

### Shallow, high-grade copper results from Jumbuck Shoot at Jericho

Demetallica Limited is delighted to report further on the recent RC drill program at its advanced Chimera Polymetal project located in the copper mining region of Cloncurry, QLD. Jericho continues to reward resource upgrade objectives with assays from another 7 holes delivering superb grade-width intersections within the Jumbuck shoot, most at shallow depths.

### **Highlights**

- Assays reveal exceptional continuity of high-grade copper mineralisation near surface
- Copper results benefit resource upgrade objectives, including:
  - o 9m @ 3.13% Cu & 0.7 g/t Au from 72m (from within 12m @ 2.61% Cu & 0.54 g/t Au)
  - o 8m @ 2.56% Cu & 0.33 g/t Au from 61m (from within 18m @1.70% Cu & 0.23g/t Au)
  - o 5m @ 3.19% Cu & 0.46 g/t Au from 115m (from within 9m @2.0% Cu & 0.29g/t Au)
  - o 6.85m @ 2.98% Cu & 0.26 g/t Au from 333m (from within 10.15m @ 2.33% Cu & 0.24 g/t Au)
- Potential for high-grade, open pit copper development emerging, which could significantly enhance future development economics for Jericho
- New results point to strong potential for growth in the current resource with copper being intersected well below the resource limit of the Jumbuck shoot
- Assay results for the final 13 holes to be reported inside two weeks
- Demetallica is on track to publish the Jericho Resource update in October 2022

### Discussion

Demetallica concluded its inaugural 56-hole RC/DD campaign in August and recently reported assays from 36 holes. A further 13 holes await assay results.

Today's report reinforces the exceptional continuity of high-grade copper mineralisation in the 'Jumbuck' shoot of J1 Lode (Figures 1-3). Of the 26 drill intercepts reported within Jumbuck since discovery, 21 contain copper intercepts over 2% and 4 other holes reporting more than 1% (Table 1). Copper mineralisation at Jumbuck has been intersected as shallow as 50m below surface. An example of continuous, shallow high-grade copper mineralisation is shown in Figure 3 as a depth slice through the shoot. Drilling also indicates resource tonnage growth potential, mineralisation being intersected 400m below surface, well below the current resource limit of Jumbuck shoot.

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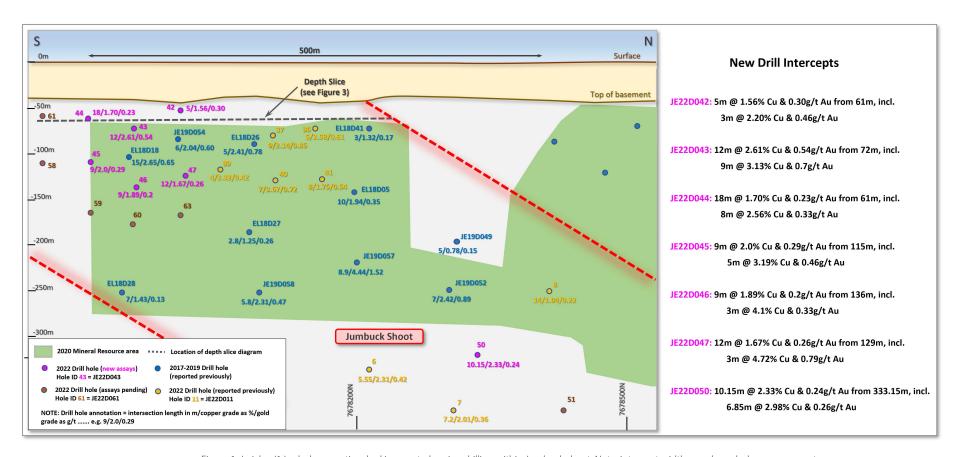


Figure 1: Jericho J1 Lode, long section, looking west, showing drilling within Jumbuck shoot. Note: intercept widths are down-hole measurements

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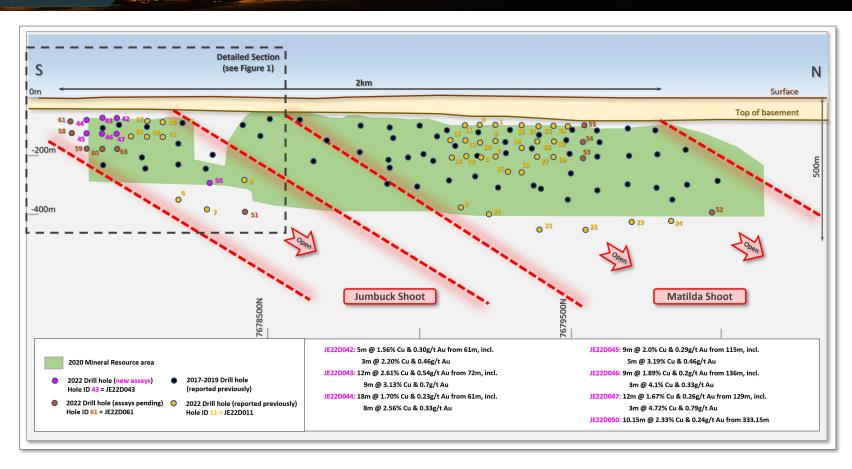


Figure 2: Jericho J1 Lode, showing copper intercepts. Note: intercept widths are down-hole measurements

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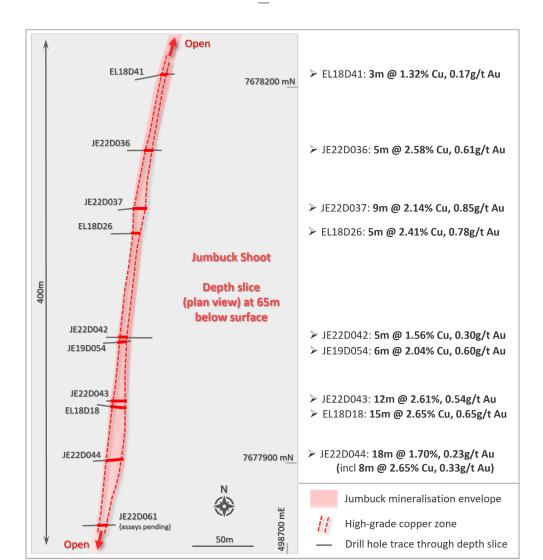


Figure 3: Jumbuck shoot depth slice (Plan view) at 65m below surface demonstrating continuous high-grade copper mineralisation along more than 350m of strike. Note drill data is from within a vertical window of +/- 20m above/below the depth slice.

Managing Director, Andrew Woskett, stated "exceptional copper grades over significant widths from this latest batch of results underscore the potential for the October Mineral Resource Estimate (MRE) to reflect higher confidence through conversion of inferred material to JORC indicated category in the shallower parts of the deposit. Additionally, drilling has extended Jumbuck's mineralised zone to 400m below surface, well beyond the limit of the existing resource, furthering expectations of an increase in overall tonnes. Moreover, we are starting to see potential for shallow, open-pit developments on the Jumbuck and Matilda shoots which, when scoped and ultimately shown to be economic, could significantly enhance Jericho's prospects for mine development. Much more work is needed to assess the feasibility of those concepts yet consistently good results from our recent RC campaign are promising".

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Table 1: Summary copper-gold intercepts for all published drill holes into the Jumbuck shoot. Intersection widths stated are down-hole widths.

ASX announcement references for all published Jumbuck data are included at the end of this report.

Hole	From	То	Interval	Cu %	Au g/t
15000040	61	66	5	1.56	0.30
JE22D042	inclu	ding	3	2.20	0.46
	72	84	12	2.61	0.54
JE22D043	inclu	ding	9	3.13	0.70
	61	79	18	1.70	0.23
JE22D044	inclu	dina	8	2.56	0.33
	115	124	9	2.00	0.29
JE22D045	inclu		5	3.19	0.46
	136	145	9	1.89	0.20
JE22D046	inclu		3	4.10	0.33
	129	141	12	1.67	0.26
JE22D047	inclu		3	4.72	0.79
	333.15	343.3	10.15	2.33	0.24
JE22D050	inclu		6.85	2.98	0.24
	257	271	14	1.04	0.28
JE22D008	inclu		3	1.04	0.22
	87	aing 92	5	2.58	0.27
JE22D036	inclu		2	5.44	1.32
	95	104	9	2.14	0.85
JE22D037	inclu		4	3.64	1.55
		144			
JE22D039	140		4	2.32	0.42
	inclu		2	3.28	0.65
JE22D040	149	156	7	3.57	0.72
	inclu		2	10.11	1.87
JE22D041	148	156	8	1.75	0.54
.=	inclu		2	3.02	1.03
JE22D006	360.45	366	5.55	2.31	0.42
JE22D007	412.8	420	7.2	2.01	0.36
	inclu		3	3.04	0.54
JE19D049	223	228	5	0.78	0.02
JE19D052	245	262	17	1.42	0.55
	inclu		7	2.42	0.89
JE19D054	86	98	12	1.37	0.38
	inclu		6	2.04	0.60
JE19D057	227	238	11	3.62	1.24
	inclu		3.9	6.48	2.64
JE19D058	253	266	13	1.22	0.55
	inclu	ding	5.8	2.31	0.89
EL18D41	90	93	3	1.32	0.17
EL18D26	91	103	12	1.23	0.36
113020	inclu	ding	5	2.41	0.78
EL18D27	186	188.8	2.8	1.25	0.26
EL18D28	249	256	7	1.44	0.13
EI 10D10	97	112	15	2.65	0.65
EL18D18	inclu	ding	7	3.09	0.93
EL 1000E	135	145	10	1.94	0.35
EL18D05	inclu	ding	3	4.46	0.69

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Table 2: Drill hole collar details; coordinates are in GDA 94, Zone 54

Hole	Easting	Northing	Dip	Azi (True)	Depth	Туре	Drill Target
JE22D042	498535	7678000	-55	90	115.0	RC	Jumbuck Infill
JE22D043	498535	7677950	-64	90	113.0	RC	Jumbuck Infill
JE22D044	498535	7677900	-67	90	107.0	RC	Jumbuck Infill
JE22D045	498503	7677900	-66	84	162.0	RC	Jumbuck Infill
JE22D046	498503	7677950	-67	84	173.0	RC	Jumbuck Infill
JE22D047	498513	7678000	-66	84	173.0	RC	Jumbuck Infill
JE22D050	498467	7678300	-69	71	360.6	RC/Diamond	Jumbuck Extension

Table 3: Copper-gold assays for individual samples for newly reported drill holes JE22D042 – JE22D047 and JE22D050. Intersection widths stated are down-hole widths

Hole	From	То	Interval	Cu (%)	Au (g/t)
JE22D042	61	62	1	1.91	0.20
JE22D042	62	63	1	3.17	0.80
JE22D042	63	64	1	1.53	0.37
JE22D042	64	65	1	0.69	0.07
JE22D042	65	66	1	0.52	0.06
JE22D043	72	73	1	0.75	0.05
JE22D043	73	74	1	1.85	0.06
JE22D043	74	75	1	0.64	0.05
JE22D043	75	76	1	2.14	0.49
JE22D043	76	77	1	5.99	0.41
JE22D043	77	78	1	5.32	0.55
JE22D043	78	79	1	4.26	2.16
JE22D043	79	80	1	3.04	1.41
JE22D043	80	81	1	0.70	0.16
JE22D043	81	82	1	3.67	0.45
JE22D043	82	83	1	1.39	0.23
JE22D043	83	84	1	1.63	0.47
JE22D044	61	62	1	0.52	0.02
JE22D044	62	63	1	1.29	0.10
JE22D044	63	64	1	1.83	0.16
JE22D044	64	65	1	2.44	0.24
JE22D044	65	66	1	3.82	0.86
JE22D044	66	67	1	2.30	0.51
JE22D044	67	68	1	3.42	0.18
JE22D044	68	69	1	3.01	0.23
JE22D044	69	70	1	2.40	0.38
JE22D044	70	71	1	0.95	0.30
JE22D044	71	72	1	0.61	0.07
JE22D044	72	73	1	0.79	0.47
JE22D044	73	74	1	2.78	0.21
JE22D044	74	75	1	0.98	0.11
JE22D044	75	76	1	0.22	0.02
JE22D044	76	77	1	0.34	0.01
JE22D044	77	78	1	1.20	0.09
JE22D044	78	79	1	1.66	0.18
JE22D045	115	116	1	0.60	0.11
JE22D045	116	117	1	0.94	0.26
JE22D045	117	118	1	2.32	0.11
JE22D045	118	119	1	6.22	0.69

Hole	From	То	Interval	Cu (%)	Au (g/t)
JE22D045	119	120	1	5.30	1.07
JE22D045	120	121	1	1.17	0.19
JE22D045	121	122	1	0.35	0.05
JE22D045	122	123	1	0.51	0.09
JE22D045	123	124	1	0.50	0.06
JE22D046	136	137	1	1.34	0.30
JE22D046	137	138	1	0.20	0.01
JE22D046	138	139	1	0.86	0.28
JE22D046	139	140	1	0.60	0.09
JE22D046	140	141	1	1.29	0.14
JE22D046	141	142	1	0.46	0.03
JE22D046	142	143	1	1.70	0.09
JE22D046	143	144	1	7.58	0.56
JE22D046	144	145	1	3.01	0.35
JE22D047	129	130	1	0.67	0.04
JE22D047	130	131	1	1.48	0.08
JE22D047	131	132	1	0.52	0.07
JE22D047	132	133	1	0.27	0.08
JE22D047	133	134	1	0.18	0.02
JE22D047	134	135	1	0.61	0.09
JE22D047	135	136	1	2.24	0.45
JE22D047	136	137	1	5.58	1.22
JE22D047	137	138	1	6.35	0.71
JE22D047	138	139	1	0.76	0.06
JE22D047	139	140	1	0.80	0.12
JE22D047	140	141	1	0.61	0.15
JE22D050	333.15	333.9	0.75	2.76	0.52
JE22D050	333.9	335	1.1	0.47	0.13
JE22D050	335	336	1	0.47	0.09
JE22D050	336	336.45	0.45	0.42	0.07
JE22D050	336.45	337.6	1.15	1.96	0.52
JE22D050	337.6	338	0.4	0.94	0.12
JE22D050	338	339	1	0.39	0.03
JE22D050	339	340	1	0.12	0.04
JE22D050	340	341	1	0.03	<0.01
JE22D050	341	341.65	0.65	2.59	0.59
JE22D050	341.65	342	0.35	11.95	0.60
JE22D050	342	343	1	9.69	0.44
JE22D050	343	343.3	0.3	5.59	0.14



### About the Chimera Polymetal Project and Jericho

Demetallica's Chimera Project is a contiguous tenement package south-east of Cloncurry, encompassing 2,067km<sup>2</sup>. Historic and recent exploration efforts identified a multiplicity of base metal mineral occurrences and styles, with copper-gold dominant.

Jericho, the most advanced asset in the Chimera portfolio, is a substantial copper-gold system comprising two persistently parallel lodes, J1 and J2. Overall, some 43,750m of drilling for 152 holes has established depth and remarkable strike continuity over 3.7km. A JORC 2012 MRE was published in June 2020 and detailed in Demetallica's Prospectus dated April 2022.

The new 56 hole drill data set will be incorporated in a revised mineral resource estimate, due for publication late October 2022. Both J1 and J2 lodes remain open along strike and down-plunge.

Demetallica's corporate ambition is to establish an economic case for development of Jericho as a mining proposition. The Company will determine what further resource quantification may be required in H1 of 2023 to support mining studies.

This report is authorised by Managing Director, Andrew Woskett.

The following announcements relating to earlier drill intercepts from Jumbuck were lodged with ASX by Demetallica Ltd and Minotaur Exploration Ltd.

- Jericho assays reveal high-grade zones and depth extensions, 31 August 2022
- Jericho continues to deliver Strong Infill & Extension Copper intercepts, 13 July 2022
- Jericho JV drill results reveal high-grade copper shoots, 22 August 2019
- Eloise JV wraps up stellar field season, 18 December 2018
- Shallow high grade copper zones in 'Jericho', Eloise JV, 25 October 2018
- Drilling update for Jericho copper prospect at Eloise JV, Cloncurry, 28 August 2018
- Drilling probes Jericho copper depth extensions for Eloise JV, Cloncurry, 06 August 2018

### COMPETENT PERSON'S STATEMENT

Information in this report that relates to Exploration Results is based on information compiled by Mr. Glen Little who is a Member of the Australian Institute of Geoscientists. Mr. Little holds shares in and is a full-time employee of Demetallica 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 Little 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.

## JORC Code, 2012 Edition, Table 1

## **Section 1: Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	New assay results and related comments in the body of this document pertain to drill holes from the Jericho Prospect 'J1' zone including JE22D008 extensional drilling of Jumbuck ore shoot, JE22D009 and JE22D020-JE22D024 extensional drilling of Matilda ore shoot, JE22D025 and JE22D027-JE22D033 infill drilling of Matilda ore shoot, and JE22D036-JE22D037 and JE22D039-JE22D041 infill drilling of Jumbuck ore shoot.
		Drillholes JE22D008-JE22D009 and JE22D020-JE22D024 were collared with blade/rotary air blast (RAB), continued through the cover sequence into basement with reverse circulation (RC) drilling method (5½" diameter) and completed with NQ2 coring to end of hole.
		Drill holes JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 were collared with blade/rotary air blast (RAB) then completed using the reverse circulation (RC) drilling method (5½" diameter) through the cover sequence into basement.
		The drill bit sizes employed to sample the mineralised zones are considered appropriate to indicate the degree and extent of mineralisation during this phase of exploration.
		Samples assayed included typically one metre lengths of halved NQ2 core (range 0.35-1.3m) or RC samples from 1 metre drilled intervals. Sample intervals were selected from the zone/s where prospective geology and/or visible sulphides were apparent. Variation in NQ2 core sample lengths reflects visible change in lithology or sulphide content.
		Unsampled intervals are expected to be unmineralised. Sample intervals not reported in this document are considered immaterial due to lack of metalliferous anomalism.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	100% of the assays reported for the Jumbuck and Matilda ore shoots <b>extensional</b> drilling are from NQ2 core samples. Core samples of typically 1 metre lengths were split with a core saw and half core samples submitted for analysis. Reported results are from 0.35-1.35m lengths.
		100% of the assays reported for the Jumbuck and Matilda ore shoots <b>infill</b> drilling are from RC samples. During RC drilling, sampled material passed through a cone splitter on the rig cyclone depositing 80% of return into a plastic retention bag and 2 sub-samples of 10% of return into 2 calico bags (Bag A and Bag B). The reported RC assays all correspond to 1m RC Bag A samples.
		Duplicate samples have been submitted for analysis at a rate of 1 duplicate per 32 alpha samples. For core samples, nominated half core samples submitted to the laboratory were crushed and divided into 2 sub-

Criteria	JORC Code explanation	Commentary
		samples at ALS with one sample assayed as the alpha sample and the other assayed as the duplicate. For RC samples, Bag B for nominated duplicate intervals is submitted to the laboratory for multi-element analysis as the duplicate sample.
	Aspects of the determination of mineralisation that are Material to the Public Report.	The entire length of drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 have been geologically logged in detail.
		For drill core specific gravity and portable XRF measurements have been recorded approximately every 1m throughout mineralised zones. Core orientation has been determined where possible and photographs have been taken of all drill core trays. Additional photographs have been taken of representative lithologies and mineralisation.
		For RC samples portable XRF measurements were recorded for every 1m interval for all samples within basement.
		This detailed information was used to determine zones of mineralisation for assay and appropriate sample lengths.
		There is no apparent correlation between ground conditions and assay grade within assays reported for holes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041.
	In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to	The assays reported here are derived from NQ2 diameter half-core lengths or reverse circulation (RC) rock chip samples.
	obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Core samples were split with a core saw and half core samples ranging from 0.35-1.35 metre lengths were sent to ALS laboratories for assay. One metre length core samples are considered appropriate for the laboratory analysis of intervals with visible copper mineralisation, however variation in sample size to align with visible changes in lithology or sulphide content is also appropriate.
		For RC drilled intervals the sampled material is released metre by metre into a cone splitter attached to the drill rig which diverts a representative 10% subsample into a calico bag attached to one side of the cone (Bag A) and a second representative 10% subsample into a calico bag attached to the opposite side of the cone (Bag B) whilst the remaining 80% of the sampled material falls into a large plastic bag below the cone splitter. For one metre sampled RC intervals, Bag A was submitted to the laboratory for multi-element analysis as the alpha sample. One metre length RC samples are considered appropriate for the laboratory analysis of intervals within the mineralised zone.
		30g charges were prepared for fire assay for gold and 0.25g charges were prepared for multi-element analyses; in both instances the sub-sample size used for assay is industry standard.
		Samples from drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 were

Criteria	JORC Code explanation	Commentary
		either sent to ALS laboratory in Mount Isa or ALS laboratory in Townsville for sample preparation (documentation, crushing, pulverizing and subsampling). Geochemical analyses for gold were undertaken at ALS Townsville laboratory whilst multi-element suite analyses, including base metals, were undertaken at the ALS laboratory in Brisbane.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Drilling contractor Eagle Drilling drilled collars for holes JE22D008-JE22D009 and JE22D020-JE22D024 and drilled the entirety of holes JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 utilising blade/RAB drilling through the cover sequence to facilitate installation of a PVC collar in unconsolidated material, then changed to a 5 ½ inch diameter face sampling hammer bit. The drill bit size 5½" diameter for RC drilling within the zones of interest is considered appropriate to indicate the degree and extent of mineralisation.
		A Reflex Sprint IQ north-seeking gyro downhole survey system is used every ~30m by Eagle Drilling to monitor drillhole trajectory during drilling.
		Drilling contractor DDH1 re-entered the RC collars JE22D008-JE22D009 and JE22D020-JE22D024 to complete the holes coring NQ2. The NQ2 drill bit size for coring within the zones of interest is considered appropriate to indicate the degree and extent of mineralisation.
		A Champ Axis north-seeking gyro downhole survey system was used every ~30m by DDH1 to monitor drillhole trajectory during drilling.
		The drilling program was supervised by experienced Demetallica personnel.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Core recovery measurements for the mineralised zones of JE22D008-JE22D009 and JE22D020-JE22D024 indicate 99% recovery for sampled intervals.
		Visual estimates of chip sample recoveries indicate ~100% recoveries for 95% of samples within mineralized zones for drillholes JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041.
		As such, there is no apparent correlation between ground conditions/drilling technique and anomalous metal grades.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Ground conditions in the basement rocks hosting the Jericho 'J1' mineralisation were suitable for standard RC or core drilling. Recoveries and ground conditions have been monitored by Demetallica personnel during drilling.
	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.	There is no apparent relationship between sample recovery and metal grade within drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041. Sample bias does not appear to have occurred.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate	Geological logging of the cover sequence and basement has been conducted by trained geologists.  The level of detail of logging is sufficient for this stage

Criteria	JORC Code explanation	Commentary
	Mineral Resource estimation, mining	of exploration drilling.
	studies and metallurgical studies.	The drill core from JE22D008-JE22D009, JE22D020-JE22D024 has been oriented where possible and structural data have been recorded. Apart from rock quality data (RQD), no geotechnical data have been collected from drillholes JE22D008-JE22D009, JE22D020-JE22D024 at this stage.
		Specific gravity measurements have been recorded approximately every 1m throughout mineralised zones within the cored portions of drillholes.
		Portable XRF measurements have been recorded for every 1 metre sample drilled by RC. For drill core portable XRF measurements have been collected approximately every 1 metre throughout mineralised zones.
		Retained half core and whole unsampled core have been retained in industry-standard core trays in Demetallica's locked storage facility in Cloncurry, along with representative RC chip samples for every drilled metre in industry-standard 20-section chip trays, as a complementary record of the intersected geology.
		Data have been collected and recorded with sufficient detail to assist with a resource estimate update to be conducted at completion of the drilling and likely published in Q4 2022.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging is qualitative. Portable XRF, specific gravity, RQD and structural measurements are quantitative.
	The total length and percentage of the relevant intersections logged.	All completed holes have been geologically logged for the entire drilled length.
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	Core was cut using an industry standard automatic core saw. The half core samples sent to the laboratory for analysis are considered appropriate for the laboratory analysis of intervals within the mineralised zones.
and sample preparation		Assays in this document report from a range of 0.35-1.35 metre lengths of halved core from zones of visible sulphides and from adjacent or internal zones lacking visible sulphides. The majority of samples are from 1 metre lengths of core; any variation in sample interval size aligns with visible change in lithology or sulphide content.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	During RC drilling, sampled material is released metre by metre into a cone splitter attached to the rig cyclone. Two sub-samples of 10% of the sampled material divert into two separate calico bags attached to opposite sides of the cone splitter (Bag A and Bag B) whilst the remaining 80% falls into a large plastic bag below the splitter. Bag A is submitted to the laboratory for multielement analysis as the alpha sample for the interval. For nominated duplicate intervals, Bag B is submitted to the laboratory for multi-element analysis as the duplicate sample when conducting QAQC.
		Cone-split 10% sub-samples of one metre length RC drilled intervals are considered appropriate for the laboratory analysis of intervals within the mineralised zone/s.
		The cone splitter is cleaned at the end of every drill rod

Criteria	JORC Code explanation	Commentary
		(6m length).
		No wet samples from the mineralised zone were submitted for assay.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	95% of the half core samples reported were 1 metre lengths (with other sample lengths ranging 0.35-1.35m). The sample lengths are considered to be appropriate for the style of mineralisation being targeted.
		RC samples submitted for analysis averaged 3.4 kg which is considered to be an appropriate sample size for the style of mineralisation being targeted.
		Core was cut (halved) using an industry standard automatic core saw and half core sections for each sample interval are placed methodically into calico bags. RC samples are collected in calico bags directly off the cone splitter at the drill rig.
		Calico sample bags are then placed into polyweave bags, secured with a zip-tie ready for dispatch. All other sample preparation is conducted under controlled conditions at the laboratory.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Logging of the drillcore was conducted to sufficient detail to maximise the representivity of the samples when determining sampling intervals.
		Sample size of the calico bags removed from the cone splitter is monitored during RC drilling to maximise representativity whilst ensuring adequate sample is obtained for analysis.
	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.	Duplicate sampling was conducted in JE22D008- JE22D009, JE22D020-JE22D025, JE22D027- JE22D033, JE22D036-JE22D037 and JE22D039- JE22D041 at a rate of 1 duplicated sample per 32 alpha samples to help assess the representivity of the sampling.
		For cored intervals, half-core samples nominated to be duplicated were sent to ALS Laboratory in either Mount Isa or Townsville for crushing (90% <4mm grainsize) then split with a Boyd rotary splitter to produce two 500-gram samples (an alpha sample and a duplicate sample). Both sub-samples were then analysed with separate sample numbers for a multi-element suite by ALS.
		For RC drilled intervals, the sampled material collects in a hopper within the rig cyclone until released by the driller at the end of each metre drilled. The release mechanism drops the sampled material onto a cone splitter. 10% of the sampled material diverts into a calico bag attached to one side of the cone (Bag A), another 10% diverts into a calico bag attached to the opposite side of the cone (Bag B) and the remaining 80% falls into a large plastic bag below the splitter. Bag A is submitted to the laboratory for multi-element analysis as the alpha sample for selected intervals. For nominated duplicate intervals, Bag B is submitted to the laboratory for multi-element analysis as the duplicate sample.
		Duplicates are typically selected from zones containing visible mineralisation representative of the grade and style sought.

Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The grainsize of Jericho mineralisation varies from disseminated sub-millimetre grains to massive, aggregated sulphides. Geological logging indicates that typically sampling 1m intervals is appropriate for the grainsize of the mineralisation.
Quality of assay data and laboratory	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Assay results reported in the body of this document pertain to half-core samples or cone-split RC samples from drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 analysed by ALS Laboratories.
tests		All samples for drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 were submitted to ALS laboratories (either Mount Isa or Townsville) to be crushed and pulverized to ensure minimum 85% passing 75µm. A 70-80g pulp subsample from every submitted sample was sent to (or retained by) ALS Townsville laboratory for gold analyses of a 30g subsample by fire assay fusion (lead flux with Ag collector) with AAS finish (method Au-AA25). A 10-20g pulp subsample from each submitted sample was sent to ALS Brisbane laboratory for multi-element analyses of 0.25g subsamples using four acid digest (HF-HNO <sub>3</sub> -HClO <sub>4</sub> ) with an ICP-MS/ICP-AES finish (method ME-MS61). Samples reporting above detection limit copper results with method ME-MS61 trigger the subsequent four acid digestion of an additional 0.4g subsample made up to 100mL solution and finished with ICP-AES (method Cu-OG62).  Analytical methods Au-AA25, ME-MS61 and Cu-OG62 are considered to provide 'near-total' analyses and are considered appropriate for regional exploratory appraisal and evaluation of any high-grade material
	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.	intercepted.  Not applicable.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Four different commercial Cu-Au standards were submitted to ALS simultaneously with samples from holes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 at a rate of approximately 1 standard per 19 alpha samples.
		Commercially produced coarse-grained (chips) blanks and fine-grained (pulp) blanks were submitted in the sampling sequence at rates of approximately 1 coarse blank per 17 samples and 1 pulp blank per 20 alpha samples.
		Thirteen field duplicates (RC sub-samples) and 9 laboratory-prepped duplicates (core sub-samples) from JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 have been submitted for analysis, equating to a rate of 1 duplicate per 32 alpha samples.

Criteria	JORC Code explanation	Commentary
		For the laboratory assays reported in the body of this document an acceptable level of accuracy and precision has been confirmed by Demetallica's QAQC protocols.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Assay data from drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 have been compiled and reviewed by the senior geologists involved in the logging and sampling of the drill holes, cross-checking assays with the geological logs and representative photos. All significant intersections reported here have been verified by Demetallica's Exploration Manager.
	The use of twinned holes.	No twinned holes have been completed at the Jericho prospect.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All geological logging, sampling and assay data for drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 have been validated using Demetallica's data entry protocols and uploaded to Demetallica's geological database for data storage.
	Discuss any adjustment to assay data.	No adjustments to assay data have been undertaken.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Jericho drill collar positions were located by handheld GPS with approximately +/-2m accuracy. Detailed collar positions will be determined by a contract surveyor using DGPS prior to the data being incorporated into an updated resource estimate. The accuracy of the handheld GPS collar position is sufficient for the reporting of information in the body of this document.  Downhole orientation surveys of RC intervals in holes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 were conducted at ~30m intervals by drilling contractor Eagle Drilling using a Reflex Sprint IQ north-seeking gyro. A Champ Axis north-seeking gyro downhole survey system was used every ~30m by drilling contractor DDH1 to monitor drillhole trajectory during drilling of cored intervals of holes JE22D008-JE22D009 and JE22D020-JE22D024. The survey data spacing is considered adequate.
	Specification of the grid system used.	Grid system used is GDA2020, Zone 54.
	Quality and adequacy of topographic control.	The Jericho prospect terrain is flat lying with approximately 10m of elevation variation over the extended prospect area. Detailed elevation data for all drill collars at Jericho were collected in August 2019 by contract surveyors M.H. Lodewyk Pty Ltd using a rover/differential GPS (real time kinematic), accuracy ±50mm.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill core has been typically sampled at intervals of 1 metre lengths through the main zone of mineralization. RC samples have been collected and submitted for analysis as 1 metre intervals.  The data spacing is considered appropriate for
		assessing mineralisation and reporting geochemical results.

Criteria	JORC Code explanation	Commentary
	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.	This document does not relate to Mineral Resource estimation or Ore Reserve estimation; however the RC infill drilling of the J1 lode Matilda and Jumbuck ore shoots (JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041) is occurring at a nominal 50m drill hole pierce point spacing as advised by Demetallica's resource consultant. This spacing is expected to provide sufficient confidence to upgrade the reported category for a portion of the resource within the area being drilled. The data spacing and distribution are sufficient to enable an initial interpretation of the infill drilling data and assist refinement of the geological model for the 'J1' zone Matilda and Jumbuck ore shoots at Jericho. These drilling results and subsequent interpretations will provide a guide for future drilling and support the planned update of the Jericho resource estimate likely to be published in Q4 2022.  The data spacing for cored extensional drillholes JE22D008-JE22D009, JE22D020-JE22D024 are sufficient to enable an initial interpretation of the drilling data and assist refinement of the geological model for the 'J1' zone Matilda and Jumbuck ore shoots at Jericho. These drilling results and subsequent interpretations will provide a guide for future drilling.
	Whether sample compositing has been applied.	Weighted composites are used to report bulked mineralisation intercepts in the body of this document. The individual assays, sample intervals and sample types are included in Table 1 in the body of this document.
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.	Holes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 at Jericho were drilled to test the interpreted J1 mineralisation position. The holes were drilled as close as possible to perpendicular to the interpreted mineralised zones dependent on available access for the drill rig. The interpreted Jericho mineralisation model, used to guide the current drill program, was derived when the Maiden Mineral Resource Estimate was established and published. All drill holes reported here intersected mineralisation very close to the expected position based on the current geological model.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation-based sampling bias is expected or evident in the assay results presented in the body of this document.
Sample security	The measures taken to ensure sample security.	The drillcore samples were securely transported from the drill site to Demetallica's premises where intervals nominated for assay were halved and sampled for dispatch to the receiving ALS laboratory in Mount Isa.  The RC samples nominated for assay were securely transported from the drill site to Demetallica's premises then on to the receiving ALS laboratory in Mount Isa.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques have been reviewed and advised by Demetallica's resource consultant to ensure industry best practice is achieved.

## **Section 2: Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Drill holes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 were drilled within tenements EPM 25389 and EPM 26233. The tenements are 100% owned by Demetallica.
		A registered native title claim exists over EPM 25389 and EPM 26233 (Mitakoodi and Mayi People #5). Native title site clearances were conducted at each drill site prior to drilling.
		Conduct and Compensation Agreements are in place with the relevant landholders.
	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.	EPM 25389 and EPM 26233 are secure and compliant with the Conditions of Grant. There are no known impediments to obtaining a licence to operate in the Jericho prospect area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The only pre-existing exploration data, prior to discovery of Jericho by Minotaur Exploration in 2017 were open file aeromagnetic data and ground gravity data.
		The open file aeromagnetic data were used to interpret basement geological units to aid Minotaur Exploration's regional targeting which led to the discovery of Jericho. The Jericho target was delineated solely by work completed by Minotaur as part of the Eloise Joint Venture with OZ Minerals.
		Some of the Minotaur technical team that discovered Jericho are now full-time employees of Demetallica.
Geology	Deposit type, geological setting and style of mineralisation.	Jericho is an Iron Sulphide Copper Gold (ISCG) type deposit covered by approximately 30-80 metres of Cretaceous sedimentary units. Proterozoic basement beneath the cover is predominantly psammite and psammopelite with amphibolites interpreted to be original dolerite sills. The psammopelitic units are generally strongly foliated with compositional layering sub-parallel to the original bedding that dips steeply west.
		The mineralisation is typified by massive to semi- massive pyrrhotite-chalcopyrite sulphide veins and breccia zones overprinting earlier quartz-biotite alteration/veining. These zones of high sulphide content typically show deformation textures, and structural studies indicate Jericho formed in a progressively developing ductile shear zone that was active prior to and during mineralisation. The high-grade sulphide zones are bound by lower- grade chalcopyrite and pyrrhotite mineralisation including crackle breccias, stringers and disseminations.
		The main zone of mineralisation forms two parallel lodes (J1 and J2) approximately 120 metres apart

Criteria	JORC Code explanation	Commentary
		and over 3.5km in strike length (open along strike and at depth). The true thicknesses of individual mineralised lenses range from less than one metre to approximately 10 metres. The lodes are subparallel to the fabric of the host units and dip steeply to the west. Higher grade mineralisation is developed in discrete shoots, named Matilda and Jumbuck on Ji and Billabong on J2 that plunge moderately north (Figure 2 shows the shoots on J1)
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length.	Drill collar details, including hole ID, easting, northing, RL, dip, azimuth and end-of-hole (EOH) depth for drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 are included in Table 2 of the body of this report.  Downhole lengths and interception depths of the significant 'J1' mineralised intervals within drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 presented in the text are included in Table 1.
	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.	No data deemed material to the understanding of the exploration results have been excluded from this document.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	The weighted average assay values of the mineralised intervals from drillholes referred to in the body of this document were calculated by multiplying the assay of each drill sample by the length of each sample, adding those products and dividing the product sum by the entire downhole length of the mineralised interval.  No minimum or maximum cut-off has been applied to any of the drillhole assay data presented in this document.
	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.	The assays included in the quoted weighted averages for the mineralised intervals were derived from typically 1 metre length half core samples (range 0.35-1.35m) (JE22D008-JE22D009, JE22D020-JE22D024) or one metre RC interval samples (JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041). Some of the reported drill intercepts include low copper grades within a mineralised interval as defined by natural geological boundaries.  See Table 1 for assay intervals and details of copper grades for every included sample interval.

Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been reported in this document.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 were designed to test the interpreted position of the Jericho 'J1' mineralisation and were therefore drilled as close as possible to perpendicular to the modelled mineralisation zones.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The targeted Jericho J1 lode dips steeply west; the orientation of the mineralisation is well-constrained from previous drilling. The current drilling program aims to test the mineralisation at as high an angle as practical and mineralisation has been intersected in each hole close to the expected position.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Available data indicate that Jericho 'J1' true mineralisation widths approximate 65-75% of the downhole intersected width.
		For the purpose of clarity, all depths and intervals related to drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 referenced in this document are downhole depths.
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.	The locations of the Jericho J1 zone drill holes including JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 are presented in Figures 2-4 and Table 2.
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.	Geological and geochemical information provided for drillholes JE22D008-JE22D009, JE22D020-JE22D025, JE22D027-JE22D033, JE22D036-JE22D037 and JE22D039-JE22D041 in the body of this document is brief and designed to provide an update on drill results.
		The assays provided in the body of this report and presented in Table 1 show zones of higher grade and lower grade copper-gold mineralisation and variations within those zones. Table 1 includes all copper-gold data of significance and any data not reported here are deemed immaterial.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No meaningful and material exploration data have been omitted.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	The current drilling program is complete. Assay data for 20 drillholes are pending and will be reported in due course. The nature and scale of further work will be assessed following receipt of all assays and completion of the planned Jericho

Criteria	JORC Code explanation	Commentary
		resource estimate update likely to be published in Q4 2022.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to Figures 2 -4.