SANDFIRE RESOURCES NL

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DOOLGUNNA PROJECT – MONTY EXPLORATION UPDATE

Thick zone of bornite-bearing massive sulphides intersected in Lower Zone

Highlights:

- **Three horizons of massive sulphides** intersected in step-out hole TLDD0026, 45m along strike from recently reported hole TLDD0021 (7.3 metres of massive sulphides from 286.2m), including a significant intercept of:
    - **19.9 metres of massive sulphides from 340.2m down-hole** (*true width not known at this time, top of intercept is ~286m vertically below surface*)
- The primary mineralisation in TLDD0026 is similar to previous holes in the Lower Zone but also **contains variable amounts of bornite**, a copper mineral which has not previously been encountered in any significant quantities at Doolgunna. Bornite typically has a copper content of ~63% by mass.
- **Drilling continuing to define the extents of the mineralisation at Monty** and to target other prospective areas both in the immediate vicinity and further afield.

Sandfire Resources NL (ASX: SFR; "Sandfire") is pleased to report further encouraging results from ongoing drilling being undertaken at the Monty copper-gold discovery located 10km east of the DeGrussa Copper-Gold Mine on the Springfield Project, part of its farm-in with Talisman Mining Limited (ASX: TLM; "Talisman") (*see Figures 1 and 2*).

Thick zone of massive sulphides intersected in Lower Zone

Diamond hole TLDD0026, which was drilled approximately 45 metres along strike from recently reported hole TLDD0021 (which returned **7.3 metres of massive sulphides** from 286.2m down-hole) and 46 metres up-dip from the halo mineralisation intersected in TLDD0014 (see Figures 2 and 3), has intersected **three horizons of massive sulphides** within the host sequence of the Lower Zone:

- **3.0 metres of massive sulphides** from 325.6m to 328.6m down-hole (*true width not known at this time, top of intercept is approximately 275m metres vertically below surface*);
- **2.4 metres of massive sulphides** from 330.5m to 332.9m down-hole (*true width not known at this time, top of intercept is approximately 279m metres vertically below surface*); and
- **19.9 metres of massive sulphides** from 340.2m to 360.1m down-hole (*true width not known at this time, top of intercept is approximately 286 metres vertically below surface*).

The 19.9 metre intersection of massive sulphides in TLDD0026 is interpreted to be a continuation of the 7.3m (down-hole width) primary mineralisation previously reported from TLDD0021 in the ASX announcement on 2 October 2015 (Figures 3 and 4). The mineralisation in the upper two intersections in TLDD0026 appears to be consistent with that of the higher level, subordinate mineralisation zones intersected in TLDD0021 (Figure 4).

Based on field observations, the mineralogy of the 19.9 metre intercept in TLDD0026 differs from that observed in the previously reported intersections of the primary mineralisation in TLDD0004A, TLDD0005, TLDD0009, TLDD0010, and TLDD0021. The massive sulphides intersected in these earlier holes comprises variable amounts of chalcopyrite (main copper-bearing sulphide mineral), pyrite and pyrrhotite, minor sphalerite and galena, along with silicate and talc gangue minerals (with gold and silver).

The primary mineralisation in TLDD0026 has a similar composition to that of the earlier holes but **also contains variable amounts of bornite (a copper-bearing sulphide)**. Both the bornite and other sulphide minerals are deformed and exhibit features consistent with re-crystallisation, which suggests that modification of the massive sulphide may have occurred during deformation.

Bornite is an important copper mineral and commonly occurs in VMS deposits globally, along with the more common chalcopyrite. Bornite, in isolation, typically has a copper content of approximately 63 per cent by mass.

Further work is required to put the presence of bornite in TLDD0026 into further context and determine its significance in the exploration campaign at Monty and further afield at Doolgunna. Diamond core from TLDD0026 will be despatched for analysis.

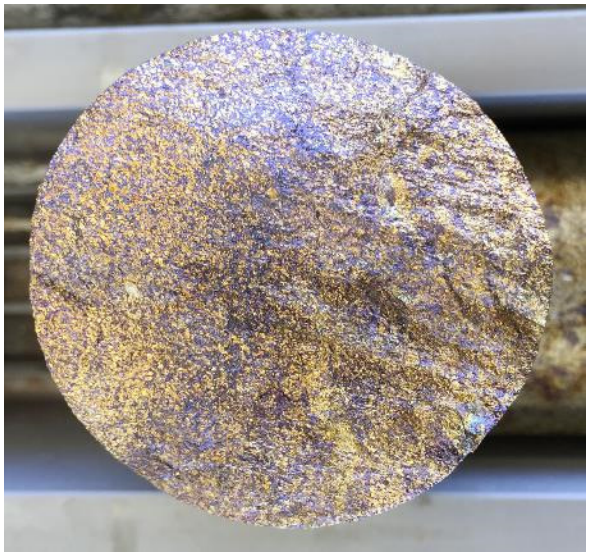

Plate 1. Cross section through NQ2 core showing bornite disseminated in the matrix of the sulphides (359.3 metres down hole).

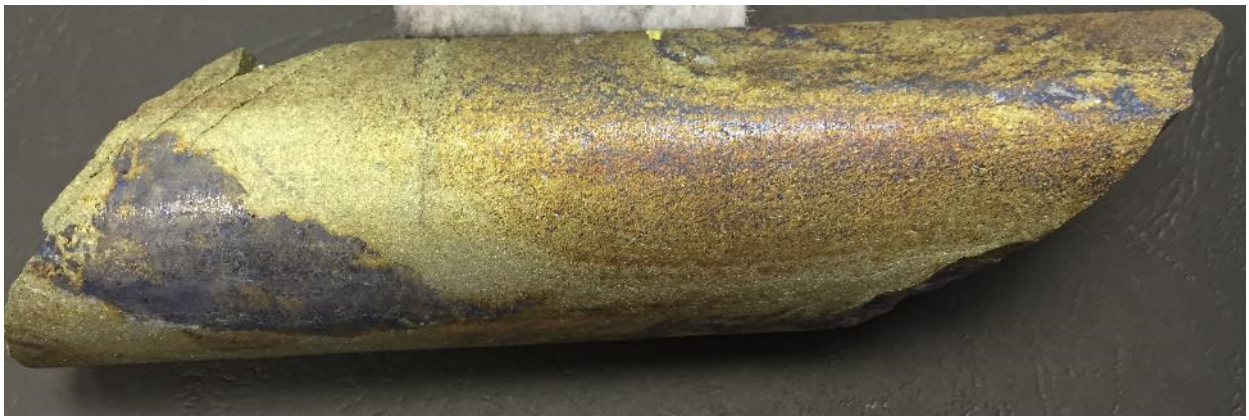

Plate 2. NQ2 core showing bornite in foliation (right) and rimming pyrite and pyrrhotite (left) (351m down-hole).

Photographs of the drill core from the mineralised intervals in TLDD0026 are provided in Appendix 1 to this release.

Additional Lower Zone Drilling Results

Diamond hole TLDD0024, which was drilled approximately 66 metres down-dip of previously reported hole TLDD0010 (which returned intercepts including **10.5m at 18.9% Cu and 3.1g/t Au** from 359.7m down-hole and **4.7m at 12.8% Cu and 2.5/t Au** from 373.6m down-hole), intersected a single horizon of massive sulphides within the Lower Zone host sequence:

- **1.8 metres of massive sulphides** from 445.6m to 447.3m down-hole (*true width not known at this time, top of intercept is approximately 381 metres vertically below surface*).

Diamond hole TLDD0028, which was drilled approximately 37 metres along strike from previously reported hole TLDD0021 (**7.3 metres of massive sulphides** from 286.2m down-hole) and 46 metres from the mineralisation intersected in TLDD0020 (**1.2 metres of massive sulphides** from 272.6m down-hole), intersected the prospective horizon with weak haematite, jasper, and minor disseminated sulphides logged in the core. No massive sulphides were encountered and further drilling will be undertaken down-dip to help define the extents of the mineralisation in this area.

Assay results have also been received for previously reported drill-hole TLDD0014, which was completed 45 metres along strike of TLDD0026 (see Figures 2 and 3). TLDD0014 intersected:

- **0.5 metres at 3.6% Cu and 0.1g/t Au** from 334.2m to 334.7m down-hole *(corresponding to the stratigraphic position of the main mineralised zone*); and
- **3.4 metres at 3.5% Cu and 0.8g/t Au** from 359.4m to 362.8m down-hole (*true widths for both intersections not known at this time*).

Diamond hole TLDD0011, which was drilled along strike of TLDD0010 (*see Figures 2 and 3*), returned an intersection of:

- **0.4 metres at 1.2% Cu and 1.3g/t Au** from 370.9m to 371.3m down-hole (*true width not known at this time*).

Upper Zone Drilling

Reverse Circulation holes TLRC0015, TLRC0016 and TLRC0017 were drilled up-dip of, and at the opposite orientation to, previously reported holes TLRC0004, TLRC0008 and TLRC0009 to test for potential mineralisation (Figure 2 and 3).

No visible mineralisation was observed and the mineralised zone is therefore interpreted to not reach the surface (*see Figure 3*). The spatial position of the host horizon intersected in TLRC0016 and TLRC0017 indicates that the host horizon in the near-surface portion of the Upper Zone may be locally overturned and dip at approximately 75° to the south-east.

As the earlier drill-holes that intersected mineralisation in the Upper Zone (TLRC0004, TLRC0008 and TLRC0009) were drilled at a dip of 60 - 62° to the south-east, the true widths of mineralisation in these holes is anticipated to be significantly lower than the down-hole widths (as previously announced). Additional diamond holes are planned to be drilled below TLRC0004, TLRC0008 and TLRC0009 in order to test for down-dip mineralisation as well as to provide information to accurately constrain the dip of the Upper Zone.

Assay results have been received for drillhole TLRC0009, which returned an intersection of:

- **12.0 metres at 5.7% Cu and 1.8g/t Au** from 133m – 145m down-hole (*true width unknown but anticipated to be significantly less than down-hole widths*).

Management Comment

Sandfire's Managing Director, Mr Karl Simich, said the latest results from the ongoing drilling program at Monty were exciting and demonstrated that the Company's geological understanding of the discovery was continuing to evolve rapidly.

"The thick massive sulphide intersection seen in TLDD0026 is an exciting breakthrough for our team and provides further evidence that we have a strongly mineralised copper-gold system on our hands. The presence of bornite in the drill core, not seen before at Doolgunna in significant quantities, is a significant development although more work is needed to understand its context.

"In the meantime, drilling is continuing to provide valuable information on the overall orientation and extents of the mineralisation in both the Lower Zone and Upper Zone," he said. "As I've said before, this is an unfolding story for Sandfire as we continue drilling both to accurately define what we have at Monty and to begin to step further afield, with the objective of finding the next lenses or clusters of lenses of VMS mineralisation."

Sandfire is earning a 70% interest in the Talisman Mining's Doolgunna Project, which forms part of its Greater Doolgunna Project comprising a 1,700 square kilometre package of contiguous tenements surrounding the DeGrussa Copper Mine.

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Table 1 – Drill-hole Information Summary, Springfield Project

Details and coordinates of all relevant drill collars are provided below:

Hole ID	Depth	Dip	Azimuth	Grid_ID	East	North	RL	Lease ID	Hole Status
TLDD0002A	463	-61°	110°	MGA94_50	743544	7171211	602	E52/2282	Complete
TLDD0004A	817	-60°	148°	MGA94_50	743588	7171281	601	E52/2282	Complete
TLDD0005	478	-62°	139°	MGA94_50	743544	7171210	602	E52/2282	Complete
TLDD0006	554	-62°	140°	MGA94_50	743469	7171174	601	E52/2282	Complete
TLDD0007	589	-62°	138°	MGA94_50	743504	7171271	601	E52/2282	Complete
TLDD0008	688	-62°	138°	MGA94_50	743441	7171223	600	E52/2282	Complete
TLDD0009	472	-61°	140°	MGA94_50	743578	7171190	602	E52/2282	Complete
TLDD0010	433	-62°	142°	MGA94_50	743514	7171138	601	E52/2282	Complete
TLDD0011	472	-62°	141°	MGA94_50	743451	7171092	598	E52/2282	Complete
TLDD0012	598	-62°	140°	MGA94_50	743403	7171155	599	E52/2282	Complete
TLDD0014	399	-62°	143°	MGA94_50	743638	7171231	603	E52/2282	Complete
TLDD0015	376	-62°	146°	MGA94_50	743561	7171073	602	E52/2282	Complete
TLDD0016	274	-61°	147°	MGA94_50	743621	7171119	604	E52/2282	Complete
TLDD0017	236	-62°	146°	MGA94_50	743686	7171166	605	E52/2282	Complete
TLDD0018	340	-62°	146°	MGA94_50	743471	7171054	599	E52/2282	Complete
TLDD0019	552	-62°	141°	MGA94_50	743566	7171329	600	E52/2282	Complete
TLDD0020	340	-61°	141°	MGA94_50	743536	7171106	602	E52/2282	Complete
TLDD0021	331	-62°	144°	MGA94_50	743599	7171152	603	E52/2282	Complete
TLDD0022	304	-62°	141°	MGA94_50	743441	7171035	599	E52/2282	Complete
TLDD0024	571	-60°	141°	MGA94_50	743470	7171172	600	E52/2282	Complete
TLDD0026	409	-59°	141°	MGA94_50	743609	7171209	602	E52/2282	Complete
TLDD0028	441	-62°	143°	MGA94_50	743569	7171129	602	E52/2282	Complete
TLRC0003	544	-61°	144°	MGA94_50	743720	7171393	599	E52/2282	Complete
TLRC0004	306	-62°	142°	MGA94_50	743497	7171025	600	E52/2282	Complete
TLRC0006	318	-62°	143°	MGA94_50	743430	7170973	598	E52/2282	Complete
TLRC0008	294	-62°	143°	MGA94_50	743461	7171001	599	E52/2282	Complete
TLRC0009	265	-62°	141°	MGA94_50	743527	7171050	601	E52/2282	Complete
TLRC0012	210	-62°	143°	MGA94_50	743553	7171017	602	E52/2282	Complete
TLRC0015	138	-60°	320°	MGA94_50	743503	7170953	600	E52/2282	Complete
TLRC0016	120	-58°	317°	MGA94_50	743580	7170985	602	E52/2282	Complete
TLRC0017	120	-60°	318°	MGA94_50	743548	7170968	601	E52/2282	Complete

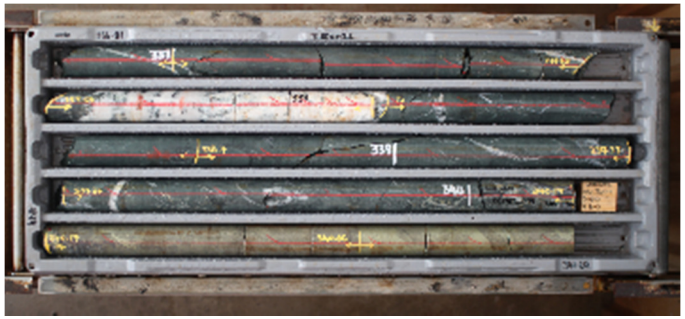
Table 2 – Significant Drill-hole Assay Intersections, Springfield Project

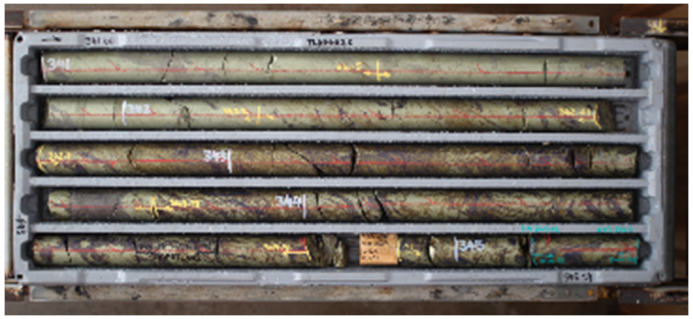
Details of all relevant intersections are provided below:

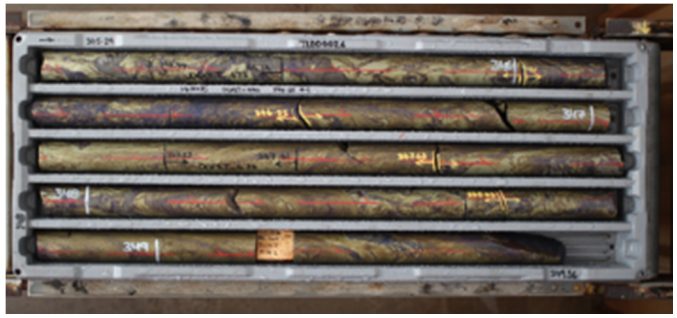
Hole ID	Interval	From (m)	To (m)	Downhole Width (m)	Intersection		
					Cu (%)	Au (g/t)	Zn (%)
TLDD0004A		409.5	426.0	16.5	18.9	2.1	1.5
TLDD0005		417.0	426.2	9.2	11.8	2.9	2.3
TLDD0009	1	343.0	344.0	1.0	8.6	0.3	0.1
	2	363.1	371.0	7.9	8.3	2.4	2.1
	3	385.8	390.6	4.8	4.9	1.1	1.4
TLDD0010	1	355.6	356.1	0.5	1.2	1.4	0.2
	2	359.7	370.2	10.5	18.9	3.1	1.1
	3	373.6	378.2	4.7	12.8	2.5	0.8
TLRC0004	1	107.0	125.0	18.0	5.7	2.4	3.2
	2	158.0	162.0	4.0	4.2	0.7	0.1
TLRC0008	1	89.0	95.0	6.0	7.8	0.9	0.9
	2	112.0	123.0	11.0	15.0	1.9	1.0
TLRC0009		133.0	145.0	12.00	5.7	1.8	2.2

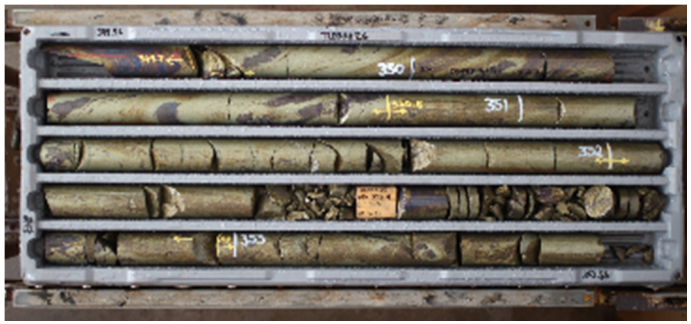
Note: Calculation is based on a 0.5% cut-off, no more than 3m of internal dilution and a minimum composite grade of 1%. Intersection length, Cu (%), Au (ppm), Ag (ppm) and Zn (%) are rounded to 1 decimal point.

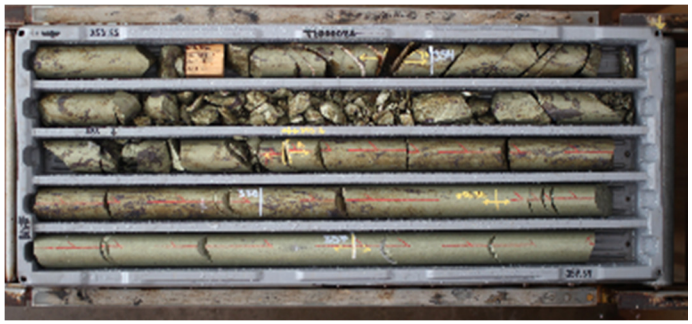
Appendix 1 – TLDD00026 Core Tray Pictures











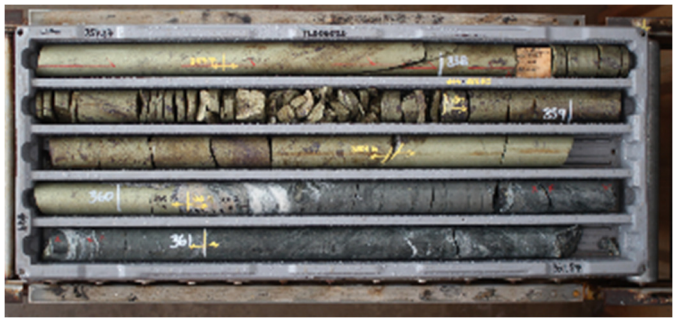


Figure 1 – Sandfire's Greater Doolgunna Project, showing the Springfield Project (farm-in) and location of the Monty mineralisation and Homer prospect

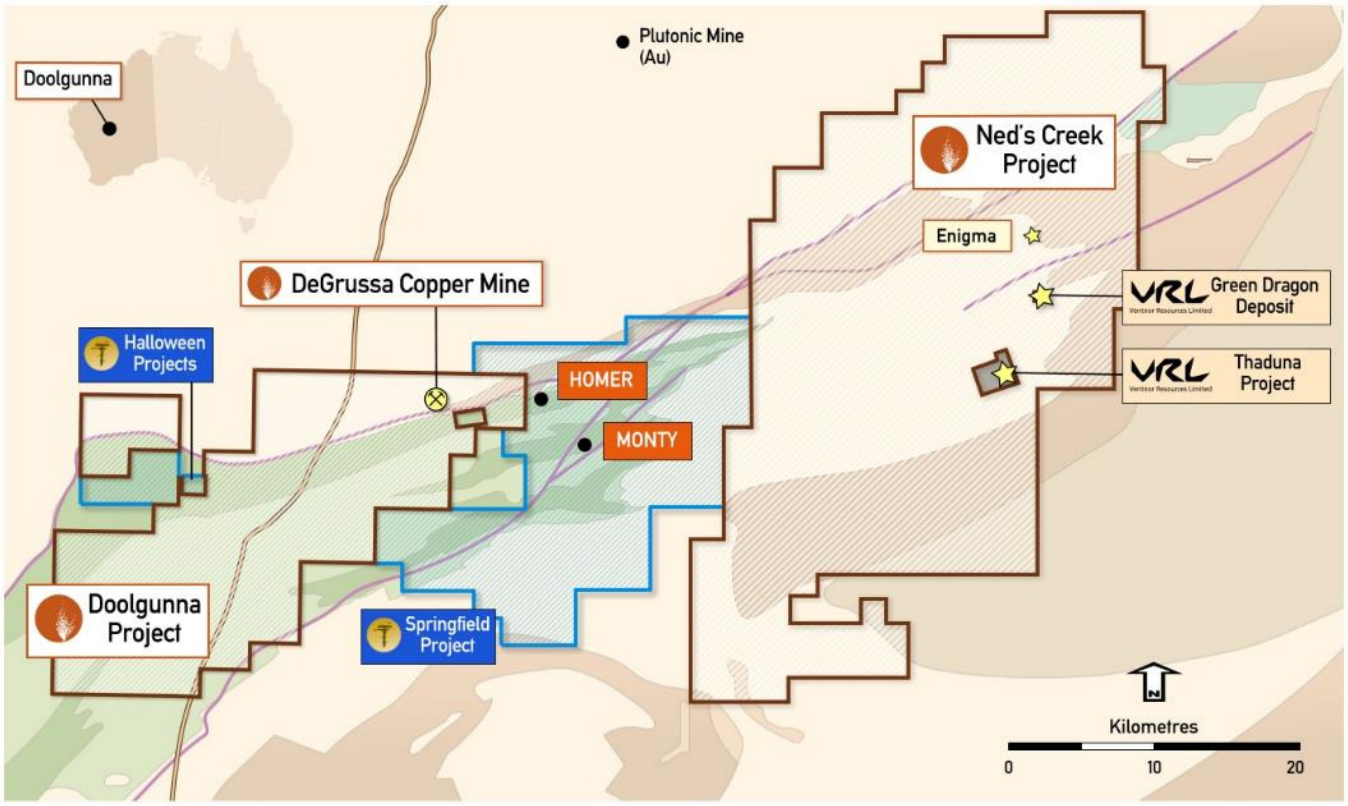


Figure 2 – Monty Prospect showing drill-hole collar locations and interpreted schematic geology

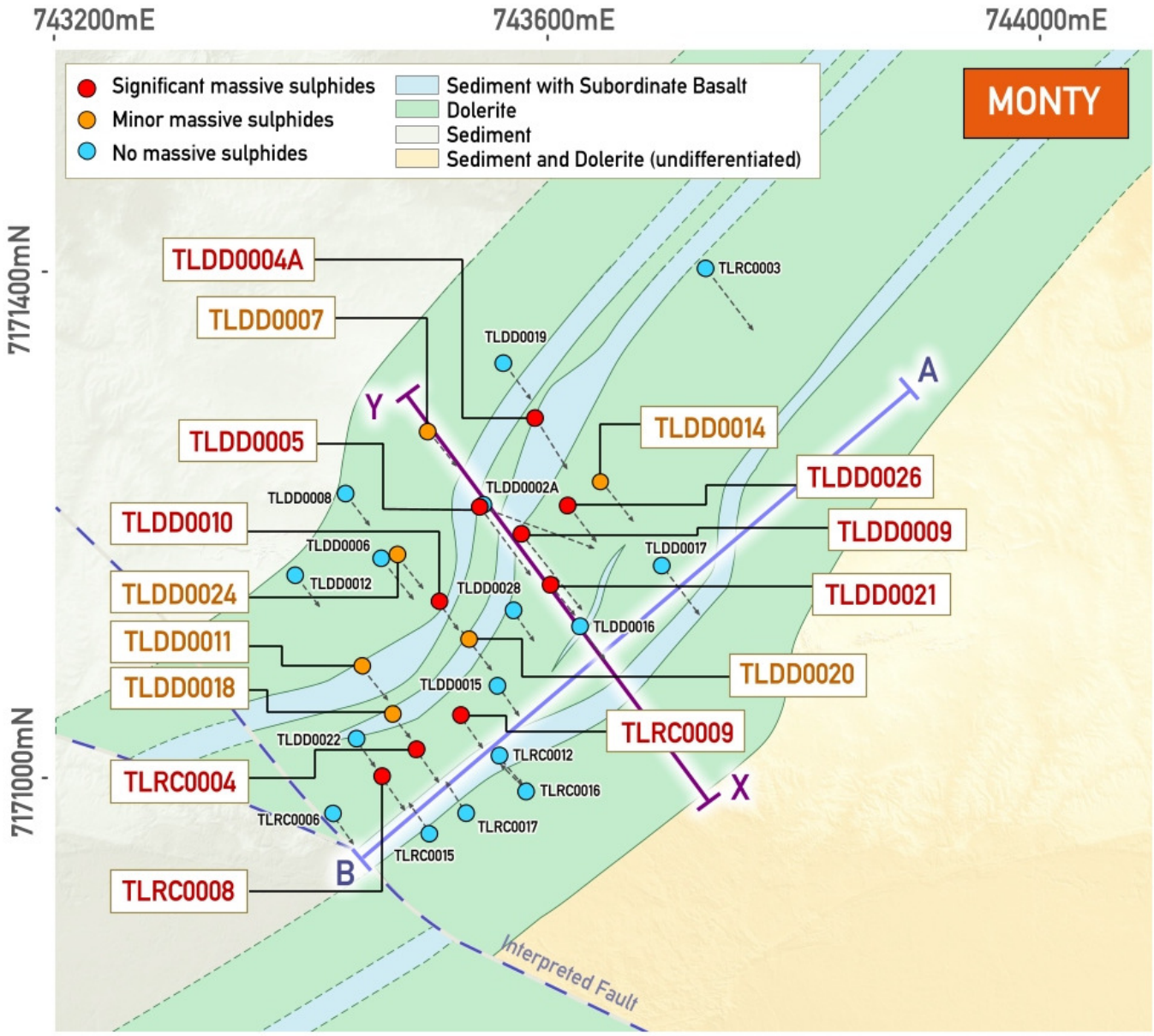


Figure 3 – Vertical Longitudinal Projection and initial interpretation of the Monty Prospect showing drill-hole piercepoints at the top of the primary intercept shown in bold. All intercepts are down-hole widths.

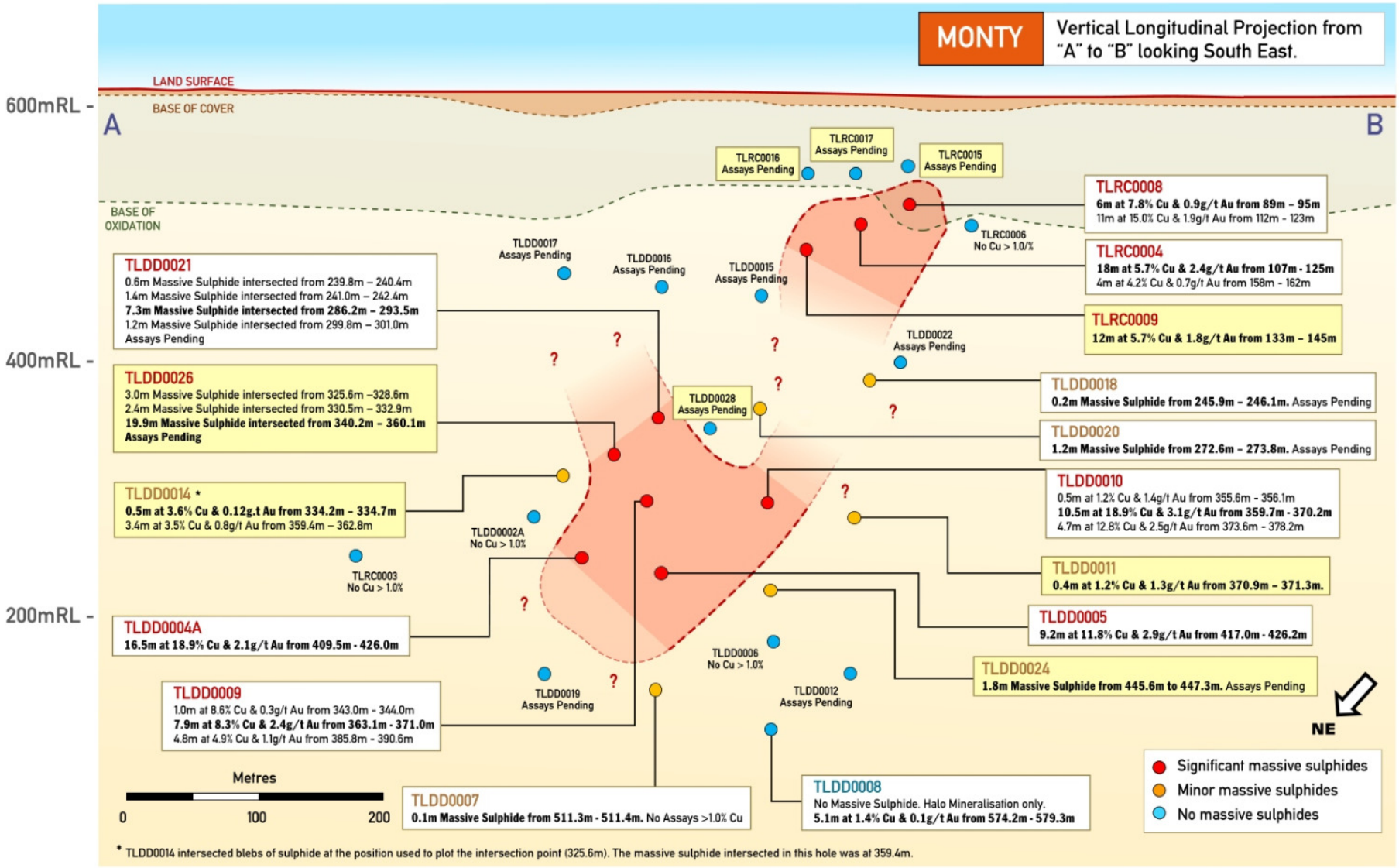
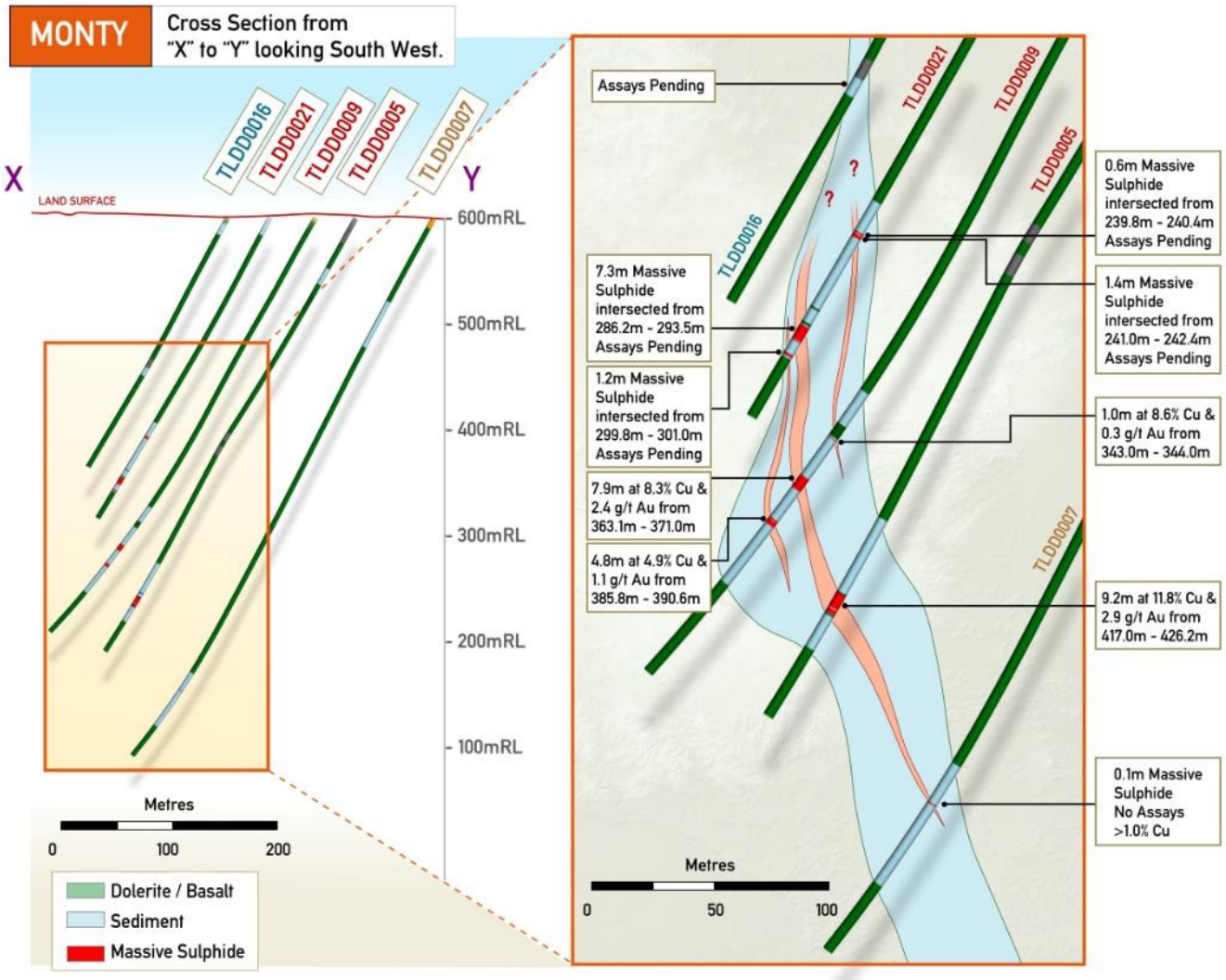


Figure 4 – Interpretive cross-section of the Monty mineralisation (Lower Zone)



Competent Person's Statement – Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr. Shannan Bamforth who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Bamforth is a permanent employee of Sandfire Resources and has sufficient experience that is relevant to the style of 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 Bamforth consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Exploration and Resource Targets

Any discussion in relation to the potential quantity and grade of Exploration Targets is only conceptual in nature. While Sandfire is confident that it will report additional JORC compliant resources for the DeGrussa Project, there has been insufficient exploration to define mineral resources in addition to the current JORC compliant Mineral Resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.

Forward-Looking Statements

Certain statements made during or in connection with this statement contain or comprise certain forward-looking statements regarding Sandfire's Mineral Resources and Ore 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.

Sandfire Resources are currently exploring the defined prospective sequence in its 100% held tenements and within the Talisman Mining earn in and joint Venture agreement

JORC 2012 TABLE 1 – EXPLORATION RESULTS

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Sampling method include half-core sampling of NQ2 core diamond drilling (DD). • RC samples are collected by a cone splitter for single metre samples or a sampling spear for first pass composite samples using a face sampling hammer with a nominal 140mm hole.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Sampling is guided by Sandfire protocols as per industry standard.
	• *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• DD Sample size reduction is through a Jaques jaw crusher to -10mm with a second stage reduction via Boyd crusher to -4mm. Representative subsamples are split and pulverised through LM5. • RC sample are crushed to -4mm through a Boyd crusher and representative subsamples pulverised via LM5. • Pulverising is to nominal 90% passing -75µm and checked using wet sieving technique. • Samples are assayed using Mixed 4 Acid Digest (MAD) 0.3g charge and MAD Hotbox 0.15g charge methods with ICPOES or ICPMS. • Fire Assay is completed by firing 40g portion of the sample with ICPMS finish.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• DD is completed using NQ2 size coring equipment. • RC drilling is with sampling hammer of nominal 140mm hole. • All drill collars are surveyed using RTK GPS with downhole surveying. • All core where possible is oriented using a Reflex ACT II RD orientation tool. • Downhole surveying is undertaken using a gyroscopic survey instrument.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• 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.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Appropriate measures are taken to maximise sample recovery and ensure the representative nature of the samples. This includes diamond core being

Criteria	JORC Code Explanation	Commentary
		reconstructed into continuous intervals on angle iron racks for orientation, metre marking and reconciled against core block markers. • RC sampling is good with almost no wet sampling in the project area. • Samples are routinely weighed and captured into the central secured database.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No sample recovery issues have impacted on potential sample bias.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Geological logging is completed for all holes and representative across the orebody. The lithology, alteration and structural characteristics of core are logged directly to a digital format following procedures and using Sandfire NL geologic codes. Data is imported into Sandfire NL's central database after validation in LogChief™.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Logging is both qualitative and quantitative depending on field being logged. • All cores are photographed.
	• *The total length and percentage of the relevant intersections logged.*	• All drillholes are fully logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• Core orientation are completed where possible and all are marked prior to sampling. Half core samples are produced using Almonte Core Saw. Samples are weighed and recorded.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• RC samples are split using a cone or riffle splitter. A majority of RC samples are dry. On occasions that wet samples are encountered they are dried prior to splitting with a riffle splitter.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• All samples are sorted, dried at 80° for up to 24 hours and weighed. DD samples are then crushed through Jaques crusher to nominal -10mm. A second stage crushing is through Boyd crusher to nominal -4mm. All RC samples are only Boyd crushed to -4mm. • 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 75%µm using wet sieving technique.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• 1:20 grind quality checks are completed for 90% passing 75%µm criteria to ensure representativeness of sub-samples.

Criteria	JORC Code Explanation	Commentary
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• Sampling is carried out in accordance with Sandfire protocols as per industry best practice. • No field duplicates have been taken.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled*	• The sample sizes are considered appropriate for the VHMS and Gold mineralisation types.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Samples are assayed using Mixed 4 Acid Digest (MAD) 0.3g charge and MAD Hotbox 0.15g charge methods with ICPOES or ICPMS. The samples are digested and refluxed with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric acids and conducted for multi elements including Cu, Pb, Zn, Ag, As, Fe, S, Sb, Bi, Mo, Re, Mn, Co, Cd, Cr, Ni, Se, Te, Ti, Zr, V, Sn, W and Ba. The MAD Hotbox method is an extended digest method that approaches a total digest for many elements however some refractory minerals are not completely attacked. The elements S, Cu, Zn, Co, Fe, Ca, Mg, Mn, Ni, Cr, Ti, K, Na, V are determined by ICPOES, and Ag, Pb, As, Sb, Bi, Cd, Se, Te, Mo, Re, Zr, Ba, Sn, W are determined by ICPMS. Samples are analysed for Au, Pd and Pt by firing a 40g of sample with ICP AES/MS finish. Lower sample weights are employed where samples have very high S contents. This is a classical FA process and results in total separation of Au, Pt and Pd in the samples. • The analytical methods are considered appropriate for this mineralisation styles.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• No geophysical tools are used in the analysis.
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Sandfire DeGrussa QAQC protocol is considered industry standard with standard reference material (SRM) submitted on regular basis with routine samples. SRMs and blanks are inserted at a minimum of 5% frequency rate.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Significant intersections have been verified by alternative company personnel.
	• *The use of twinned holes.*	• None of the drillholes in this report is twinned.

Criteria	JORC Code Explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Primary data are captured on field tough book laptops using Logchief™ Software. The software has validation routines and data is then imported into a secure central database.
	• *Discuss any adjustment to assay data.*	• The primary data is always kept and is never replaced by adjusted or interpreted data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Sandfire Survey team undertakes survey works under the guidelines of best industry practice. • All drill collars are accurately surveyed using RTK GPS system within +/-50mm of accuracy (X,Y,Z). • Downhole survey completed by gyroscopic downhole methods at regular intervals.
	• *Specification of the grid system used.*	• Coordinate and azimuth are reported in MGA 94 Zone 50.
	• *Quality and adequacy of topographic control.*	• Topographic control was established LiDar laser imagery technology.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drill spacing is currently defined by geological criteria regarded as appropriate to determine the extents of mineralisation. This is nominally an 80m by 80m spacing. Spacing is shown by in the accompanying tables and collar plans. Some holes are drilled at a closer spacing to determine the edges of mineralisation.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• Drilling is preliminary in its spacing and distribution and is not sufficient to at this stage to support Mineral Resources or Ore Reserves
	• *Whether sample compositing has been applied.*	• No sample compositing have been applied to the Exploration Results.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The drillhole may not necessarily be perpendicular to the orientation on the intersected mineralisation.
	• *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.*	• No significant orientation based sampling bias is known at this time. The drillholes may not necessarily be perpendicular to the orientation of the intersected minerlisation. All reported intervals are downhole intervals not true widths. This will be established with additional drilling

Criteria	JORC Code Explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• 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 a licence transport company in sealed bulker bags. The laboratory receipts received samples against the sample dispatch documents and issues a reconciliation report for every sample batch.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits or reviews of the sampling techniques and data have been completed.

Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• The Talisman project encompasses E52/2282, E52/2313 and E52/2466 which are wholly owned by Talisman Mining Ltd, with no known third party encumbrances. Sandfire is currently farming into the project on a staged basis with the right to earn 70% interest in the project area.
	• *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.*	• All tenements are current and in good standing. • The Talisman tenements are currently subject to a Native Title Claim by the Yungunga-Nya People (WAD6132/98). Sandfire currently has a Land Access Agreement in place with the Yungunga-Nya Native Title Claimants and have assumed management of Heritage Agreements which were executed by Talisman. These agreements allow Sandfire to carry out mining and exploration activities on their traditional land.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Aside from Sandfire Resources and Talisman Mining Limited there has been no recent exploration undertaken on the Talisman Project. • Exploration work completed prior to Talisman's tenure included geochemical soil and rock chip sampling combined with geological mapping. Some targeted RC was completed over gold and diamond targets.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Doolgunna Talisman's Project lies within the Proterozoic-aged Bryah rift basin enclosed between the Archaean Marymia Inlier to the north and the Proterozoic Yerrida basin to the south. • The principal exploration targets at the Doolgunna Projects are the Volcanogenic Massive Sulphide (VMS) deposits located with the Proterozoic Bryah Basin of Western Australia.

		• The discovery of Bornite at Doolgunna is new and its full context and implication is still to be determined.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to Appendix 1 of this accompanying document.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Significant intersections are based on greater than 0.5% Cu and may include up to a maximum of 3.0m of internal dilution, with a minimum composite grade of 1.0% Cu. • Cu grades used for calculating significant intersections are uncut.
	• *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.*	• Minimum and maximum DD sample intervals used for intersection calculation are 0.3m and 1.2m respectively subject to location of geological boundaries. • RC reported intersections are based on a regular 1m sample intervals.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No metal equivalents are used in the intersection calculation. • Where core loss occurs; the average length-weighted grade of the two adjacent samples are attributed to the interval for the purpose of calculating the intersection. The maximum interval of missing core which can be incorporated with the reported intersection is 1m.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.*	• Downhole intercepts of mineralisation reported in this release are from a drillhole orientated perpendicular to a modelled EM plate. The drillhole may not necessarily be perpendicular to the mineralised zone. All widths reported are downhole intervals.
	• *If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.*	• The geometry of the mineralisation, relative to the drillhole, is targeted to be approximately perpendicular. As geological interpretation advances any areas where the drilling is at a low angle to the mineralisation will be tested with holes

		from a more suitable orientation and reported as such.
	• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• All intersections reported in this release are downhole intervals. True widths are not known.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate maps are included within the body of the accompanying document.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• The accompanying document is considered to represent a balanced report. Reporting of grades is done in a consistent manner.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Other exploration data collected is not considered as material to this document at this stage. Further data collection will be reviewed and reported when considered material.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Step-out drilling for along-strike and down-dip extensions of mineralisation continue on 160m x 80m x 80m grid pattern subject to geological and geophysical interpretation. • Additional drilling may include holes targeting the definition of mineralisation extents, this drilling will be on a nominal 40m x 40m grid.