

Sulphidic Carbonaceous Shale Intersected in Sandfire Hole DGDD416 Likely source of Off-Hole DHEM Conductor at Homestead Prospect, Doolgunna WA

Enterprise Metals Limited (ASX: ENT – “Enterprise”) wishes to announce that Sandfire Resources NL has advised that diamond drill hole DGDD416, drilled to test a highly conductive, discrete late-time DHEM anomaly at the Homestead Prospect, has intersected at 295.9m (downhole) a sedimentary unit which is a credible source of the DHEM conductor. Late Sunday afternoon the hole was still underway with last core observed at 312m.

The hole has encountered strongly sulphidic, cherty, carbonaceous shale, and the sulphides are mostly finely laminated pyrrhotite + minor pyrite + trace chalcopyrite (<2%). The total sulphide content of this rock unit ranges up to 25%. Sandfire interprets this sedimentary unit to possibly represent a discrete local basin, as there is significant facies variation and soft sediment deformation within the unit.

Hole DGDD416 at the Homestead Prospect was collared within Sandfire’s 100% owned Exploration Licence 52/1715 and terminated within Enterprise’s 100% owned Exploration Licence 52/2049, which is subject to a farm-in and joint venture agreement with Sandfire.

A “Preliminary Summary Log” supplied by Sandfire for hole DGDD416 is attached below, and a schematic section of the holes and DHEM conductor is shown overleaf in Figure 1.

DGDD416	
Current Depth	312m
Target depth downhole	300-310m
Skeleton Geology log	<p>93.4 – 218m – Dolerite</p> <p>218 – 221.4m – Siltstone</p> <p>221.4 – 223.5 – Basalt</p> <p>– 223.5 – 268.5 – Mixed interval of laminated siltstones, laminated and disseminated sulphide and nodular to laminated chert. Sulphide ranges from % consists of roughly equal proportions of Pyrite, Pyrrhotite and minor chalcopyrite (<2%) .</p> <p>268.5 – 278.5 – Siltstone + nodular and laminated chert</p> <p>278.5 – 280.2 – Basalt</p> <p>280.2 – 283.5 – Siltstone</p> <p>– 283.5 – 292.3 - Mixed interval of laminated siltstones, laminated and disseminated sulphide and nodular to laminated chert. Sulphide ranges from % consists of roughly equal proportions of Pyrite, Pyrrhotite and minor chalcopyrite (<2%) .</p> <p>292.3 – 295.9 – Basalt</p> <p>– 295.9 – 312 - Mixed interval of carbonaceous, laminated siltstones, laminated disseminated sulphide and nodular to laminated chert. Sulphide ranges from % consists of roughly equal proportions of Pyrite, Pyrrhotite and minor chalcopyrite (<3%).</p>

Figure 1. Schematic Section Showing DGDD415 & DGDD416, with DHEM Conductor

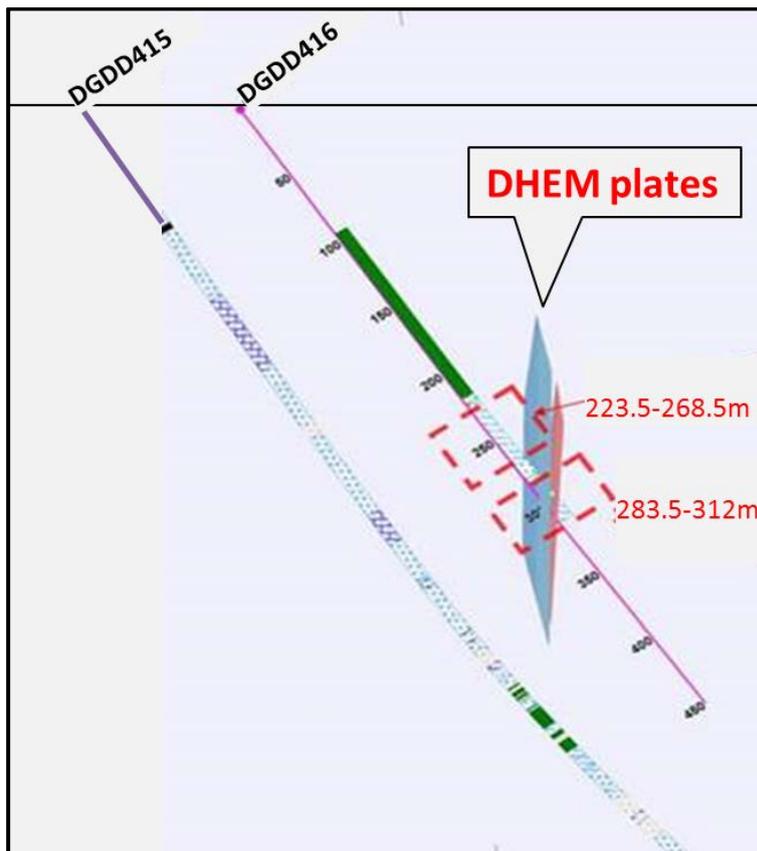


Table 1: Sandfire Drill Hole Collars

Hole Number	Easting*	Northing*	RL	Dip	Azimuth
DGDD415	723165	7157663	555.02	-62	147.7
DGDD416	723166.9	7157586	555	-62	157.7

Plate 1. Core from Sandfire Hole DGDD416 at 294.3m Downhole



ABOUT THE SANDFIRE - ENTERPRISE FARM-IN & JV AGREEMENT

On 12th October 2016, Sandfire and Enterprise entered into a farm-in agreement over Enterprise’s entire Doolgunna Project which covers over 60km of strike of the southern boundary of the Bryah Basin and the northern part of the Yerrida Basin. Sandfire is initially required to spend a minimum of \$1.5M over 2 years. After \$1.5M has been spent, Sandfire has the option to sole fund exploration and earn a 75% interest in the project by discovering and defining Mineral Resources of at least 50,000 tonnes Cu metal or equivalent. Following this discovery, Enterprise and Sandfire would form a joint venture and fund their respective interests.

Sandfire advised Enterprise on 13th April 2017 that it had commenced an extensive ~600 aircore drill hole program on a 400m x 100m spacing over the 10 strike kilometres of the favourable volcano-sedimentary sequence interpreted to belong to the Karalundi Formation, which is host to Sandfire’s DeGrussa and Monty copper/gold deposits. This program is still in progress.

Sandfire also signalled their intention to drill two 600m deep drill holes [reverse circulation (RC) with diamond core (DC) tails] over the next few months, with one hole at the Vulcan West EM target area and one hole testing the Vulcan Regolith target. (Refer Figure 2 below)

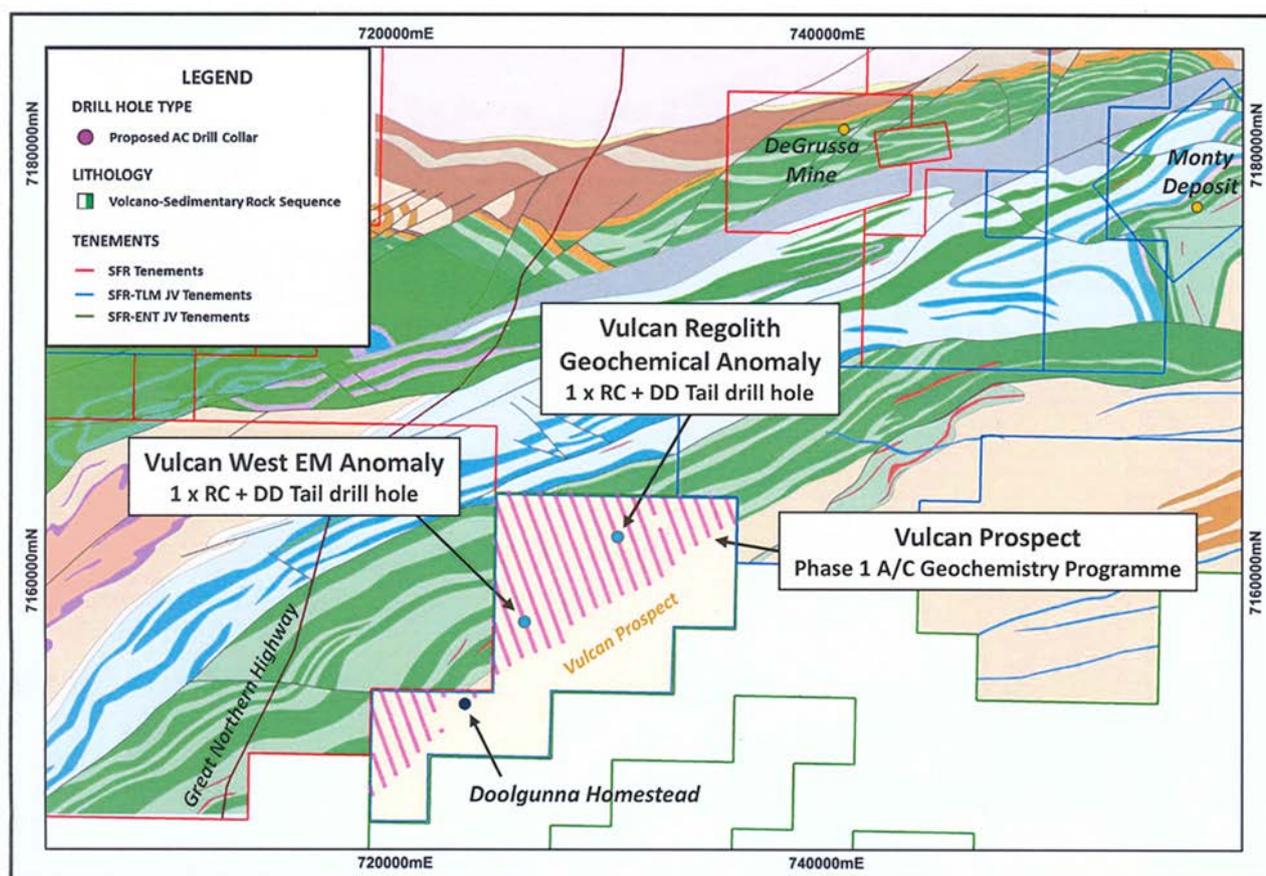


Figure 2. Sandfire’s Vulcan Prospect Exploration Plan over Geology

ABOUT ENTERPRISE METALS LTD

Enterprise Metals Limited (ASX: ENT) was incorporated in January 2007 as a public company and was admitted to the ASX on 20th June 2007. Enterprise has 315,133,979 million Shares on issue, and 2 million (5 cent) Options with an expiry date of 10th August 2017, and the present market capitalisation is approximately \$15.7 million.

The Company has four main gold/ base metal projects in Western Australia, two of which are funded by partners. The Doolgunna Project is managed and operated by Sandfire Resources NL under a farm-in agreement dated 12th October 2016. The Fraser Range Project, in which Enterprise holds a 30% interest free carried to bankable feasibility stage, is managed and operated by Apollo Minerals Limited (ASX: AON), which holds a 70% interest. The Darlot and Yalgoo Projects have gold and base metal targets that require drill testing.

Enterprise also holds a 7.9% interest (12 million shares) in **Alto Metals Limited** (ASX: AME, or “Alto”). On 23rd June 2016 Alto announced that it had acquired a 100% interest in Sandstone Exploration Pty Ltd, the holder of tenements covering the 723km² and the majority of the Archaean Sandstone Greenstone Belt in Western Australia, which has produced over 1.3 million ounces of gold. Enterprise’s 12 million Alto shares have a current fair market value of \$0.9M based on the AME share price at market close on 16th June 2017.

Further Information

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Competent Persons statement

The information in this report that relates to Exploration Results is based on information supplied by Sandfire Resources NL and compiled by Mr Dermot Ryan, who is an employee of Xserv Pty Ltd and a Director and security holder of the Company. Mr Ryan is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ryan consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this report that relates to Geophysical Exploration Results is based on information supplied by Sandfire Resources NL and compiled by Mr Barry Bourne, who is employed as a Consultant to the Company through geophysical consultancy Terra Resources Pty Ltd. Mr Bourne is a fellow of the Australian Institute of Geoscientists and a member of the Australian Society of Exploration Geophysicists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bourne consents to the inclusion in the report of matters based on information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 report

19 June 2017 – Doolgunna Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> • Sampling methods employed by Sandfire include half-core sampling of NQ2 core from 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. • Sampling is guided by Sandfire DeGrussa protocols and QAQC procedures as per industry standard. • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. • 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. • RC sampling is good with almost no wet sampling in the project area. • Samples are routinely weighed and captured into the central secured database. • No sample recovery issues have impacted on potential sample bias.
Logging	<ul style="list-style-type: none"> • Sandfire 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 the central database after validation in LogChief™. • Logging is both qualitative and quantitative depending on field being logged. • All diamond drill core is digitally photographed and stored. • All drill holes are fully logged.

Section 1 Sampling Techniques and Data (cont'd)

Criteria	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • Sandfire diamond core orientation is completed 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 • All samples are sorted, dried at 80° for up to 24 hours and weighed. DD samples are crushed through Jaques crusher to nominal -10mm. A second stage crushing is through Boyd crusher to nominal -4mm. 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 75µm using wet sieving technique. • 1:20 grind quality checks are completed for 90% passing 75µm criteria to ensure representativeness of sub-samples. • Sampling is carried out in accordance with Sandfire protocols as per industry best practice. No field duplicates have been taken. • The sample sizes are considered appropriate for the VHMS and Gold mineralisation types.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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 • This target was identified from an amalgamation of anomalous responses in FLEM and MLEM surveys conducted by Sandfire and Enterprise, respectively, in 2015. • Surface Fixed Loop Electromagnetic (FLEM) geophysical surveys have been conducted by Sandfire at the Homestead Prospect. Survey parameters include: <ul style="list-style-type: none"> ○ Vortex VTX – 100 transmitter, SMART fluxgate sensor and SMARTem receiver ○ 1000m x 1200m single turn loop • Surface Moving Loop Electromagnetic (MLEM) geophysical surveys have been conducted by Enterprise at the Vulcan Prospect. Survey parameters include: <ul style="list-style-type: none"> ○ Vortex VTX – 100 transmitter, SMART fluxgate sensor and SMARTem receiver ○ 200m x 200m twin- turn loop • Downhole Electromagnetic (DHEM) Geophysical Surveys have been completed by Sandfire. Geophysical survey parameters include: <ul style="list-style-type: none"> ○ Merlin Geophysical Solutions MT-200 transmitter, DigiAtlantis probe and receiver ○ 300m x 300m single turn loop. • 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	<ul style="list-style-type: none"> • Significant intersections have been verified by alternative company personnel. • None of the drill holes in this report is twinned. • 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. • The primary data is always kept and is never replaced by adjusted or interpreted data.

Section 1 Sampling Techniques and Data (cont'd)

Criteria	Commentary
Location of data points	<ul style="list-style-type: none"> • 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. • MGA94 Zone 50 grid coordinate system is used. • Topographic control was established LiDar laser imagery technology.
Data spacing and distribution	<ul style="list-style-type: none"> • DGDD416 is the first drill hole to intersect the modelled EM plate. • As DGDD416 is the first drill hole to intersect the modelled EM plate. It is not possible to make any conclusions regarding sample spacing and distribution. • Sampling intended. Not applicable to this release.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • The drill hole was orientated to intersect the modelled geophysical plate and may not necessarily be perpendicular to the orientation on the intersected mineralisation. • No significant orientation based sampling bias is known at this time. The drill hole may not necessarily be perpendicular to the orientation of the intersected mineralisation. • All reported mineralised intervals are downhole intervals not true widths.
Sample security	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Sampling intended. Not applicable to this release.

JORC Code, 2012 Edition – Table 1 report

19 June 2017 – Doolgunna Project

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • Diamond drilling by Farm-in Partner Sandfire Resources NL at the Homestead Prospect referred to in this report is on tenement E52/2049, granted to Murchison Exploration Pty Ltd (MEPL) on 27th October 2008. MEPL is a wholly owned subsidiary of Enterprise Metals Ltd. • This tenement is part of Enterprise's Doolgunna Project, and Sandfire is managing and funding all exploration. (Refer to terms of Farm-In and Joint Venture Agreement in main body of this report) • The Project is centred ~120km north-east of Meekatharra, in Western Australia. These tenements fall within the Doolgunna pastoral lease managed by the WA Department of Parks & Wildlife. • All Doolgunna Project tenements are current and in good standing.
Exploration done by other parties	<ul style="list-style-type: none"> • Exploration work on E52/2049 at the Homestead Prospect by Enterprise included a detailed fixed wing airborne magnetic survey in 2007, re-assaying of pulps from a 1km x 1km spaced Maglag geochemical survey in 2009, a heli borne VTEM survey in 2009, 100m x 100m soil sampling and multielement geochemical analysis, and a 400m line spaced Slingram Moving Loop EM (MLEM) survey conducted in 2015.
Geology	<ul style="list-style-type: none"> • Enterprise'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. • The principal exploration targets at the Doolgunna Project are Volcanogenic Massive Sulphide (VMS) deposits located with the Proterozoic Bryah Basin of Western Australia.
Drill-hole Information	<ul style="list-style-type: none"> • Refer to Table 1 in main body of Report: Drill-hole information summary Homestead Prospect
Data aggregation methods	<ul style="list-style-type: none"> • Not applicable as no new drilling intersections reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • Not applicable as no new drilling intersections reported.
Diagrams	<ul style="list-style-type: none"> • Appropriate maps with scale are included within the body of the accompanying document.
Balanced reporting	<ul style="list-style-type: none"> • The accompanying document is considered to represent a balanced report.
Other substantive exploration data	<ul style="list-style-type: none"> • Down Hole Electromagnetic (DHEM) geophysical survey results are discussed in the body of the document.
Further work	<ul style="list-style-type: none"> • Sandfire has indicated to Enterprise that follow-up drill hole DGDD416 will be completed shortly targeting the off-hole anomaly identified from DHEM survey in drill-hole DGDD415. • Drill hole DGDD416 will be logged and selectively cut and assayed as required,