

# **ASX Announcement**

# 30 October 2024

ASX: OD6

# Acquisition of one of Australia's Highest-Grade, Historical Copper Mines

OD6 Metals Limited (**OD6** or the **Company**) is delighted to announce the proposed acquisition of the Historic Gulf Creek Copper Project—a high grade volcanogenic massive sulphide (VMS) deposit located near the town of Barraba in New South Wales (the **Gulf Creek Project** or **Project**).

### **Highlights:**

- High-Grade Copper–Zinc VMS style deposit historic underground mining averaged 2 to 6.5% Cu<sup>1</sup>
- **Mined over 100 years ago (1896-1912)** with +100m vertical and +300m strike open in multiple directions
- **Mineralisation is associated with magnetite** with geophysics showing repeat structures to the north and west of existing Gulf Creek workings
- Significant greenfields and brownfields exploration potential with over >3km of untested strike in the immediate mine-stratigraphy, and over >10km across the tenement
- Favourable deal metrics and structure based on \$200k cash, and 6,000,000 shares, plus a deferred issue of \$200k shares (subject to shareholder approval) or cash on commencement of Phase 2 drill program
- Strong near-term catalysts with exploration to commence imminently fully permitted to drill Phase
   1 program around the historical workings

### Brett Hazelden, Managing Director, commented:

"OD6 has reviewed over 40 potential new projects and is pleased to announce that we have entered into binding documentation to acquire the license over the historic Gulf Creek Copper mine and its surrounding area, in NSW.

The project was mined at the turn of the last century, between 1896 and 1912, with very high grades averaging between 2 to 6.5% Copper within the three main lodes. Exploration prospectivity is immense as there has been no modern exploration of substance since the mine closed, with only two drill holes completed more than 60 years ago.

We intend to apply modern exploration technologies and have identified the linkage between copper and magnetite in the shallow historic workings. Based on a review of a recent 2021 drone magnetic survey there is potential of over 10km of untested magnetic VMS target horizon.

Copper is rapidly becoming a critical mineral in Australia, with NSW recently announcing a royalty deferral program for developing critical minerals projects. OD6 is committed to rapidly advancing this early-stage prospect and the opportunity to build a larger copper focussed portfolio."

<sup>&</sup>lt;sup>1</sup> The Competent Person cautions that while the Mines Department records in this instance have been collected in accordance with official provisions at the time, they are not absolute measures of the tenor or quantity of mineralisation. The Competent Person considers that these records provide a reasonable indication of the tenor of grades and potential volumes of mineralisation present.



# **Gulf Creek Copper Project Background**

The Gulf Creek Project is a historic high-grade Copper–Zinc, volcanogenic massive sulphide (VMS) style deposit that was mined from underground over 100 years ago (1896-1912) to +100m vertical depth and +300m of strike. Historic records <sup>2</sup> describe the mineralisation as occurring within three parallel sulphide zones:

- Cornish Lode averaged 6% to 6.5% Cu
- Middle Lode averaged 3% to 3.5% Cu
- Big Lode averaged 2% to 2.5% Cu

Historic workings at the Gulf Creek Project will form the basis of initial exploration, the last drilling being two holes, which were drilled in the 1960's. As the Project has seen very little modern exploration and there are numerous untested targets as well as potential for a larger and more expansive high-grade Cu–Zn system with multiple repeat structures.

The exploration license, EL8492 (**Tenement**), covers an area of 2,375ha and is located near the town of Barraba, approximately 400km by road to the port of Newcastle and 550km north of Sydney. The project geology sits along the Peel Fault and encompasses the historic Gulf Creek and Murchison copper mines (see Figure 1).

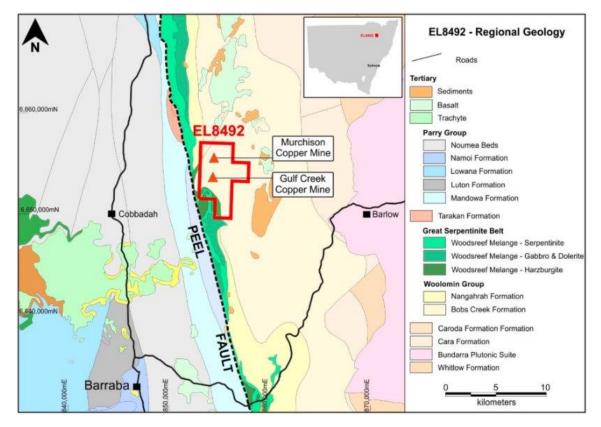


Figure 1: Gulf Creek Project location and geological setting

<sup>&</sup>lt;sup>2</sup> Brown, R.E., Brownlow, J.W., & Kyrnen (1992). Metallogenic Study and Mineral Deposit Data Sheets: Manilla-Narrabri 1:250 000, SH/56/9, SH/55-12. Geological Survey of New South Wales (319p) (Gulf Creek referenced p.26).

These average grades were not reported in accordance with the provisions of the JORC Code or its precedents and the Competent Person advises appropriate caution be exercised on the part of investors, potential investors or their advisers. The Competent Person considers that the reported grades are indicative of but not absolute measures of the tenor of mineralisation present at Gulf Greek.



The Project sits in a classic setting for Besshi Style Volcanogenic Massive Sulphide Deposit (VMS). This Silurian-Devonian age geologically is analogous to the Woodlawn Deposit (>20Mt @ 1.6% Cu, 9.1% Zn endowment)<sup>3</sup> owned by Develop Global Ltd.

# Initial Exploration Focus – Gulf Creek Historical Workings

A Phase 1 program has been designed to test the area in and around the historical workings and is fully permitted to commence during early 2025. The permitted program consists of a 14 hole, 1,500 to 3,000m diamond or RC drill program.

OD6 will investigate the use of downhole geophysics as a suitable targeting technique for mineralisation within 100m of drill holes.

The Company will examine re-processing and reinterpretation of Induced Polarisation (**IP**) and drone magnetics with the latest modeling techniques.

A new drone geophysical survey across the whole tenement will also be considered.

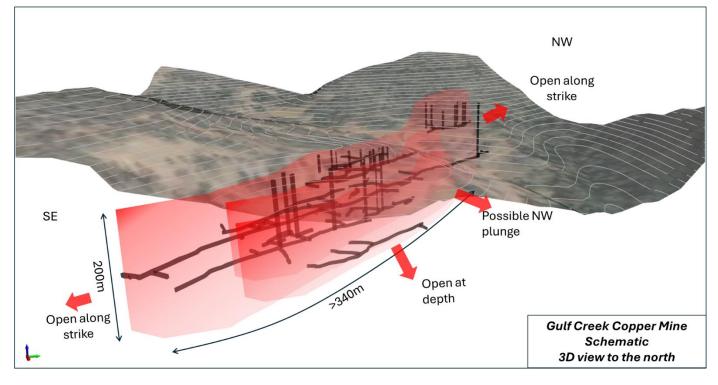


Figure 2: Gulf Creek Historical Workings. Oblique schematic view north

<sup>1.</sup> https://portergeo.com.au/database/mineinfo.asp?mineid=mn295



# **Extensional Exploration Near Gulf Creek**

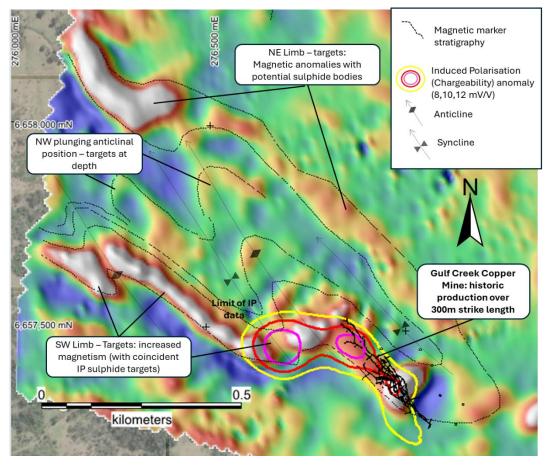
The Cu–Zn mineralisation has a strong association between magnetite and massive sulphide units. This association has been studied by students at the University of New England.<sup>4</sup> This relationship permits use of magnetic geophysics to identify targets that can be further tested with further geophysics and drilling.

A 2021 drone magnetics survey, shown in Figures 3 and 4 matches known mineralisation over +300m strikelength of the historic ore-body, and identified additional magnetic anomalies which may contain sulphide bodies.

Induced Polarisation (IP) Chargeability geophysics, to potentially map subsurface sulphide minerals, has been utilised in a small area surrounding the historic workings with results being coincident with extensional magnetic targets to the northwest.

The extended magnetic survey in Figure 3, **indicates a series of NW plunging folds providing >3km of local strike length of target high grade magnetite-VMS target horizons within the Gulf Creek Syncline.** 

The Competent Person cautions that this geophysical work is used to map potentially magnetic minerals (magnetic survey) or sulphide minerals (IP chargeability survey), and that subsequent physical sampling may not return results of economic interest.



Drilling in this area is planned as part of a future Phase 2 program.

Figure 3: Gulf Creek historical workings with 1VD Magnetic and IP data showing potential target extensions

<sup>4</sup> McCarron, J., The Geochemistry of Silurian/Devonian Cherts of Djungati Terrane, NSW and their Implications for Volcanogenic Massive Sulphide Deposits. 1991. University of New England, Armidale, NSW, BSc. Hons Thesis



# **Regional Exploration Potential**

The 2021 drone magnetics survey was extended north to the **historic Murchison Mine**, which is also associated with magnetic stratigraphy, as seen in Figure 4, and reported with copper grades up to 4%.<sup>5</sup>

There appears to be significant folded magnetic stratigraphy **completely untested with potentially over** >10km of magnetic VMS target horizon.

Further follow up geophysics and drilling in this area is planned as part of a future program.

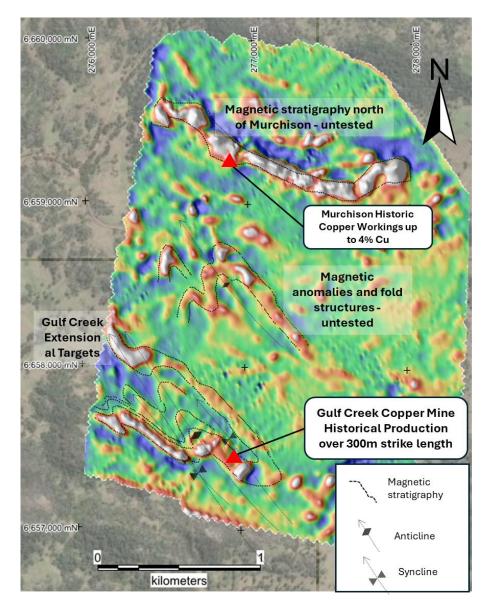


Figure 4: Gulf Creek regional 1VD Magnetic and potential untested targets

<sup>&</sup>lt;sup>5</sup> Refer: Comet Resources Press Release (13/01/2021)



# **Forward Works Program**

## Works underway

- Geophysics reprocessing and interpretation
- Check sampling / assays
- Integration of historic data and information into database

## Remaining 2024

- Reconnaissance mapping and sampling
- Planning (and implementation) of surface geochemistry surveys
- Planning of extended geophysical survey drone or ground-based

## Next calendar year

- Q1 2025 Phase 1 drilling program and downhole electromagnetics
- First drill assay results from Phase 1 drilling program at Gulf Creek
- Planning, permitting and implementation of Phase 2 drilling



# Appendix – Terms of Acquisition of the Gulf Creek Project

The Company, together with wholly owned subsidiary, Gulf Creek Copper Pty Ltd (**Buyer**), has entered into a tenement sale agreement with Mr Jonathan Downes (**Seller**), the current 100% owner of the Tenement, to acquire a 100% legal and beneficial interest in the Project (**Acquisition Agreement**). The Seller is not a related party of the Company nor a shareholder in the Company.

The Acquisition is subject to certain conditions, in particular ministerial approval for the transfer of the Tenement from the Seller to the Buyer which is anticipated to take up to 4 months (**Ministerial Approval Period**).

Key terms outlined below:

#### 1. Consideration

Subject to satisfaction (or waiver) of the conditions, the consideration payable by the Company for the Acquisition is comprised of:

- (i) payment of a non-refundable cash deposit of \$50,000 (exclusive of GST) to the Seller upon execution of the Acquisition Agreement;
- (ii) at Completion:
  - (A) payment of \$150,000 (exclusive of GST) to the Seller in immediately available funds (Completion Cash Consideration); and
  - (B) the Company issuing 6,000,000 fully paid ordinary shares in the capital of the Company (OD6 Shares) pursuant to the Company's placement capacity under Listing Rule 7.1 (Completion Consideration Shares); and
- (iii) post Completion, and subject to the satisfaction of the Deferred Milestone (see section 3 below), the Company will either:
  - (A) subject to the approval of the Company's shareholders pursuant to Listing Rule 7.1, issue such number of OD6 Shares to the Seller (or its nominee) with a deemed value of \$200,000 based on the volume weighted average price of OD6 Shares traded on ASX during the 10 trading days on which sales in OD6 Shares were recorded on ASX ending on the date that the Deferred Milestone is satisfied (**Deferred Consideration Shares**); or
  - (B) if, after seeking shareholder approval for the issue of Deferred Consideration Shares, OD6 does not receive the requisite shareholder approval for issue of such OD6 Shares, a cash payment by the Company of \$200,000 to the Seller in immediately available funds (**Deferred Cash Consideration**), payable within 5 Business Days of the applicable OD6 shareholder meeting,

#### (Deferred Consideration),

(together, the **Consideration**).

The Company must seek shareholder approval to issue the Deferred Consideration Shares within 60 days of satisfaction of the Deferred Milestone (or such later date agreed by the Seller).



#### 2. Voluntary Escrow

The Completion Consideration Shares are subject to a voluntary escrow period of 12 months from the date of issue (**Completion Share Escrow Period**).

If Deferred Consideration Shares are issued, they will be subject to voluntary escrow for the greater of:

- (i) any remaining Completion Share Escrow Period; and
- (ii) 4 months from the date of issue of the Deferred Consideration Shares.

#### 3. Deferred Milestone

The Deferred Consideration will be payable upon an announcement by the Company to ASX that it has commenced a second phase of drilling in respect of the Gulf Creek Project (**Deferred Milestone**).

The second phase of drilling will be taken to have commenced upon remobilisation of a drill rig occurring on the Tenement following completion of an agreed initial drilling program or, in the event drilling following completion of the Initial Drilling Program is continuous, when total drilling by the Company on the tenement has exceeded 2,500m. The Company must make the announcement to ASX as soon as reasonably practicable following satisfaction of the Deferred Milestone.

#### 4. Conditions Precedent

Completion of the Acquisition is conditional upon satisfaction (or waiver) of the following conditions precedent (**Conditions**):

- the Seller obtaining ministerial approval in accordance with the Mining Act 1992 (NSW) for the transfer of a 100% beneficial and legal interest in the Tenement to the Buyer, such consent being unconditional or subject only to the conditions imposed on the Buyer which are acceptable to the Buyer (acting reasonably);
- (ii) the Seller obtaining all other Government Agency consents and approvals reasonably necessary for the transfer of the Tenement to the Buyer;
- (iii) the Seller obtaining all Government Agency approvals (including, the approval of a review of environmental factors by the Department) and all applicable heritage clearances reasonably necessary for an initial drilling program (**Initial Drilling Program**) to be commenced on the Tenement on the terms of an existing Assessable Prospecting Operation (**APO**) approval applicable to the Tenement. For the avoidance of doubt, if the Buyer requires any amendments to the APO to conduct the Initial Drilling Program, the Buyer is responsible for seeking approval of any such amendments (provided that the Seller will provide reasonable assistance to the Buyer with respect to lodging any such amended APO and communicating with the Department in respect of the amended APO); and
- (ii) the Seller entering into a voluntary escrow deed in respect of the Completion Consideration Shares.

If the above Conditions are not satisfied within 6 months from the date of the Acquisition Agreement, either the Company or the Seller may terminate the Acquisition Agreement.



#### 5. Pre-Completion Exploration

On and from the date of the Acquisition Agreement until the date of Completion (inclusive) the Seller (to the extent it is legally able to do so) has granted the Buyer (acting through its employees, consultants and representatives):

- (i) a licence to (at OD6/the Buyer's sole cost):
  - (A) access and travel over the Tenement and bring vehicles, plant and machinery on to the Tenement;
  - (B) take samples, including bulk samples, from the Tenement;
  - (C) use all applicable mining information; and
  - (D) do all things the Seller is lawfully entitled to do on the Tenement,

to the extent such activities can be lawfully undertaken by the owner of the Tenement; and

(ii) the exclusive right (but not obligation), at OD6/the Buyer's sole cost, to carry out exploration activities (including, for the avoidance of doubt, the right to carry out an initial drilling program on the Seller's behalf) in accordance with all approvals obtained by the Seller (**Pre-Completion Activities**), which the Buyer may determine (in consultation with the Seller) the nature, location, timing and conduct of all exploration activities provided that it acts in accordance with good and generally accepted exploration practices,

and the Seller will provide all reasonable assistance to the Buyer for the purpose of procuring any Department approvals or other approvals required for the Buyer to lawfully carry out Pre-Completion Activities.

#### 6. Guarantee

The Company has agreed to guarantee the various obligations of the Buyer under the Acquisition Agreement.



#### **Competent Persons Statement**

Information in this report relating to Exploration Results is based on information reviewed by Jeremy Peters, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist and Mining Engineer of that organisation. Mr Peters is an independent consultant of Burnt Shirt Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Peters consents to the inclusion of the data in the form and context in which it appears.

#### **Forward Looking Statements**

Certain information in this document refers to the intentions of OD6 Metals, however these are not intended to be forecasts, forward looking statements, or statements about the future matters for the purposes of the Corporations Act or any other applicable law. Statements regarding plans with respect to OD6 Metals projects are forward looking statements and can generally be identified by the use of words such as 'project', 'foresee', 'plan', 'expect', 'aim', 'intend', 'anticipate', 'believe', 'estimate', 'may', 'should', 'will' or similar expressions. There can be no assurance that the OD6 Metals plans for its projects will proceed as expected and there can be no assurance of future events which are subject to risk, uncertainties and other actions that may cause OD6 Metals actual results, performance, or achievements to differ from those referred to in this document. While the information contained in this document has been prepared in good faith, there can be given no assurance or guarantee that the occurrence of these events referred to in the document will occur as contemplated. Accordingly, to the maximum extent permitted by law, OD6 Metals and any of its affiliates and their directors, officers, employees, agents and advisors disclaim any liability whether direct or indirect, express or limited, contractual, tortuous, statutory or otherwise, in respect of, the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).

#### **No new information**

Information in this report relating to Exploration Results is based on information reviewed by Mr Jeremy Peters who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist and Mining Engineer of that organisation. Mr Peters is a Director of Burnt Shirt Pty Ltd, consulting to OD6 and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Peters consents to the inclusion of the data in the form and context in which it appears.

The information in this report relating to the Mineral Resource estimate for the Splinter Rock Project is extracted from the Company's ASX announcements dated 29 May 2024. OD6 confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply.

#### This announcement has been authorised for release by the Board of OD6 Metals Limited



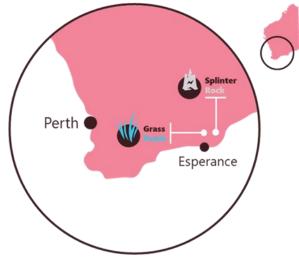
#### **About OD6 Metals**

OD6 Metals is an Australian public company pursuing exploration and development opportunities within the critical mineral sector.

The Company has successfully identified clay hosted rare earths at its 100% owned Splinter Rock and Grass Patch Projects, which are located in the Esperance-Goldfields region of WA - about 30 to 150km northeast of the major port and town of Esperance.

REE are becoming increasingly important in the global economy, with uses including advanced electronics and permanent magnets electric motors in electric vehicles, wind turbines and robotics.

An updated Mineral Resource Estimate (MRE) for the flagship Splinter Rock Rare Earths Project was released in May 2024 and has confirmed that Splinter Rock hosts the largest and highest-grade clay-hosted rare earths deposit in Australia with a Resource of 682Mt @ 1,338ppm TREO.



The Splinter Rock MRE indicates that high-value Magnetic Rare Earths (MagREE) such Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy) and Terbium (Tb) represent ~23% of the deposit.

Metallurgical testing using hydrochloric acid to leach the rare earths have resulted in positive REE recoveries with optimisation ongoing. The Inside Centre Prospect is a main focus of the company given its metallurgical recoveries, high grade, low strip ratio and its considerable thickness.

As part of the exploration process the Company has entered into heritage agreements with Esperance Tjaltrjraak Native Title Aboriginal Corporation and the Ngadju Native Title Aboriginal Corporation that serves to both enable exploration and protect important cultural sites on Country.

#### **Corporate Directory**

Managing Director	Mr Brett Hazelden
Non-Executive Chairman	Wayne Bramwell
Non-Executive Director	Dr Darren Holden
Non-Executive Director	Mr Piers Lewis
Non-Executive Director	Dr Mitch Loan
Financial Controller/ Joint Company Secretary	Mr Troy Cavanagh
Joint Company Secretary	Mr Joel Ives

#### Contact

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#### **Investor Relations**

Lucas Robinson Corporate Storeytime <u>lucas@corporatestorytime.com</u> Phone: +61 408 228 889



# JORC 2012 – Table1: Gulf Creek

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information</li> </ul>	<ul> <li>Reference to copper and zinc grades are based on historic reports noted in:</li> <li>Peters, J. 2023. Independent Geologists Report for Comet Resources Ltd. Burnt Shirt Pty Ltd.</li> <li>Brown, R., 1987. Preliminary Geological Notes for the Manilla 1:250,000 sheet. Geological Survey of New South Wales, Report GS1987/003.</li> <li>Brown, R.E., Brownlow, J.W., &amp; Kyrnen (1992). Metallogenic Study and Mineral Deposit Data Sheets: Manilla-Narrabri 1:250 000, SH/56/9, SH/55-12. Geological Survey of New South Wales (319p) (Gulf Creek referenced p.26)</li> <li>Byass, A. and Thompson, A., 2012. Gulf Creek CopperZinc Deposit – Scoping Study March 2012. Unpublished Report prepared by Clonaig Consulting for Corazon Mining Limited. (reported in Annual Report for EL6492 available NSW government portal)</li> <li>Other references noted in the reference list.</li> <li>Samples and exploration reported in previous studies and reports are considered historic in nature and are yet to be verified by the Company. The details and verification are not necessarily available, however, based on multiple reports with similar assessments, historic results are considered generally reliable in the context in which they have been presented. Further verification is underway by the Company.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	• No drilling results reported in this release.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	• No drilling results reported in this release.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	• No drilling results reported in this release.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary</li> </ul>	<ul> <li>No drilling results reported in this release.</li> <li>Samples and exploration reported in previous studies and reports are considered historic in nature and are</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	yet to be verified by the Company. The details and verification are not necessarily available, however, based on multiple reports with similar assessments, historic results are considered generally reliable in the context in which they have been presented. Further verification is underway by the Company.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	• Samples and exploration reported in previous studies and reports are considered historic in nature and are yet to be verified by the Company. The details and verification are not necessarily available, however, based on multiple reports with similar assessments, historic results are considered generally reliable in the context in which they have been presented. Further verification is underway by the Company.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	• No drilling results reported in this release.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>No drilling results reported in this release.</li> <li>Grid system is MGA 94 Zone 56</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>No spaced data is reported other than geophysical data. Refer below.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>No assay sampling reported, other than historic results as previously noted.</li> <li>With reference to magnetic data – flightlines were flown on an orientation 045 degrees (NE-SW), which is orthogonal to the principal geological structure</li> <li>With reference to IP Geophysics – lines were oriented E-W, which is approximately a 45 degree angle to the principal NW-SE oriented geological structure.</li> </ul>
Sample security	• The measures taken to ensure sample security.	• Samples reported by previous studies are considered historic in nature and are yet to be verified by the Company. The security of samples is not known.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The Independent Competent Person reviewed the historic reports.</li> <li>Whilst reported by previous studies are considered historic in nature and are yet to be verified by the Company, the various historic reviews by Geological Survey of New South Wales and academic researchers noted in the reference list concur the presence of high-</li> </ul>



Criteria

RC Code explanation

Commentary

grade copper mined historically at Gulf Creek.

## 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	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Gulf Creek Project EL8492 is listed on the Mining Titles Registrar of NSW under the names Jonathan Charles Downes and Comet Resources Ltd. Jonathan Downes has provided a verification that Comet Resources Ltd has relinquished its interest in the title and has returned it to Downes.</li> <li>As part of the arrangement, OD6 Metals will become the sole 100% holder of the exploration license. The license was renewed on 18/03/2024 is valid until 21/12/2029.</li> <li>Other than state royalties, there are no overriding royalties on the project.</li> <li>The license overlaps both crown land (being the area principally of the historic mine) and private farmland. Private land holders in the area have previously consented to exploration activity on their land, and the Company knows no reason why on-going land access cannot be granted.</li> <li>The land falls in the area of Claimants – the Gomeroi people. On private land, the native title has been extinguished. The area of Crownland was subject to a ruling 31/03/2022 and that Native Title is effectively extinguished for the purposes of exploration. Further consents may be required prior to mining.</li> <li>Heritage – areas subject to future ground disturbing work are subject to the NSW Mineral Industry Due Diligence Code of Practice for the Protection of Aboriginal Objects 2010.</li> <li>Historical archaeological sites are protected under the NSW Heritage Act (19777), which may be applicable to historic buildings and structures, including the presence of historic mine and smelter workings.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The Gulf Creek mine has been subject to intermittent exploration for more than 100 years. In recent times, reconnaissance and geophysical surveys were carried out. <b>Refer to reference list in this document.</b>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Base metal (copper and zinc) mineralisation occurs is massive to semi-massive sulphides principally chalcopyrite and sphalerite. The mineralisation is closely associated with magnetite.</li> <li>Mineralisation is hosted in a series of cherts, (sedimentary radiolarian and exhalative) siltstones and basalts of the Bob's Creek Formation. The Bob's Creek formation is underlain by the Woodsreef Formation- an ophiolite sequence including harzburgite, dunite and gabbro.</li> <li>Mineralisation is considered to be 'Besshi Type' Volcanogenic Massive Sulphide (VMS) deposit</li> <li>The sedimentary sequence, of which the mineralisation is parallel, has been folded into NW-SE striking and steeply dipping folds.</li> <li>At the historic Gulf Creek mine, mineralisation strikes NW-SE and is steeply dipping (70-85 degrees) to the NE.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all</li> </ul>	• No drilling results reported in this release.



Criteria	JORC Code explanation	Commentary
	<ul> <li>Material drill holes:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	• No drilling results reported in this release.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	• No drilling results reported in this release.
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>No drilling results reported in this release.</li> <li>Diagrams are included at relevant sections in this Report</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>All results reported in this release have been compiled from open file information and appropriately listed in the reference list.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>All results reported in this release have been compiled from open file information and appropriately listed in the reference list.</li> <li>Magnetic data – the magnetic data was reported by Comet Resources in the annual report for 2022 and available through the NSW Government portal. Magnetic data was a drone survey completed by AirGeoX Ltd using the TotalMag system. Line spacing was 25m, traverse direction 045deg, tie-lines of 250m, tie-lines 135 deg and sensor height 30m. Magnetic data maps magnetism in the rocks, and there is a close association of the mineral magnetite with mineralisation.</li> <li>Induced Polarisation survey was completed in 2008 by Graynic Resources and included 10 E-W Oriented lines for 11.5 line kilometres at 50m spacing across the main mine workings and extending east-west. The survey was a pole-dipole survey conducted by Planetary Geophysics. IP maps chargeability of the rocks and in the context of Gulf Creek is considered to be mapping disseminated sulphides associated with alteration</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>around target zones.</li> <li>Geophysics data has been reviewed and reprocessed by Mitre Geophysics Ltd for previous explorers and OD6 Metals.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Mineralisation mined historically is open along strike to the NW and down-dip / plunge.</li> <li>The Company is planning on initially drilling the immediate vicinity and extensions of historic workings, before stepping out and drilling geophysical targets to the NW and elsewhere on the exploration license.</li> </ul>

## **Gulf Creek History**

- 1896 Discovery of high-grade gossanous samples at surface at Gulf Creek. Maitland Daily Mercury (1901)
- **1896-1912** Underground mine and on-site smelter for a period, the best in the country **employing 300 to 500 workers** (Carne, 1908, Maitland Daily Mercury, 1904, 1911, Manilla Express, 1899).
- 1912 Mine closed due to low copper prices and lack of transport logistics for product. (Maitland Daily Mercury, 1911)
- **1963-1964** Carpentaria Exploration (a subsidiary of Mt Isa Mines) conducted surface mapping and drilled two holes. One hole intersected old workings and was terminated. The other hole drilled beneath the plunge of the mineral system, missing the main lodes, yet intersected copper and silver mineralisation (no assays for zinc) over 3m. Carpentaria Exploration (1965) & Darlington (1964)
- **1967** Austminex reviewed the region for copper deposits as part of regional exploration. Austminex (1967).
- **1971-1975** Serpentine Resources and Western Mining Corporation reviewed the region as part of extensional exploration of the Woodsreef asbestos mine located ~20km to the south of Gulf Creek; highlighting the presence of regional prospectivity for high-grade copper. Hall (1971), Mckenna, 1987.
- **1982** Newmont Holdings assessed the area principally for gold associated with copper mineralisation and withdrew citing poor outcrop hampering mapping and prospecting activities. Newmont (1982)
- **1991– 1993** University of New England conducted geological investigations of the sediments and volcanics, including potential for Volcanogenic Massive Sulphides. McCarron (1991), Lawie, (1993)
- **1992** CRA Ltd mapped the regional geology and despite concluding there was potential for additional stacked lenses of blind mineralisation, withdrew from the project. CRA, 1992
- **2001-2002** Rimfire Pacific explored the area, though their exploration was focused elsewhere in the region principally towards gold and diamonds. Rimfire (2001,2002)
- 2006-2007 Graynic Minerals conducted surface reconnaissance and IP Geophysics. Despite identifying several high priority targets, did not undertake any drilling. Graynic (2006,2008)
- 2011-2012 Corazon Minerals conducted reconnaissance and a scoping study showing as little as 2 to 3Mt of ore could be economic in this area. Corazon (2011-2013); Byass & Roberts (2011)
- **2013-2014** Peel Mining conducted a review, concluding that Gulf Creek was a promising target, but could not divert exploration budget from their projects in Cobar Basin. Marshall, (2013, 2014).
- 2017-2022 Downes and Comet Resources carried out minor amount of soil sampling and reconnaissance, and fly drone magnetics. This included permitting for drilling, but due to delays on Heritage (now solved) and other issues, did not continue with the project, Laursen (2017, 2018, 2019) & Rampe (2020, 2021, 2022)
- 2024 OD6 Metals agrees to acquire the project from Downes and is committed to the first substantial drill program ever on the project.



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