

## Completion of Diamond Drilling at Lamil – Paterson Province

- **Two diamond drill holes have been completed at the Dune Prospect (“Dune”) part of the 100% owned Lamil copper-gold project (“Lamil”), located 25km from the Telfer copper-gold mine**
- **The two holes (ETG0244 & ETG0245) were designed to test for lateral and down plunge extensions of the prospective package intersected in ETG0243 that contained stacked, copper-gold reefs (see ASX release 16 November 2021)**
- **Initial observations confirm the geological model with multiple veins containing sulphides (pyrite and chalcopyrite) intersected within the prospective package in both holes**
- **In addition, a new steep vein orientation striking sub-parallel to drilling was observed in ETG0244 which may represent a new untested target**
- **The drill holes are being cased for downhole EM to test for off-hole conductive features that could be concentrations of sulphide associated with Cu-Au mineralisation at Dune**
- **Initial assay results are expected in November/December 2022**

The directors of Encounter Resources Ltd (“Encounter” / “the Company”) are pleased to advise that diamond drilling has been completed at Lamil in the Paterson Province of WA.

**Commenting on diamond drilling at Lamil, Managing Director Will Robinson said:**

“Initial observations indicate that the EIS co-funded diamond drill program at Dune has extended the target package of interbedded siltstones analogous to Telfer’s Upper Malu formation. Drillhole ETG0244 intersected this thick prospective package with multiple quartz carbonate veins containing sulphides (dominantly pyrite and minor chalcopyrite) from ~355m depth. The hole also contained a new steep vein set which may represent a new untested target at Dune.

The drill holes are being cased for a downhole EM survey to test for off-hole conductive features which may represent concentrations of sulphides often associated with copper-gold mineralisation at Dune.”

### **Background**

Lamil covers an area of ~61km<sup>2</sup> and is located 25km northwest of the major copper-gold mine at Telfer, owned by Newcrest Mining Ltd (ASX:NCM). Lamil is adjacent to a major regional gravity lineament which marks the location of an interpreted significant crustal scale structure that would have acted as a pathway for mineralising fluids during the formation of the Proterozoic aged deposits.

The Dune prospect is located in the northwest of the Lamil project and consists of a laterally extensive copper-gold system, outlined by broad spaced RC drilling over 1km of strike (Figure 1).

The mineralisation at Dune is hosted in metasedimentary rocks of the Proterozoic Lamil group which also host the Telfer, Havieron and Winu copper-gold deposits. Dune is situated close to the intersection of the prospective Upper Malu formation and the interpreted fold axis in the north western part of the Lamil Dome.

## Diamond Drilling at Dune & Elsa

Prior drilling at Dune intersected multiple, stacked, copper-gold reefs in drill hole ETG0243 within a thick prospective package of interbedded siltstones analogous to Telfer's Upper Malu formation (see ASX release 16 November 2021).

The two holes (ETG0244 & ETG0245) that were completed in the current program were designed to test for lateral and down plunge extensions of the prospective package intersected in ETG0243.

Initial observations confirm the geological model with both holes intersecting the target package as well as multiple veins containing sulphides (pyrite and chalcopyrite).

Drillhole ETG0244 intersected the prospective package of altered interbedded siltstones and sandstones from 355m to 474m downhole. Initial observation of the veining within this zone has noted multiple (<1m) quartz-quartz carbonate veins orientated sub-parallel to bedding and are similar to the mineralised veins seen in ETG0243. In addition, a new steep vein orientation striking sub-parallel to drilling was observed in the hole which may represent a new untested target.

ETG0245 confirmed the dip of the north eastern flank of the Lamil Dome and intersected the prospective package at 159m. The package again contained altered siltstones and sandstones. This hole contained less veining throughout the target package but did intersect a 3.1m wide quartz carbonate vein with blebby pyrite from 262m. The hole ended in quartzite at 355m.

Diamond drilling was also completed to test a discrete gravity anomaly at the Elsa prospect also part of Lamil. This hole (ETG0246) intersected a folded sequence of metasediments containing minor pyrrhotite and was completed to 301.1m.

Logging and sampling of the three diamond drill holes is in progress prior to submission for chemical analysis.

The diamond drill program at Lamil is co-funded, up to \$220,000, under the WA Government's Exploration Incentive Scheme ("EIS").

## Next Steps

ETG0244 and ETG0245 are being cased for downhole EM to assess the proximal area for conductive features that could represent sulphide accumulations often associated with copper-gold mineralisation at Dune.

Assay results from this program are expected in November/December 2022.

## Cautionary Statement

The references to the presence of alteration minerals such as sulphides within quartz veins observed in the Lamil drilling are not considered to be a proxy or substitute for laboratory analyses. Copper-gold mineralisation within the Paterson Province is commonly found within quartz veins that may or may not contain alteration minerals including sulphide minerals. Laboratory analysis will be required to determine if any of the veined and altered zones noted in these drill holes are copper-gold bearing.

Hole_ID	Hole_Type	MGA_Grid_ID	MGA_East	MGA_North	MGA_RL	Azimuth	Dip	EOH Depth
ETG0244	Diamond	MGA94_51	388001	7613188	270	40	-65	672.8
ETG0245	Diamond	MGA94_51	388466	7613445	270	220	-75	355.1
ETG0246	Diamond	MGA94_51	392772	7609387	270	180	-75	301.1

Table 1: Collar locations and drill hole information of completed diamond holes at Lamil



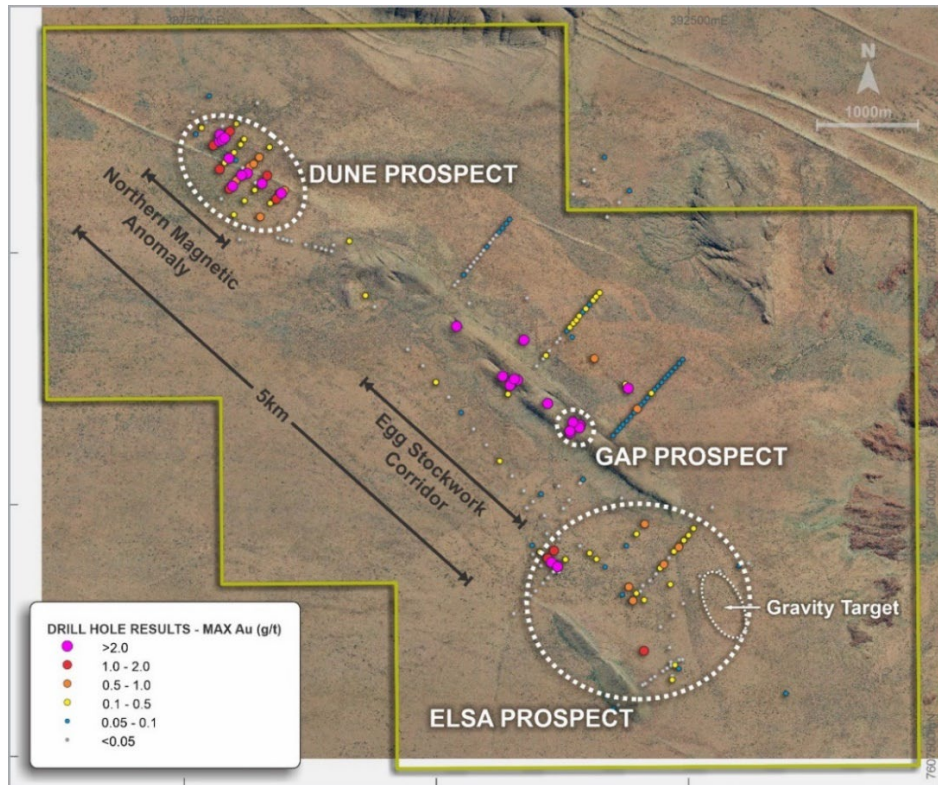


Figure 1 – Image showing the prospect locations at Lamil including Dune in the NW of the Lamil dome and the location of the Elsa gravity target in the SE of the Dome. Drill hole collars displaying max Au g/t are also shown.

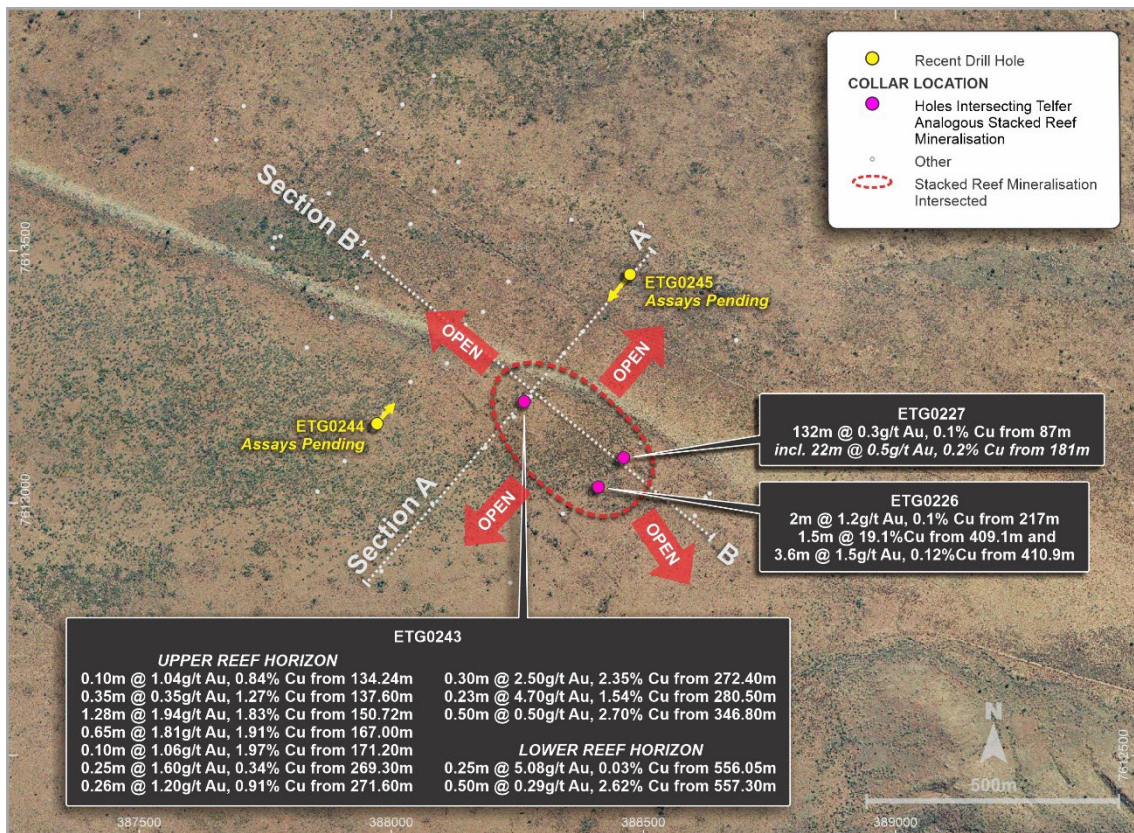
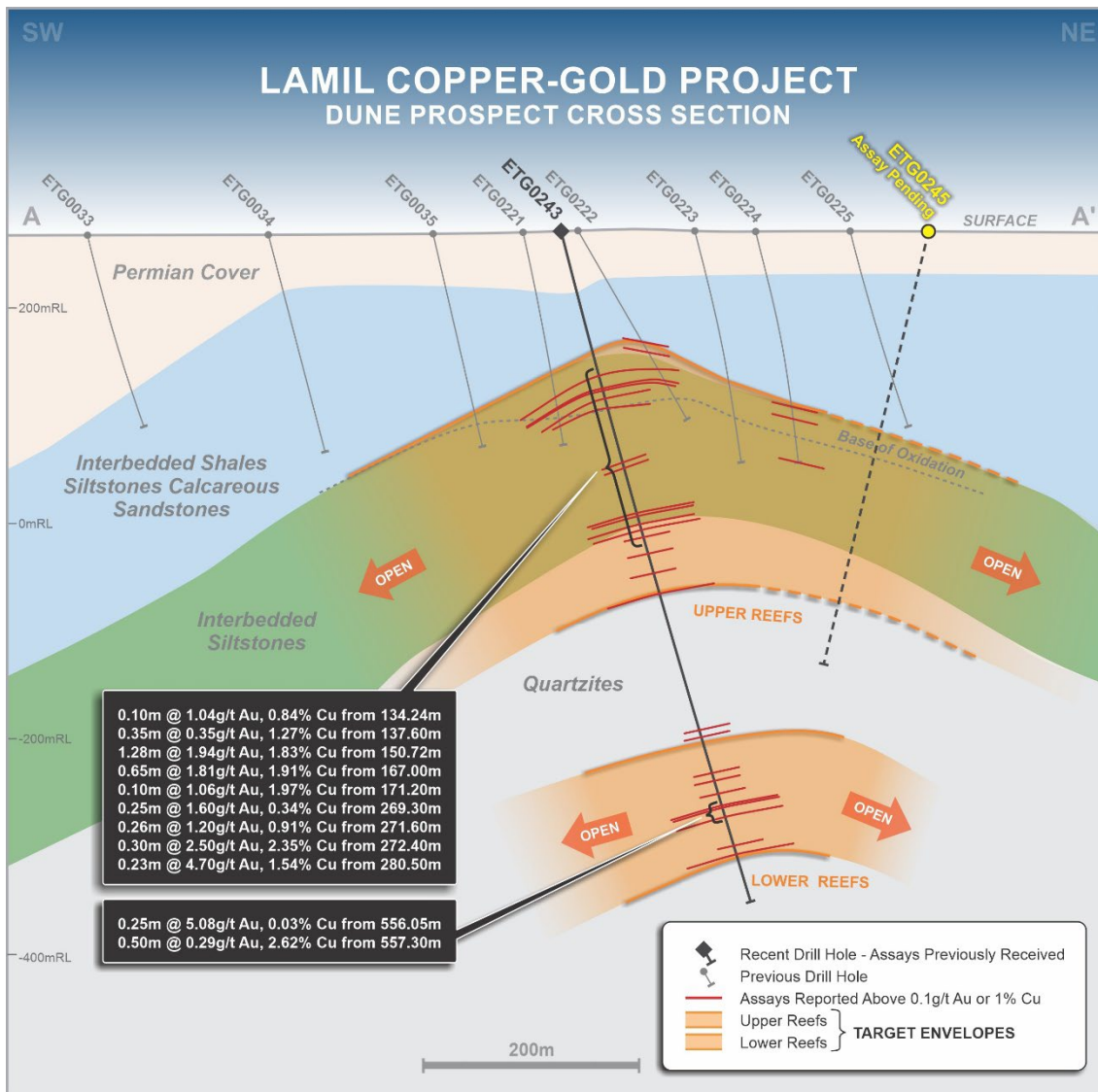
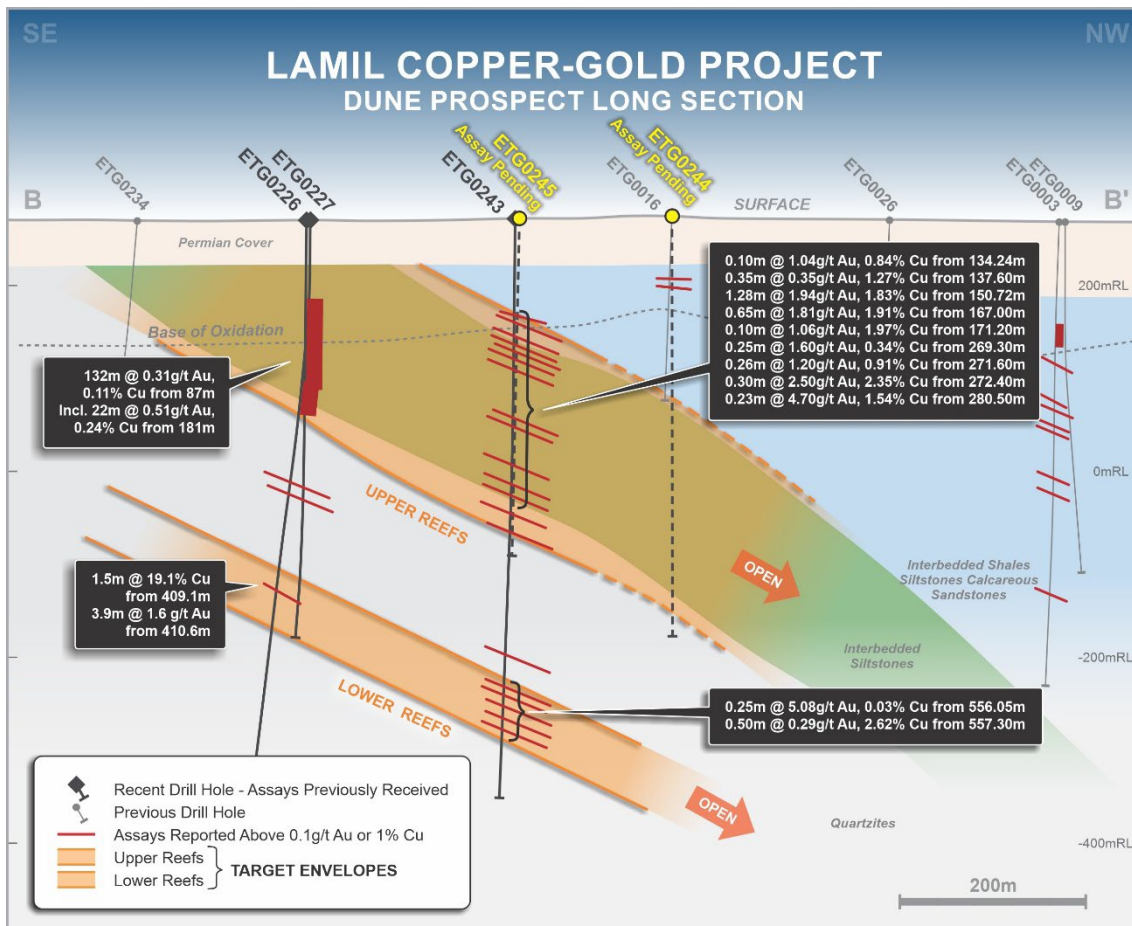


Figure 2 – Dune prospect plan showing the three previous holes that intersected stacked reef mineralisation in the Telfer analogous stratigraphic package. The locations of the two recent diamond drill holes (ETG0244 & ETG0245) down dip (cross section A-A', ETG0244) and down plunge (long section B-B' (ETG0245)).<sup>1</sup>



**Figure 3- Schematic Dune cross section with completed drill hole ETG0245. The Telfer analogous stratigraphy including upper and lower reef horizons intersected in ETG0243 contain multiple Cu-Au reefs which are generally sub-parallel to stratigraphy. ETG0245 was completed to test for lateral continuity and increased widths of the upper reefs down dip <sup>1</sup>**



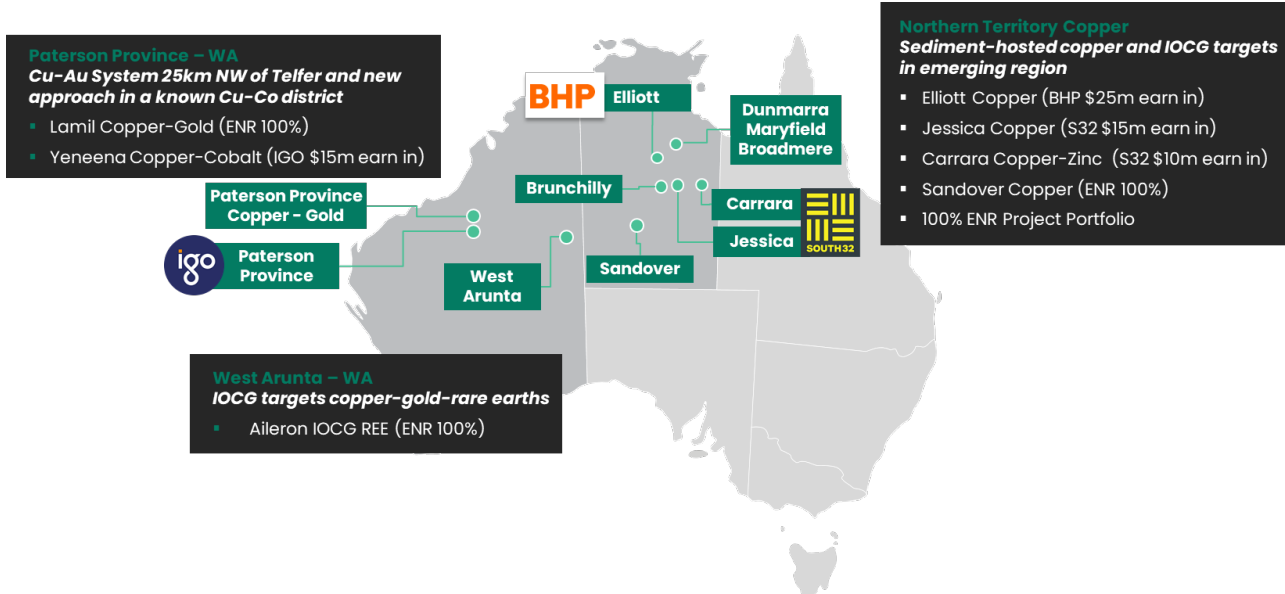


**Figure 4- Schematic long section of Dune showing the interbedded siltstone unit dipping below previous drilling and recently completed drill holes, ETG0244 and ETG0245.<sup>1</sup>**

<sup>1</sup> For further details regarding the exploration results at the Lamil Copper-Gold Project, please refer to the following ASX announcements:

- ASX release 26 April 2017
- ASX release 19 January 2017
- ASX release 18 December 2020
- ASX release 21 April 2021
- ASX release 6 September 2021
- ASX release 16 November 2021

## About Encounter



Encounter is one of Australia’s leading mineral exploration companies listed on the ASX. Encounter’s primary focus is on discovering major copper dominant deposits in Australia.

Encounter partners with leading mid-tier and major producers to advance its extensive project pipeline with more than \$25m of project funding contributed by partners over the past decade. Currently, Encounter has farm-in agreements in place with world leading resources companies to provide up to \$65m in initial exploration funding.

Encounter’s assets include:

- A large project portfolio in the Paterson Province of WA where it is exploring for copper-gold deposits at its 100% owned Lamil Project and for copper-cobalt deposits at the Yeneena project with IGO Limited (ASX:IGO);
- A series of camp scale sediment hosted copper opportunities in the Northern Territory. This includes the Elliott copper project which is being advanced via a \$25m earn-in and joint venture in partnership with BHP (ASX:BHP) and farm-in agreements with South32 (ASX:S32) at the Jessica and Carrara projects; and
- The 100% owned Aileron IOCG / REE project in the West Arunta region of WA.

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*The information in this report that relates to Exploration Results is based on information compiled by Mr Mark Brodie who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Brodie holds shares and options in and is a full time employee of Encounter Resources Ltd and has sufficient experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Brodie consents to the inclusion in the report of the matters based on the information compiled by him, in the form and context in which it appears.*

*The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases and the form and context of the announcement has not materially changed. This announcement has been authorised for release by the Board of Encounter Resources Limited.*

# JORC Code, 2012 Edition – Table 1 report

## SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<i>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 sounds, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Two holes have been completed at the Dune prospect and one hole at the Elsa prospect using diamond drilling for a total of 1329m. Diamond drill core will be sampled as half core samples of HQ and NQ sized core.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	Drill hole collar locations were recorded by handheld GPS, which has an estimated accuracy of +/- 5m.
	<i>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 (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</i>	Diamond drill core will be sampled as half core samples of HQ and NQ sized core. The samples from the drilling will be sent to Bureau Veritas Minerals Pty Ltd Laboratories in Perth, where they will be dried, crushed, pulverised and split to produce a sub – sample for ICP (OES) (MS) 4 Mixed Acid Digest and Fire Assay.
<b>Drilling techniques</b>	<i>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).</i>	Completed holes were drilled with mud rotary from surface through cover sediments with diamond drilling commencing at the cover-oxidized sediment boundary as HQ3 to reduce core loss before switching to NQ coring once ground conditions allowed. All core was oriented using Relfex Act III system.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	Sections of lost core where minimal and were noted by the diamond drillers.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	New drillholes were drilled by mud rotary through the cover sequence. HQ3 was used in areas of broken or soft ground to reduce the chances of core loss. The remainder of the holes being NQ diamond drilled with core recovery +95%.
	<i>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.</i>	To date, no detailed analysis to determine the relationship between sample recovery and/or and grade has been undertaken for this drill program.

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<i>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.</i>	Geological logging is in progress. All core will be fully logged by Encounter Geologists with lithology, alteration, mineralisation, structure and veining recorded.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Geological logging is qualitative in nature and will record interpreted lithology, alteration, mineralisation, structure, veining and other features of the samples and core.
	<i>The total length and percentage of the relevant intersections logged</i>	Geological logging is in progress and all core will be logged in full by Encounter geologists
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Samples submitted from the diamond drill holes will be half core. Minor lithology samples from unmineralized zones may be taken as composite samples with the first 25cm of each meter combined into a 4m composite sample. Sampling intervals will be determined once geological logging is completed.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable as all drilling was core drilling
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	No sample preparation has been completed to date, Sample preparation will be completed at Bureau Veritas Minerals Pty Ltd Laboratories in Perth. Samples will be dried, crushed, pulverised (90% passing at a $\leq 75\mu\text{M}$ size fraction) and split into a sub – sample that will be analysed using fire assay.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Field QC procedures involve the use of commercial certified reference materials (CRMs) and in house blanks. The insertion rate of these will be at an average of 1:33.
	<i>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.</i>	No sampling of the second half of the drill core will be completed.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered appropriate to give an accurate indication of the mineralisation at Dune.
	<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>



*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.*

Routine pXRF analysis is being completed down hole on core but this information does not form part of this report.

*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.*

Laboratory QAQC involves the use of internal lab standards using certified reference material and blanks as part of in-house procedures. Encounter also submits an independent suite of CRMs and blanks. A formal review of this data is completed on a periodic basis.

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No intersections are being reported. Geological observations included in this report have been verified by Sarah James (Exploration Manager)
	<i>The use of twinned holes.</i>	No twinned holes have been drilled.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary logging and sampling data is being collected for drillholes on toughbook computers using Excel templates and Maxwell Geoservice's LogChief software. Data collected is sent offsite to Encounter's Database (Datashed software), which is backed up daily.
	<i>Discuss any adjustment to assay data.</i>	No assay data is being reported
<b>Location of data points</b>	<i>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.</i>	Drill hole collar locations are determined using a handheld GPS. Down hole surveys were collected during this drilling program at approx. 30m intervals downhole.
	<i>Specification of the grid system used.</i>	Horizontal Datum: Geocentric Datum of Australia1994 (GDA94) Map Grid of Australia 1994 (MGA94) Zone 51 Vertical Datum: Australian Height Datum (AHD) Gravity Datum: Australian Absolute Gravity Datum 2007 (AAGD07)
	<i>Quality and adequacy of topographic control.</i>	Estimated RLs were assigned for drillhole collars and are to be corrected at a later stage using a DTM created during the aeromagnetic survey.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The drilling at the Dune prospect has been completed on 200m to 400m spaced sections with holes spacing ranging from 40m to 80m
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve</i>	Mineralisation has not yet demonstrated to be sufficient in both geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications to be applied.

*estimation procedure(s) and classifications applied.*

*Whether sample compositing has been applied.*

No drilling results or sample compositing is being reported.

**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.*

This is early stage drilling and the orientation of the hole with respect to key structures is not is not fully understood. Drilling at Dune has intersected the strata at an appropriate angle not to significantly bias samples of veins orientated sub-parallel to bedding. Additional steep vein sets have been observed at Dune striking sub parallel to drilling but their relationship to grade is not yet fully understood.

*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.*

This is early stage drilling and the orientation of the hole with respect to key structures is not is not fully understood. Drilling at Dune has intersected the strata at an appropriate angle not to significantly bias samples of veins orientated sub-parallel to bedding. Additional steep vein sets have been observed at Dune striking sub parallel to drilling but their relationship to grade is not yet fully understood.

**Sample security**

*The measures taken to ensure sample security.*

The chain of custody is managed by Encounter. Samples will be delivered by Encounter personnel to the Camp Dome laydown and then transported to the assay laboratory via DDH-1 Drilling contractors or transport courier services.

**Audits or reviews**

*The results of any audits or reviews of sampling techniques and data.*

Drill core sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on Dune data.

**SECTION 2 REPORTING OF EXPLORATION RESULTS**

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	<p>The Lamil project is located within the tenement E45/4613 which is 100% held by Encounter. The prospect area is subject to a production royalty of A\$1 per dry metric tonne of ore mined.</p> <p>This tenement is contained completely within land where the Martu People have been determined to hold native title rights.</p> <p>No historical or environmentally sensitive sites have been identified in the work area.</p>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>The majority of historical exploration activity at Lamil was completed during a Newmont / BHP / WMC joint venture in the mid-1980s with Newmont as operator.</p> <p>In 1989 Newmont completed a six hole diamond program at Lamil (LHS 89 1-6) for a total of 563m with one hole targeting the Northern Magnetic anomaly (now called Dune).</p> <p>In 1990/91, a program of RAB holes (LHB series) were</p>

drilled on the Northern Magnetic Anomaly along the interpreted fold axis for a total of 1734m. Drilling was hampered by ground water resulting in the program being largely ineffective.

## Geology

*Deposit type, geological setting and style of mineralisation*

The Lamil project is situated in the Proterozoic Paterson Province of Western Australia. A simplified geological interpretation comprises a domal feature with Isdell Formation in the core overlain by Malu Formation and the Puntapunta Formation forms the uppermost unit. The Dune project is considered prospective for sediment – hosted ‘Telfer style’ gold-copper mineralisation and skarn style mineralisation.

## Drill hole information

*A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:*

- *Easting and northing of the drill hole collar*
- *Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar*
- *Dip and azimuth of the hole*
- *Down hole length and interception depth*
- *Hole length*

Refer to tabulation in the body of this announcement

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Data aggregation methods</b>	<i>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.</i>	N/A - No new drilling results are being reported in this announcement
	<i>Where aggregated 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.</i>	N/A- No new assay results are being reported in the announcement
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	N/A- No metal equivalents are being reported in this announcement

<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of exploration results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’).</i></p>	<p>The geometry of the mineralisation is not yet known due to insufficient drilling in the targeted area.</p>
<b>Diagrams</b>	<p><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plane view of drill hole collar locations and appropriate sectional views.</i></p>	<p>Refer to body of this announcement</p>
<b>Balanced Reporting</b>	<p><i>Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	<p>All significant intervals have been previously reported with a 0.1g/t Au and/or 0.1% Cu lower cut-off. No new assay results are being reported in this announcement</p>
<b>Other substantive exploration data</b>	<p><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<p>All meaningful and material information has been included in the body of the text. No metallurgical or mineralogical assessments have been completed.</p>
<b>Further Work</b>	<p><i>The nature and scale of planned further work (e.g. 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.</i></p>	<p>The next phase of work will be designed following interpretation of assays from the current program.</p>