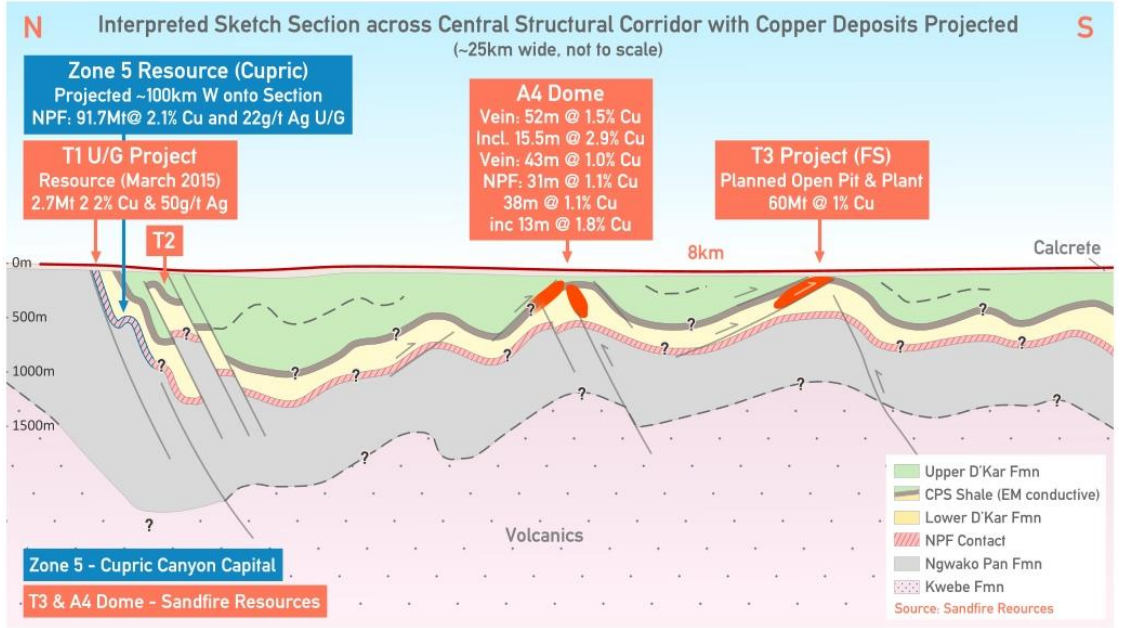
Intact domes & anticlines, extensive calcrete cover

Minor oxidation, subtle Cu/Zn soil anomalies

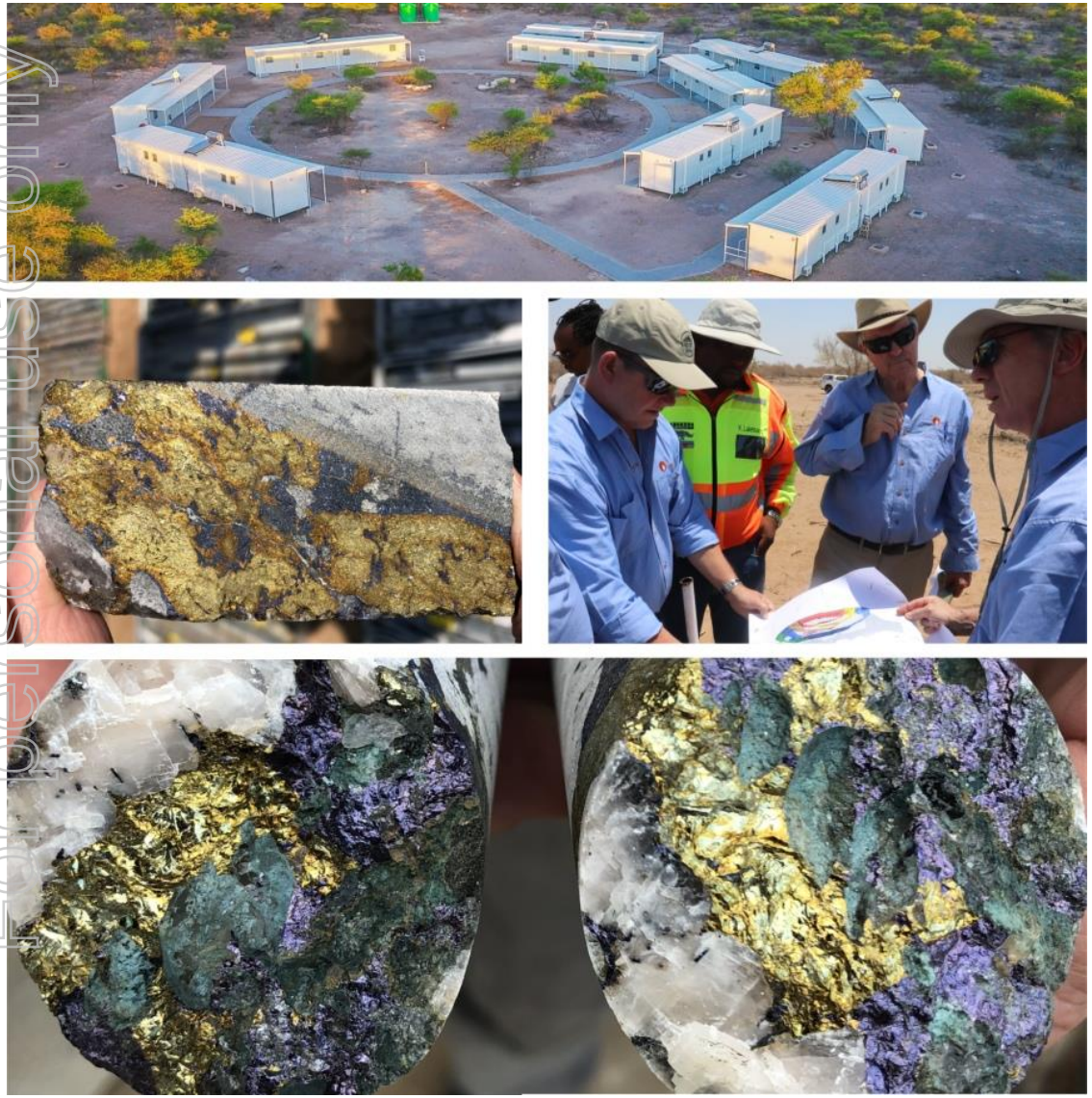
3 years focused on T3, ~0.6Mt Cu in resources

Effective exploration tool : Airborne EM

Many domes and structures identified for drilling



Sandfire EMEA | Tshukudu Operations – Outlook for FY2020



- Optimisation of T3 Feasibility Study underway, including mine scheduling, plant size optimisation
- ESIA approval expected soon with Mining Licence application to follow
- Optimised Feasibility Study and Ore Reserve expected in the June 2020 quarter with Decision to Mine to follow
- Project financing discussions underway
- Expanded exploration program targeting:
  - High-grade satellite discoveries that have potential to expand the scale of T3
  - Increased mineral resources, ore reserves and mine life
  - Major new regional discoveries to unlock the potential of the wider regional land-holding

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Sandfire Resources America Inc (85%)
- Black Butte Copper Project, Montana, USA

Sandfire AMER | Black Butte Copper Project, USA

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- Advanced, high-quality underground copper project in Tier-1 location
- 85% stake in the Black Butte copper project via interest in Sandfire Resources America Inc. (TSX-V: SFR) ~A$60M invested to date
- One of the top-10 undeveloped copper projects worldwide by grade
- Updated NI 43-101 Mineral Resource estimate completed for the Johnny Lee Deposit, following 48 additional diamond drill-holes[1]:
  - Measured and Indicated Resource: **10.9Mt at 2.9% Cu for 311,000t of contained copper** (at a 1.0% Cu cut-off grade)
  - Inferred Resource of **2.7Mt at 3.0% Cu for 80,000t of contained copper** (at a 1.0% Cu cut-off grade)
- Mineral Resource underpins ongoing Feasibility Study and future development decision
- Permitting well advanced with Mine Operating Permit (MOP) for the Johnny Lee deposit found to be "Complete and Compliant" by Montana Department of Environmental Quality (DEQ)
- Draft Environmental Impact Statement (EIS) outlining final permitting steps released by DEQ

1 Refer Sandfire ASX Announcement, dated 30 October 2019 – "Updated Mineral Resource completed for Johnny Lee Deposit, Black Butte Copper Project, USA". Excludes the Lowry Resource.

Sandfire AMER | Black Butte Copper Project – Outlook for FY2020

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- Feasibility Study advanced on highly engineered, state-of-the-art underground mine
- Very small surface footprint – will be 100% reclaimed
- Mine design, layout and geology ensures that water quality and quantity will be protected
- Stringent monitoring and approval process
- Final EIS and Record of Decision pending
- Development decision post EIS/ROD and completion of Feasibility Study

Modern mine design restores the site to original land uses and water flows, fully protecting water and landscapes long term.

Summary | Moving to the Next Level as a Global Mining Company

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- **Strong foundations** with +7 year track record of delivery
- **Record production** in FY19, further growth in FY20
- **Strong** balance sheet
- **Aggregating** quality copper development assets
- **MOD acquisition** adds a third global hub
- **Committed** to organic growth via exploration
- **Strongly** positioned with capacity to grow

Sandfire is a high-margin, low-cost Australian copper-gold producer which has embarked on its next chapter of growth

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Currency in AUD unless otherwise stated.

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Competent Person's Statements

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DeGrussa and Monty Mineral Resource

The information in this report that relates to the DeGrussa and Monty Mineral Resource 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 Ltd 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 Resource and Ore Reserve. 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.

DeGrussa and Monty Ore Reserve

The information in this report that relates to the DeGrussa and Monty Ore Reserve 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 Ltd 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.

Black Butte Mineral Resource

The information in this report that relates to Black Butte Mineral Resource is based on information compiled by Mr Michael J. Lechner who is a Registered Member of SME, a CPG with AIPG, a RPG in Arizona, and a P. Geo. In British Columbia. Mr Lechner is an independent consultant 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 Lechner consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Exploration Results – Tshukudu Exploration

The information in this report that relates to Tshukudu Exploration Results is based on information compiled by Mr Julian Hanna who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hanna is a permanent employee of Sandfire Resources Ltd 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 Hanna 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 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.

SANDFIRE RESOURCES ASX Code- SFR

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Spreading our wings in Botswana

Beginning our transformation to a global, diversified and sustainable metals company

- Optimisation of T3 Feasibility Study underway
- Early exploration success in Botswana

Investor Presentation - Cape Town, South Africa - February 2020