

# RC Drilling Completed at Lamil Copper-Gold Project, Paterson Province

- Ten hole RC drill program (2,077m) has been completed at the Dune Prospect ("Dune") part of the 100% owned Lamil Copper-Gold Project ("Lamil") in the Paterson Province of WA.
- RC program was designed to test for extensions to the east and south of the >800m long Dune copper-gold system which remains open.
- Initial observations from the RC drilling include:
  - o Mineralised zone at Dune extends further to the south and east;
  - Copper anomalism noted in handheld Niton XRF; and
  - Minor visual malachite and native copper logged in drill cuttings (see Photo 1).
- Assay results expected March 2021.
- Diamond drill rig secured to complete an immediate follow-up EIS co-funded drill program from April 2021

The directors of Encounter Resources Ltd ("Encounter") are pleased announce that a ten hole, 2,077m RC drill program has been completed at Dune, part of the 100% owned Lamil Copper-Gold Project in the Paterson Province of WA.

# Commenting on the Dune drilling, Encounter Managing Director, Will Robinson said:

"Prior to this drilling the near surface copper-gold mineralisation at Dune was over 800m in strike with strengthening copper to the south. Initial observations from the current RC drill program suggest that the the mineralised zone at Dune extends further to the south and east. In addition, for the first time at Dune, traces of copper oxides and native copper have been observed in the drill cuttings. Assay results are expected in March 2021 and a diamond drill rig will commence an immediate follow up program in April 2021."

## Background

Lamil covers an area of ~61km² 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 a significant structure and deformation zone that would have acted as a pathway for ore forming fluids during the formation of the Proterozoic aged deposits.

This is a regionally similar structural context to the setting of Rio Tinto Ltd's (ASX:RIO) Winu copper-gold deposit (Inferred Resource of 503Mt @ 0.35% Cu and 0.27 g/t Au 1) (Figure 3).



## **Dune Prospect**

Dune sits in the northwest of Lamil and consists of a laterally extensive +1g/t Au supergene zone outlined in previous broad spaced drilling. The mineralisation is located on the fold axis in the northern part of the Lamil Dome (Figure 2).

The November 2020 RC drill program (14 holes) at Dune successfully 2:

- Extended the gold mineralisation intersected in ETG0003 and ETG0010 (see Figure 1);
- Identified a mineralisation vector to the south that remains open;
- Expanded the gold mineralisation footprint; and
- Intersected primary, copper-gold mineralisation in a series of stacked lodes.

The follow-up RC drill program completed in February 2021 at Dune (see Figure 1) was designed to test for extensions of the copper-gold system both to the south and east. Observations from the program include:

- Mineralised zone at Dune extends further to the south and east;
- Copper anomalism noted in handheld Niton XRF; and
- Minor visual malachite (see Photo 1) and native copper logged in drill cuttings.

A diamond drill rig is schedulued to commence an EIS co-funded program at Dune, Elsa and Gap in April 2021.



Photo 1 – Supergene copper mineralisation noted in ETG228 (104-107m)



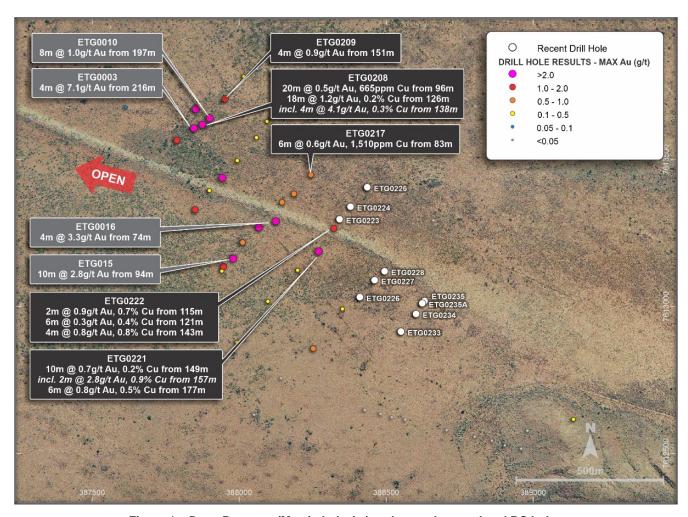


Figure 1 - Dune Prospect (Max in hole Au) and recently completed RC holes



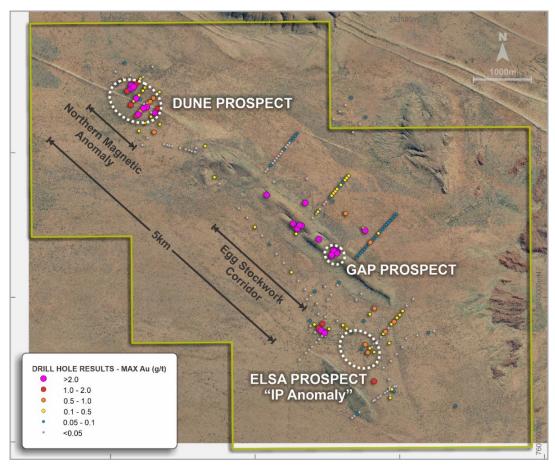


Figure 2 – Airphoto of Lamil with Dune Prospect to the northwest and Max Au in hole

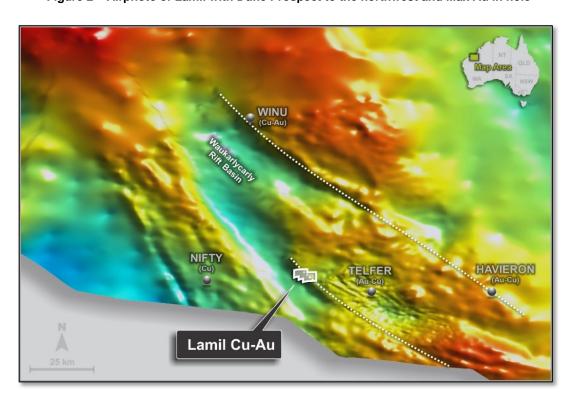


Figure 3 – Regional gravity over Seebase depth to Proterozoic basement image (red = shallow, blue = deep)



Hole_ID	Hole_Type	MGA_Grid_ID	MGA_East	MGA_North	MGA_RL	Azimuth	Dip	EOH Depth
ETG0223	RC	MGA94_51	388342	7613297	270	40	-75	219
ETG0224	RC	MGA94_51	388379	7613340	270	40	-75	219
ETG0225	RC	MGA94_51	388436	7613406	270	40	-75	189
ETG0226	RC	MGA94_51	388411	7613032	270	40	-75	225
ETG0227	RC	MGA94_51	388461	7613090	270	40	-75	219
ETG0228	RC	MGA94_51	388495	7613120	270	40	-60	201
ETG0233	RC	MGA94_51	388551	7612915	270	40	-75	231
ETG0234	RC	MGA94_51	388602	7612975	270	40	-75	249
ETG0235	RC	MGA94_51	388631	7613019	270	40	-60	117
ETG0235A	RC	MGA94_51	388623	7613011	270	40	-75	208

Table 1: RC drill hole collar locations and drill hole information

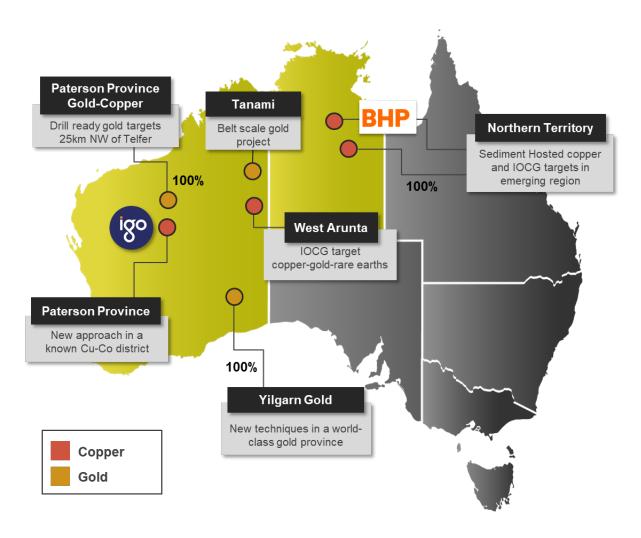
The information in this report that relates to Exploration Results is based on information compiled by Mr. Peter Bewick who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Bewick holds shares and options in and is a full time employee of Encounter Resources Ltd and has sufficient 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 Bewick 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.

<sup>&</sup>lt;sup>1</sup> refer Rio Tinto Ltd - Winu Mineral Resource release 28 July 2020

<sup>&</sup>lt;sup>2</sup> refer ASX release 18 December 2020





### **About Encounter**

Encounter Resources Limited is one of the most productive project generation and active mineral exploration companies listed on the Australian Securities Exchange. Encounter's primary focus is on discovering major gold and copper deposits in Australia.

Encounter holds a major ground position in the emerging Paterson Province where it is exploring for copper-gold deposits at its 100% owned Lamil Project and for copper-cobalt deposits at the Yeneena project with highly successful mining and exploration company IGO Limited (ASX:IGO).

Encounter controls a major land position the Tanami region covering over 100km of strike along a major structural corridor and the Aileron copper-gold-rare earths IOCG project in the West Arunta in WA.

In addition, Encounter moved early and aggressively to secure a series of camp scale, first mover opportunities in the Northern Territory ("NT") based on their potential to contain large, sedimentary-hosted and IOCG style copper deposits. This includes the Elliott copper project which is being advanced in partnership with BHP via an option agreement to enter an earn-in and joint venture.

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# **SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Commentary	
Sampling techniques	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.	Lamil was sampled by Encounter using RC drilling. A 10-hole program has been completed at the Dune prospect on 3 separate 200m spaced drill lines.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Drill hole collar locations were recorded by handheld GPS, which has an estimated accuracy of +/- 5m.	
	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	Reverse circulation drilling was used to obtain 1-3 kg samples every 1m downhole and composited into 2m samples. The samples from the drilling will be sent to Bureau Veritas Minerals Pty Ltd Laboratories in Perth, where they were dried, crushed, pulverised and split to produce a sub – sample for Fire Assay and 4 mixed acid digest ICP – OES and ICP – MS analysis.	
Drilling techniques	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).	The RC holes were drilled using 5 1/4" face sampling.	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	RC sample recoveries were estimated as a percentage and recorded by Encounter field staff.	
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Driller's used appropriate measures to minimise down-hole and/or cross – hole contamination in RC drilling. Where contamination of the sample was suspected this was noted by Encounter field staff as a percentage.	
	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 drill results reported in this announcement	



Criteria	JORC Code explanation	Commentary	
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 will be completed on all drill holes, with lithology, alteration, mineralisation, structure and veining recorded.	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging is qualitative in nature and records interpreted lithology, alteration, mineralisation, structure, veining and other features of the samples.	
	The total length and percentage of the relevant intersections logged	All drill holes will be logged in full by Encounter geologists.	
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No core was drilled in this program.	
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were collected on the rig using a cone splitter. Samples were recorded as being dry, moist or wet by Encounter field staff.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation will be completed at Bureau Veritas Minerals Pty Ltd Laboratories in Perth. Samples will be dried, crushed, pulverised (90% passing at a ≤75µM size fraction) and split into a sub – sample that will be analysed using fire assay and 4 acid mixed digest with an ICP – OES and ICP – MS finish.	
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	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.	
	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.	Field duplicates were taken during RC drilling and were collected on the rig via a cone splitter at a rate of 1:50. The results from these duplicates are assessed on a periodical basis.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered appropriate to give an accurate indication of the mineralisation at Lamil.	
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.	The samples will be analysed by ICP using a 4 mixed acid digest including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. This extended digest approaches a total digest for many elements however some refractory minerals are not completely attacked. Assays will be determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry (OES)(AI, Ca, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, S, Sc, Ti, V, Zn) and ICP – Mass Spectrometry(MS) (Ag, As, Bi, Cd, Co, Ga, Hf, In, La, Mo, Nb, Pb, Rb, Sb, Sn, Sr, Ta, Te, Th, TI, U, W, Y, Zr). Au, Pt and Pd will be determined via Fire Assay.	
	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.	Not applicable as no geophysical instruments were use in determining these results	
	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, blanks, splits and replicates as part of in-house procedures. Encounter will also submitted an independent suite of CRMs, blanks and field duplicates (see above). A formal review of this data is completed on a periodic basis.	



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	No drill results reported in this announcement
	The use of twinned holes.	No twinned holes have been drilled.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data is collected for Lamil on toughbook computers using Excel templates and Maxwell Geoservice's LogChief software. Data collected will be sent offsite to Encounter's Database (Datashed software), which is backed up daily.
	Discuss any adjustment to assay data.	No drill results reported in this announcement
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches,	Drill hole collar locations are determined using a handheld GPS.
	mine workings and other locations used in Mineral Resource estimation.	Down hole surveys were collected during this drilling program utilizing a EZ gyro instrument
	Specification of the grid system used.	The grid system used is MGA_GDA94, zone 51.
	Quality and adequacy of topographic control.	RLs will be corrected using a DTM created during the aeromagnetic survey.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The 10 holes completed in this program at the Dune prospect were drilled on 200m spaced drill lines and approx. 80m spaced holes for 2077m. ETG235A was a re-drill of ETG235 that ended at 117m due to a blow out of the collar.
	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.	No drill results reported in this announcement
	Whether sample compositing has been applied.	RC drill samples from this program were composited into 2m samples.
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.	N/A – this is early stage drilling and the orientation of sampling to the mineralisation is not known.
	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 sampling to the mineralisation is not known.
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by Encounter. Samples will be delivered from site by DDH-1 and transported to the assay laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on Lamil data.



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 including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	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.  This tenement is contained completely within land where the Martu People have been determined to hold native title rights.  No historical or environmentally sensitive sites have been identified in the area of work.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	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. Newmont completed a regional aeromagnetic and radiometric survey in 1984 and colour photography survey. 144 rock chip samples and a bulk stream sediment sampling was also completed prior to a 15 hole RC drill program (total of 756m, LSR series) targeting the Upper Malu/ Puntapunta contact. RC Holes were drilled on four 400m spaced sections at ~40m spacing on the north-east side of the interpreted dome. No mineralized reef positions were identified in this program.  In 1985, Newmont completed 4 diamond holes (LSPC 1-4) for a total of 391m in the south of the dome testing separate magnetic anomalies. Drilling returned encouraging results with Au-Cu-W 'skarn style' mineralization hosted in the Isdell Formation.  In 1986, RAB drilling at the Egg prospect totaled 63 holes for 1175m over an area approx. 400m by 400m (ERG series). Sampling was limited to two samples per hole, one at the base of cover and one at the bottom of the hole. Four diamond holes (LHS86 series) for 677m were drilled across the project testing the Egg, Southern Magnetic anomaly and the northern Malu fold nose  In 1987, the JV partners completed 13 (LSR 1-13) RAB holes for 379m along a single 1200m long east-west line in the south of the project. RC drilling (LSR 87 series) of 16 holes for 1383 were drilled in the vicinity of the southern magnetic anomalies. It is unclear at this stage if this drilling effectively tested the magnetic features.  In 1988, Newmont completed 4 diamond holes (LHS 88-1, 4, 4a and 7) with drilling completed at the Egg prospect and Magnetic anomaly 1.  In the following year, 1989, Newmont drilled a further 6 diamond holes (LHS 88-1, 6) for a total of 563m targeting the Northern Magnetic anomaly, the Egg prospect and the Central Shear Zone.  In 1990/91, 30 RAB holes (LHB series) were drilled on the Northern and Southern Magnetic anomalies and along the interpreted fol	



		final tenement surrenders occurred in 1997 and it is assumed the joint venture terminated at the same time. No exploration work has been conducted over the Lamil project since the termination of the WMC / Newmont / BHP joint venture.
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 Lamil 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 tabulations in the body of this announcement.
Data aggregation methods	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.	No drill results reported in this announcement
	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.	No drill results reported in this announcement
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No drill results reported in this announcement



Criteria	JORC Code explanation	Commentary	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of exploration results. 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').	The geometry of the mineralisation is not yet known due to insufficient drilling in the targeted area.	
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 plane view of drill hole collar locations and appropriate sectional views.	No drill results reported in this announcement	
Balanced Reporting	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.	No drill results reported in this announcement	
Other substantive exploration data	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.	All meaningful and material information has been included in the body of the text. No metallurgical or mineralogical assessments have been completed.	
Further Work	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.	Diamond drilling of the Dune prospect is due to commence in April 2021. Drill hole location for this program will be finalized once assay results from the RC program have been received.	