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## 20 July 2015

**COMPANY SNAPSHOT** 

# Monty Drilling Update Step out "pre-collar" RC drill-hole intersects 18 metres of massive sulphides at 108 metres downhole

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#### **Capital Structure**

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ASX: TLM

Talisman Mining Limited (ASX: **TLM** "Talisman") is pleased to announce that Sandfire Resources NL (ASX: **SFR**; "Sandfire") has provided an update on ongoing diamond drilling being undertaken at the Monty Prospect within Talisman's Springfield Project located approximately 10km east of the DeGrussa Copper Mine (see *Figure 1*).

The Springfield Project is subject to an exploration farm-in joint venture between Sandfire and Talisman where Sandfire has the right to earn up to a 70% interest in Talisman's Doolgunna Projects by the expenditure of \$15 million on exploration at the Projects.

An RC drill hole, TLRC0004, which is being drilled at Monty as a pre-collar for a diamond step out drill-hole approximately 135m along strike from the recently reported massive sulphide intercept in TLDD0005, has intersected **18 metres of massive sulphides** from 108.0m to 126.0m down-hole. Note, all widths are down-hole as true widths are not currently known.

Based upon field observations by Sandfire, the massive sulphides intersected in TLRC0004 also contain visible chalcopyrite and will be despatched by Sandfire for assaying.

This new intersection (TLRC0004) is located approximately **135 metres along strike** to the south-west from the massive sulphide intersection reported in TLDD0005 (**9.2 metres** from 417m down-hole (see *TLM ASX announcement* – 14 July 2015) and approximately **200 metres along strike** from the high-grade intersection in TLDD0004A (**16.5 metres @ 18.9% Cu and 2.1 g/t Au** from 409.5m down-hole (see *TLM ASX announcement* – 25 June 2015). The location of the holes is shown in Figure 2.

It is important to note that, while the new intersection in TLRC0004 increases the known footprint of mineralisation at Monty, the continuity with the mineralisation seen in holes TLDD0004A and TLDD0005 is not currently known. Further drilling will be undertaken to determine the geological setting.

Sandfire advise that drilling of TLRC0004 will continue to a planned depth of approximately 400m to provide optimal coupling in planned follow up down-hole electromagnetic (DHEM) surveying.

Drilling of step-out diamond drill-hole TLDD0006, approximately 80 metres along strike to the south-west from the massive sulphide mineralisation intersection reported in TLDD0005, is also continuing towards its target depth.

Assays from TLDD0005 are awaited.



Talisman's Managing Director, Gary Lethridge, said that the discovery of a relatively near surface zone of massive sulphides at Monty was an exciting exploration development.

"This new intercept from RC drilling along strike at Monty is considerably shallower than any previous massive sulphide intersections in the area and extends the known potential footprint of mineralisation in this emerging prospect," Mr Lethridge said.

"While it is early days at Monty, with a considerable amount of work still required to be undertaken in order to understand the geological context and significance of the recent exploration results, this is clearly a very exciting and encouraging development for both Talisman and Sandfire."

#### ENDS

For further information, please contact: Gary Lethridge – Managing Director on +61 8 9380 4230 For media inquiries, please contact: Nicholas Read – Read Corporate on +61 419 929 046

## **Competent Person's Statement**

Information in this ASX release that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Graham Leaver, who is a member of the Australian Institute of Geoscientists. Mr Leaver is a full time employee of Talisman Mining Ltd and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Mineral Resources and Ore Reserves". Mr Leaver consents to the inclusion in this report of the matters based on information in the form and context in which it appear.



## Table 1 – Drill-hole Information Summary, Springfield Project

Details and co-ordinates of the historical drill-hole SPD021 and recent drill holes completed by Sandfire at the Springfield Project, TLDD0001, TLDD0002A, TLDD0003 and TLDD0004A, together with details of step-out drill holes TLDD0005 and TLDD0006 and the new RC hole TLRC0004 are provided below:

Hole ID	Depth	Dip	Azimuth	Grid_ID	East	North	RL	Lease ID	Hole Status
SPD021	553	-60°	180°	MGA94_50	743598	7171437	598	E52/2282	Complete
TLDD0001	1099	-60°	360°	MGA94_50	740146	7174149	589	E52/2313	Complete
TLDD0002A	500	-60°	112°	MGA94_50	743544	7171211	602	E52/2282	Complete
TLDD0003	658	-60°	360°	MGA94_50	740596	7174550	589	E52/2282	Complete
TLDD0004A	817	-60°	148°	MGA94_50	743588	7171281	601	E52/2282	Complete
TLDD0005	478	-62°	139°	MGA94_50	743544	7171211	602	E52/2282	Complete
TLDD0006	Ongoing	-62°	138°	MGA94_50	743479	7171160	602	E52/2282	In Progress
TLRC0004	Ongoing	-62°	143°	MGA94_50	743497	7171025	605	E52/2282	In Progress

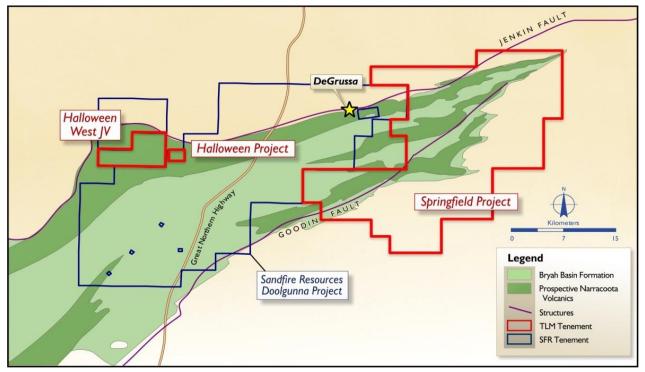


Figure 1: Talisman's Doolgunna Copper-Gold Projects subject to the \$15M Exploration Farm-In Joint Venture with Sandfire Resources NL

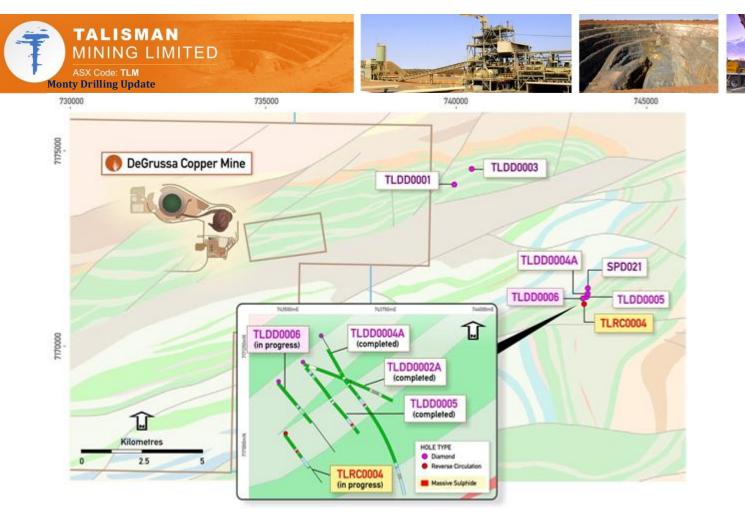


Figure 2 – Plan view showing location of recent exploration drilling relative to the DeGrussa Copper Mine, including the high-grade intersection in TLDD0004A, step-out hole TLDD0005, TLD0006 and the new intersection in TLRC0004.



# Appendix 1 - JORC TABLE 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <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> <li>The sampling method employed by Sandfire is half-core sampling of NQ2 core from diamond drilling (DD)</li> <li>Sampling is guided by Sandfire protocols as per industry standard.</li> <li>Sample size reduction is through a Jaques jaw crusher to -10mm and all samples are 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> <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> <li>Sandfire diamond drilling is completed using NQ2 size coring equipment.</li> <li>All drill collars are surveyed using RTK GPS.</li> <li>All core, where possible is oriented using a Reflex ACT II RD orientation tool.</li> <li>Downhole surveying is undertaken using a gyroscopic survey instrument.</li> </ul>

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Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <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> <li>Sandfire 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 of core recovered.</li> <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 weighed and the information captured into the central secured database.</li> <li>No sample recovery issues have impacted on potential sample bias</li> </ul>
Logging	<ul> <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> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Sandfire Geological logging is completed for all holes and is 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> <li>Logging is both qualitative and quantitative depending on field being logged.</li> <li>All cores are photographed.</li> <li>All drill holes are fully logged.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Sandfire complete diamond core orientation where possible and all core is marked prior to sampling. Half core samples are produced using an Almonte Core Saw. Samples are weighed and recorded.</li> <li>All samples are sorted, dried at 80° for up to 24 hours and weighed. Samples are then crushed through a Jaques crusher to nominal -10mm. A second stage crushing is through a Boyd crusher to nominal -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.</li> <li>1:20 grind quality checks are completed for 90% passing 75%µm criteria to ensure representativeness of sub-samples.</li> <li>Sampling is carried out in accordance with Sandfire protocols as per industry best practice.</li> <li>No field duplicates have been taken.</li> <li>The sample sizes are considered appropriate for VHMS and Gold mineralisation types.</li> </ul>

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Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <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> <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> <li>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 analysis 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.</li> <li>The analytical methods are considered appropriate for this mineralisation styles.</li> <li>No geophysical tools are used in the analysis.</li> <li>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.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Significant intersections have been verified by alternate Sandfire personnel.</li> <li>No twinned holes are being drilled as part of this programme.</li> <li>Primary data is captured on field Toughbook laptops using Logchief™ Software. The software has validation routines and data is then imported into a secure central database.</li> <li>The primary data is always kept and is never replaced by adjusted or interpreted data.</li> </ul>

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Location of data points	<ul> <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 Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The Sandfire Survey team undertakes survey works under the guidelines of best industry practice.</li> <li>All drill collars are accurately surveyed using RTK GPS system within +/-50mm of accuracy (X, Y, Z).</li> <li>Coordinates are based on control previously established by MHR Surveyors which was derived by ties into the Government SSM/BM network.</li> <li>Downhole surveys are completed by gyroscopic downhole methods at regular intervals.</li> <li>Coordinate and azimuth are reported in MGA 94 Zone 50.</li> <li>Topographic control was established from aerial photography using a series of 33 surveyed control points.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>TLDD0004A was the first drill hole to intersect the modelled EM plate.</li> <li>TLDD0005 has intersected massive sulphide mineralisation approximately 70 metres along strike to the south-west from the massive sulphide mineralisation intersected in drill hole TLD0004A.</li> <li>TLRC0004 has intersected massive sulphide mineralisation approximately 135 metres along strike to the south-west from the massive sulphide mineralisation approximately 135 metres along strike to the south-west from the massive sulphide intersection reported in TLDD0005.</li> <li>It is not possible to make any conclusion regarding sample spacing and distribution.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>No significant orientation based sampling bias is known at this time.</li> <li>Drill holes are oriented to intersect a modelled EM plate and interpreted stratigraphy. The drill holes 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	The measures taken to ensure sample security.	<ul> <li>Sandfire ensures 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 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> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Sandfire have not completed any external audits or reviews of the sampling techniques and data







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Section 2 Reporting of Exploration Results (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <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> <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> <li>Diamond and RC drilling by Farm-in Partner Sandfire is on tenements E52/2313 and E52/2282. Tenements E52/2282, E52/2313 and E52/2466 form Talisman's 100% owned Springfield Project, 150km north-east of Meekatharra, WA. Sandfire is currently farming into the project on a staged basis with the right to earn 70% interest in the project</li> <li>All tenements are current and in good standing.</li> <li>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.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Aside from Sandfire Resources and Talisman Mining Limited there has been no recent exploration undertaken on the Talisman Project.</li> <li>Historic exploration work at Springfield completed prior to Talisman's tenure included geochemical soil and rock chip sampling combined with geological mapping. Some targeted RC drilling was completed over gold and diamond targets.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Talisman's Doolgunna 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.</li> <li>The principal exploration targets at the Doolgunna Projects are Volcanogenic Massive Sulphide (VMS) deposits located with the Proterozoic Bryah Basin of Western Australia.</li> </ul>

Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	Refer to Table 1 of this document – Drillhole Information Summary, Springfield Project.
Data aggregation methods	<ul> <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> <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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>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.</li> <li>Cu grades used for calculating significant intersections are uncut.</li> <li>Reported intersections are based on a regular sample interval of 1m or 5m composites 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> <li>No metal equivalents are used in 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> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Downhole intercepts of mineralisation reported in this release are from a drill hole orientated perpendicular to a modelled EM plate. The drill hole may not necessarily be perpendicular to the mineralised zone. All widths reported are downhole intervals.</li> <li>The geometry of the mineralisation, relative to the drill hole, is unknown at this stage.</li> <li>All intersections reported in this release are downhole intervals. True widths are not known.</li> </ul>

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 with scale are included within the body of the accompanying document.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>The accompanying document is considered to represent a balanced report.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	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	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step- out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Sandfire have indicated to TLM that additional down hole geophysics (DHEM) and drilling will occur to define the extent of the intersected mineralisation