



4 February 2022

## **Downhole Electromagnetic Survey Starts at Gibsons**

Critical Resources Limited (ASX:CRR) (“Critical Resources” or the “Company”), is pleased to advise that it has started Down Hole Electromagnetic (“DHEM”) surveying at its Gibsons prospect, part of the broader Halls Peak project in New South Wales.

### **Highlights**

- **DHEM surveying commenced on completed drill holes at Gibsons**
- **Four holes over approximately 1,000m of drill hole length to be surveyed**
- **Surveying designed to identify off-hole conductors and anomalies**
- **New drill holes will be designed to target any identified anomalies**

The Company reports that it has started DHEM surveying at its Gibsons project. The survey will focus on Holes 01 (to 141.6m), 06 (105.7m), 09 (to 258m) and 11A (to 550m). The purpose of the survey is to identify any off-hole conductors and anomalies both laterally and at depth at the Gibsons prospect which can be targeted in subsequent drill programs.

Critical Resources Managing Director Alex Biggs said: “The Gibsons drilling campaign has been a great success so far and this allows us to gain a greater understanding of the deposit, whilst drilling continues. DHEM surveying is an important strategy for us to identify further targets both laterally and at depth. Halls Peak is demonstrating strong indicators that demonstrate its potential and this survey program will assist greatly in planning the next phase of drilling”.

### **Geophysics Background**

Historically exploration at Halls Peak has trialled numerous geophysical methods, including Induced Polarisation (IP), Electromagnetic (EM) and Mise-a la-Masse.

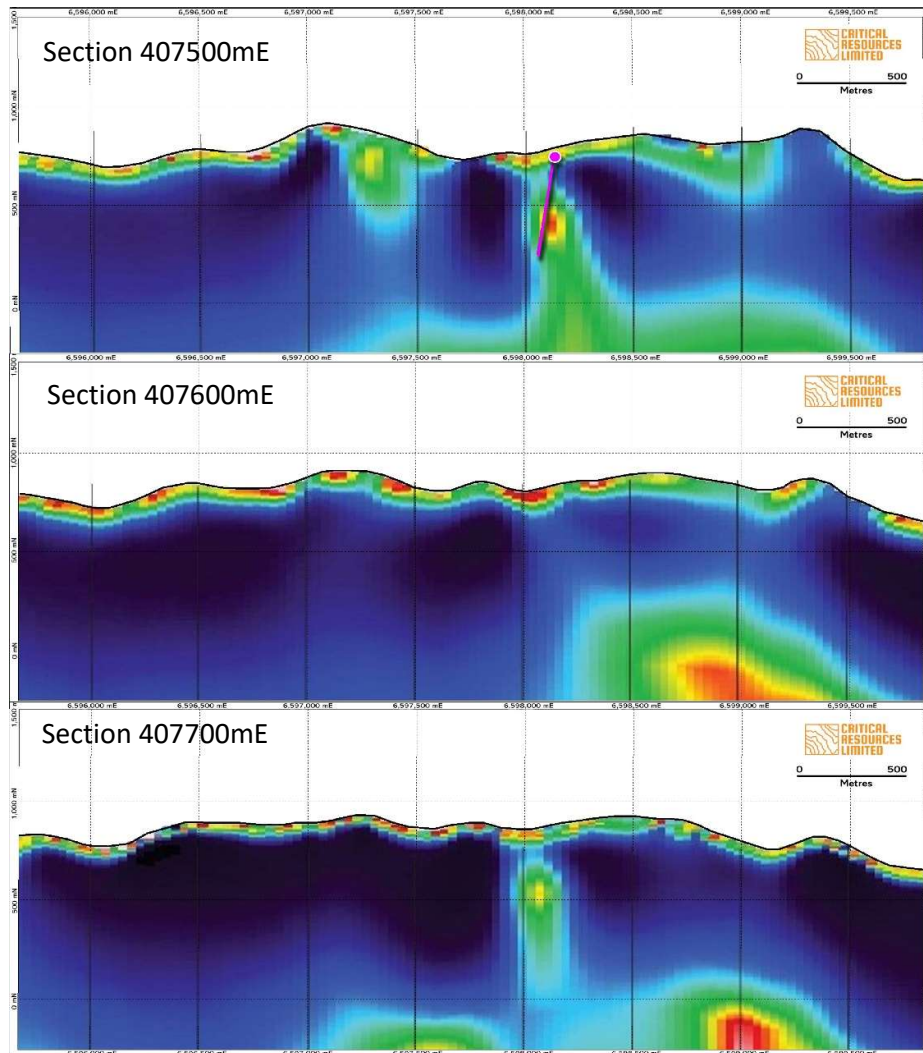
The most recent and expansive survey, completed in 2012, was an aerial electromagnetic survey, Versatile Time Domain Electromagnetic Survey (“VTEM”). The purpose of the survey was to measure the conductance of the rock mass with the aim of delineating an economic massive sulphide deposit.

The 2012 VTEM survey delineated at Gibsons a deeper target to the north-west (as shown in Figure 1) which may represent the source of shallow mineralisation discovered by previous and current drilling. This is a view that is reinforced by an early Mise a la Masse survey that saw extensions to the mineralisation in this direction (Silver-Lead-Zinc-Copper Mineralisation Halls Peak N.S.W., Carpentaria Exploration Company Pty. Ltd., GS 1971/749).

A reinterpretation of the VTEM geophysical data in 2021 by Southern Geoscience Consultants was completed which assisted in development of the current drill program at both Gibsons and Sunnyside. Previous modelling of data utilised algorithms that envisage flat lying conductors. More recent modelling employs algorithms that better model vertical conductors. Geophysical targets generated by this reinterpretation are shown in Figure 1.

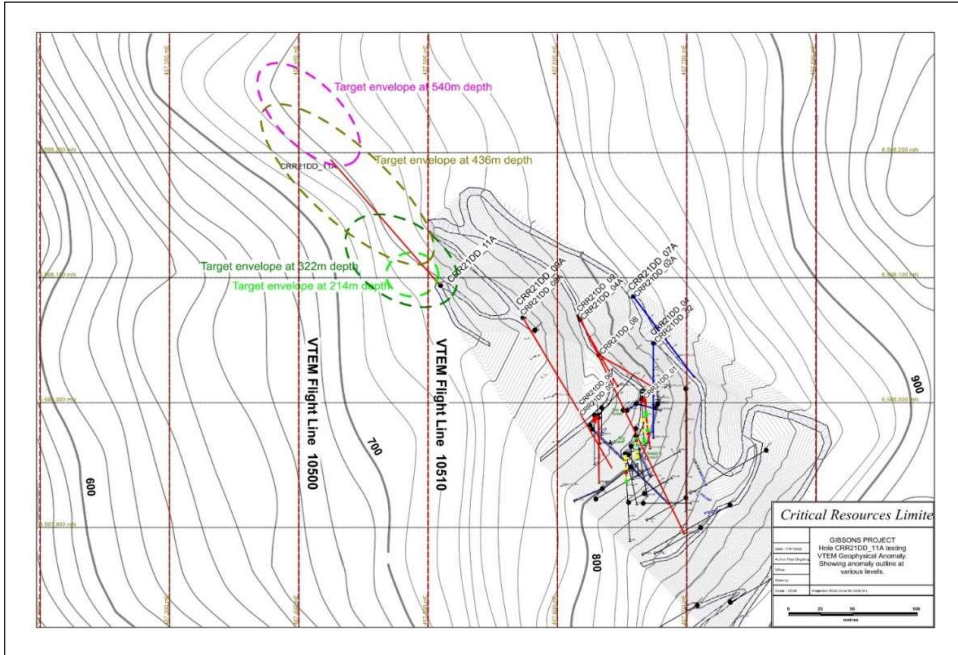
The current DHEM surveying is designed to provide more clarity to the VTEM survey data as well as generating further targets.

**Figure 1: Gibsons VTEM geophysical targets demonstrating three sections at 100m intervals**



Gibsons drilling with geophysical targets outlined at depth are shown in Figure 2. This is a plan view interpretation of data presented in Figure 1.

**Figure 2: Gibsons project geophysical target outline at various levels (VTEM 2.5D processing) Note: Drilled holes in blue and proposed holes are red**



## Halls Peak Project Description

The 100% owned Halls Peak project is located in New South Wales approximately 45km South-East of Armidale in the New England Fold Belt, an area well known for its mineral endowment and production. The Halls Peak massive sulphide deposits were discovered in 1896 where near surface mining extracted high-grade Zinc, Lead, Copper and Silver. More recent near surface exploration has been conducted by Precious Metal Resources Limited, Sovereign Gold Company Limited (now Critical Resources Limited) and Force Commodities Limited (now Critical Resources Limited) yielding high-grade intercepts to a depth of approximately 150m at the Gibsons prospect. Some near surface historic mining has occurred around the Sunnyside prospect.

<sup>1</sup>Previous drilling results includes:

### **Critical Resources Limited (formerly Sovereign Gold Company and Force Commodities Limited) – ASX Announcements**

12.45m @ 10.91% Zn 5.73% Pb, 1.15% Cu, 331.63g/t Ag and 1.50g/t Au  
(refer ASX announcement dated 11 January 2022)

11.3m @ 15.18% Zn, 8.02% Pb, 597g/t Ag, 1.61% Cu from hole SG-03  
(refer to ASX announcement dated 15 December 2016)

11.2m @ 19.71% Zn, 10.77 % Pb, 134.96 g/t Ag, 0.8% Cu from hole SG-06  
(refer ASX announcement dated 29 December 2016)

7.2m @ 20.19% Zn, 7.17 % Pb, 30.93gpt Ag, 0.66% Cu from hole SG-05  
(refer to ASX announcement dated 29 December 2016)

5.7m @ 9.44% Zn, 7.09% Pb, 155g/t Ag, 0.53% Cu from hole SG-03  
(refer ASX announcement dated 15 December 2016)

### **Precious Metal Resources Limited – ASX Announcements**

37.2m @ 8.7% Zn, 3.0% Pb, 85g/t Ag, 1.4% Cu from hole DDH HP 026

(refer to ASX announcement dated 03 January 2014)

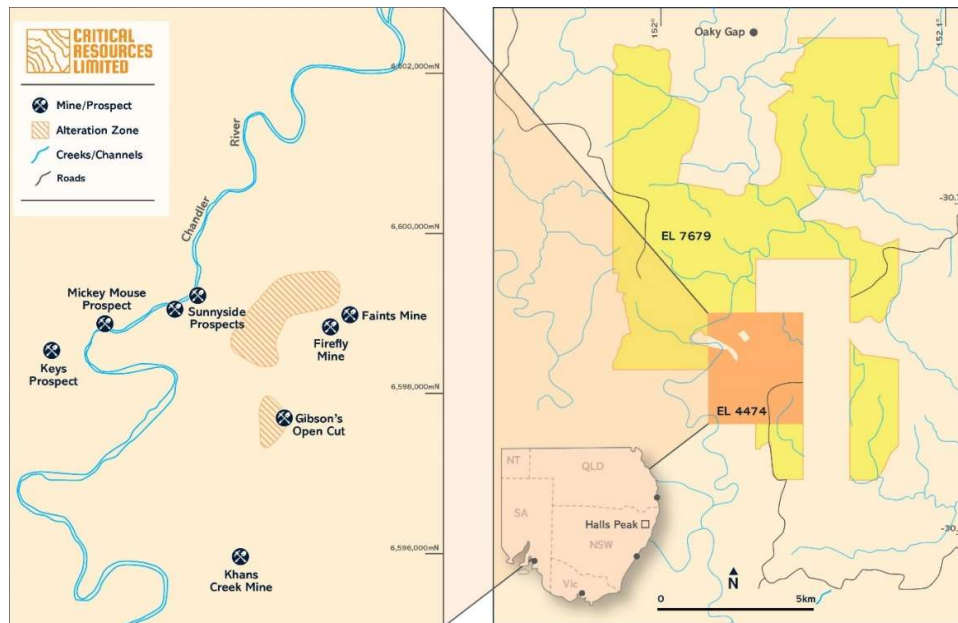
7.45m @ 8.88% Zn, 3.11% Pb, 22 g/t Ag, 0.56% Cu from hole DDH HP 027

(refer to ASX announcement dated 15 January 2014)

<sup>1</sup>The information required pursuant to listing rule 5.7 is included in ASX announcement dated 08 July 2021

Halls Peak is considered to have potential to contain world class deposits similar to those already being mined in northern Australia. The project area comprises multiple historic mines and prospects including Gibsons, Sunnyside, Firefly, Faints, Khans Creek, Keys and Mickey Mouse. All current exploration activities are focused on exploration licence EL 4474 with primary targets being the Gibsons and Sunnyside prospects. A summary of the project location is shown in Figure 3.

**Figure 3: Halls Peak project location**



**This announcement has been approved for release by the Board of Directors.**

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## **ABOUT CRITICAL RESOURCES LIMITED**

Critical Resources is a base metals and lithium exploration and development focused company headquartered in Perth, Western Australia and is listed on the Australian Securities Exchange (ASX:CRR). The Company has recently been undergoing a structured process of change at the Director and Executive level. These changes mark the commencement of a renewed focus by the Company on providing shareholder value through the exploration, development and advancement of the Company's long held NSW assets, its newly acquired Lithium assets in Canada and also of its Copper assets in Oman.

## **EXPLORATION WORK – COMPETENT PERSONS STATEMENT**

The information in this ASX Announcement that relates to Exploration Results is based on information compiled by Mr Michael Leu, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Leu is a full-time employee of Critical Resources Limited. Mr Leu has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Leu consents to the inclusion in this ASX Announcement of the matters based on his information in the form and context in which it appears.

## **FORWARD LOOKING STATEMENTS**

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in

providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

**NO NEW INFORMATION**

Except where explicitly stated, this announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements.