

## Golden Deeps Expands Footprint in the World-Class Lachlan Fold Belt Copper-Gold Province, NSW

Golden Deeps Ltd (ASX: GED) has entered into a binding Heads of Agreement (HOA) to earn an 80% interest in the holders of **four granted and highly-prospective exploration licences in the world-class Lachlan Fold Belt Copper-Gold Province of NSW** (see Figures 1, 2 and 3).

- Under the HOA with Acros Minerals Pty Ltd (Acros) and Crown Gold Resources Pty Ltd (Crown), Golden Deeps will reimburse \$179,263 previous exploration expenditure, and earn an 80% interest by spending \$300,000 on exploration within three years (see Significant Terms, Appendix 1).
- The Acros and Crown tenements in the Lachlan Fold Belt straddle the boundary between the Siluro-Devonian **Hill End Trough - which hosts the Hill End and Hargreaves goldfields (2Moz historic production<sup>1</sup>)** - and the **Rockley-Gulgong Volcanic Belt**, which is highly prospective for porphyry copper-gold deposits (see Figure 1). **Major deposits in the Lachlan Fold Belt include the world-class Cadia-Ridgeway deposit (456Mt @ 0.83 g/t Au, 0.24% Cu endowment<sup>2</sup>).**
- **Golden Deeps is currently drilling at the Havilah Copper-Gold Project (EL8936) within the Rockley-Gulgong Volcanic Belt** to test a series of porphyry/volcanics hosted copper-gold targets at the Hazelbrook prospect<sup>3</sup> (see location, Figure 1 and magnetics with key targets, Figure 2).
- Targets within the Acros (EL9114, EL9069 & EL9118) and Crown (EL9060) tenements include:
  - **Extensions of the Sofala Volcanics** south of the Havilah Project. Magnetics indicate continuity of the highly-prospective volcanics and intrusives which project south under Permian cover into EL9114. No previous work has tested the underlying volcanics and/or the intrusive boundary (see Figures 1 and 2).
  - **Extensions of the Rockley-Gulgong belt** along the Mudgee Fault (Figure 1), which includes the mineralised Sofala Volcanics and buried porphyry intrusion targets, into EL9069 and EL9060 north of the Havilah tenement (see Figures 1 and 2).
  - **Extensions of the Hargreaves and Tuckers Hill high-grade gold trends** north into EL9118 (see Figure 1).
- **The Company will build on previous work which has shown that the mineralised Sofala Volcanics and porphyry Cu-Au targets are present on EL9114 and EL9069.** Planned work includes further geophysical surveys (detailed gravity, magnetics & Induced Polarisation), with a focus on extensions of the Rockley-Gulgong belt south and north of the Company's projects (Figure 2).
- **This work will aim to define drilling targets targeting major porphyry/volcanics hosted copper-gold deposits in an area which has received limited exploration due to shallow cover.**

### Golden Deeps CEO Jon Dugdale commented:

*"This HOA gives Golden Deeps access to extensions of mineralised volcanics and intrusives within the Rockley-Gulgong Volcanic Belt. This belt is highly prospective for major porphyry/volcanic hosted copper-gold discoveries and is a similar setting to major deposits such as the world-class Cadia-Ridgeway mine.*

*"The Acros and Crown tenements also include extensions to the Hill End gold corridor which has produced over two million ounces of gold.*

*"We now look forward to immediately advancing geophysical programs to define drilling targets south and northwest of the Company's Havilah Project, where drilling is currently testing copper-gold targets which continue under cover into the Acros and Crown ground."*

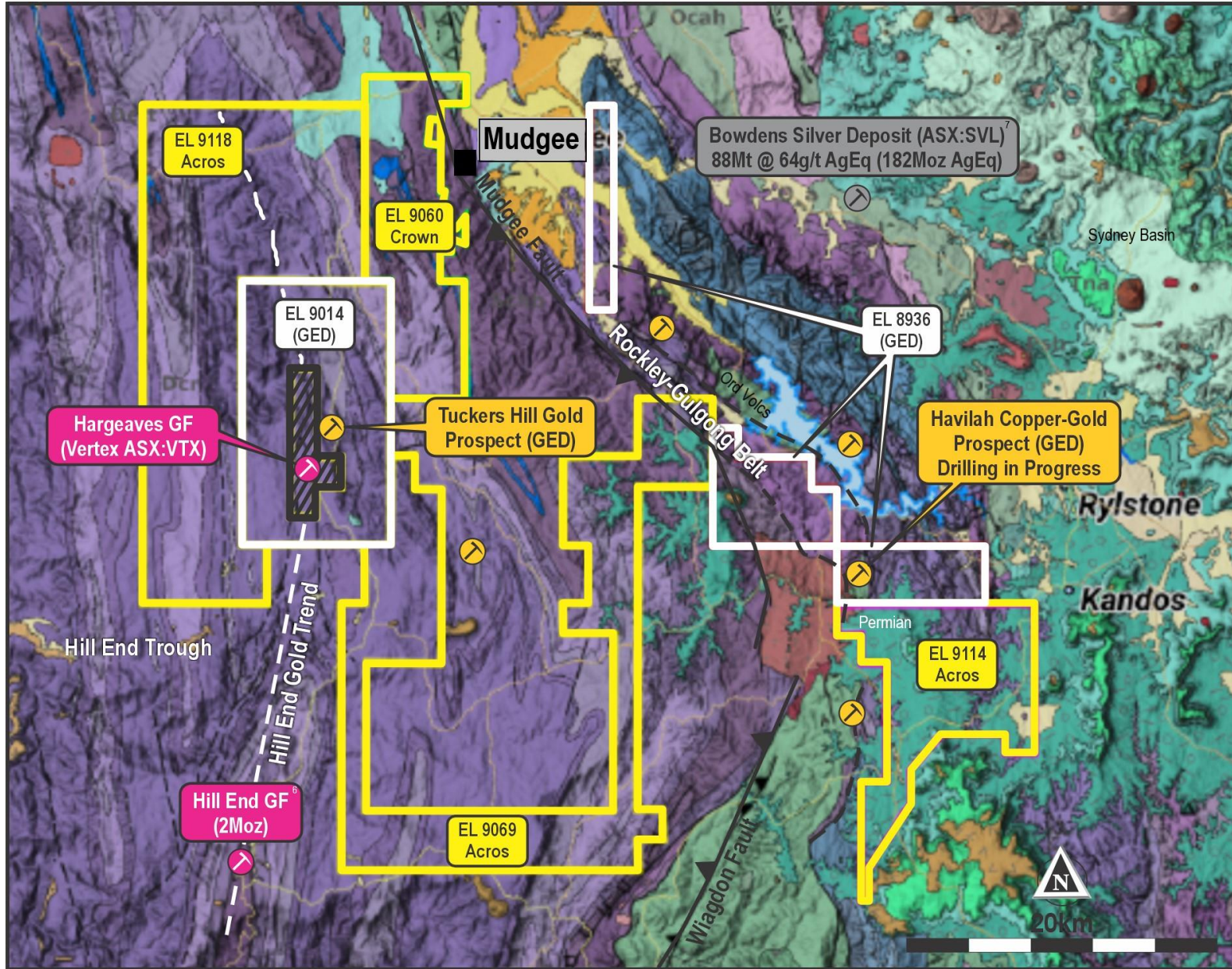


Figure 1: Geology of the Eastern Lachlan Fold Belt showing the Acros and Crown tenements and GED's existing projects

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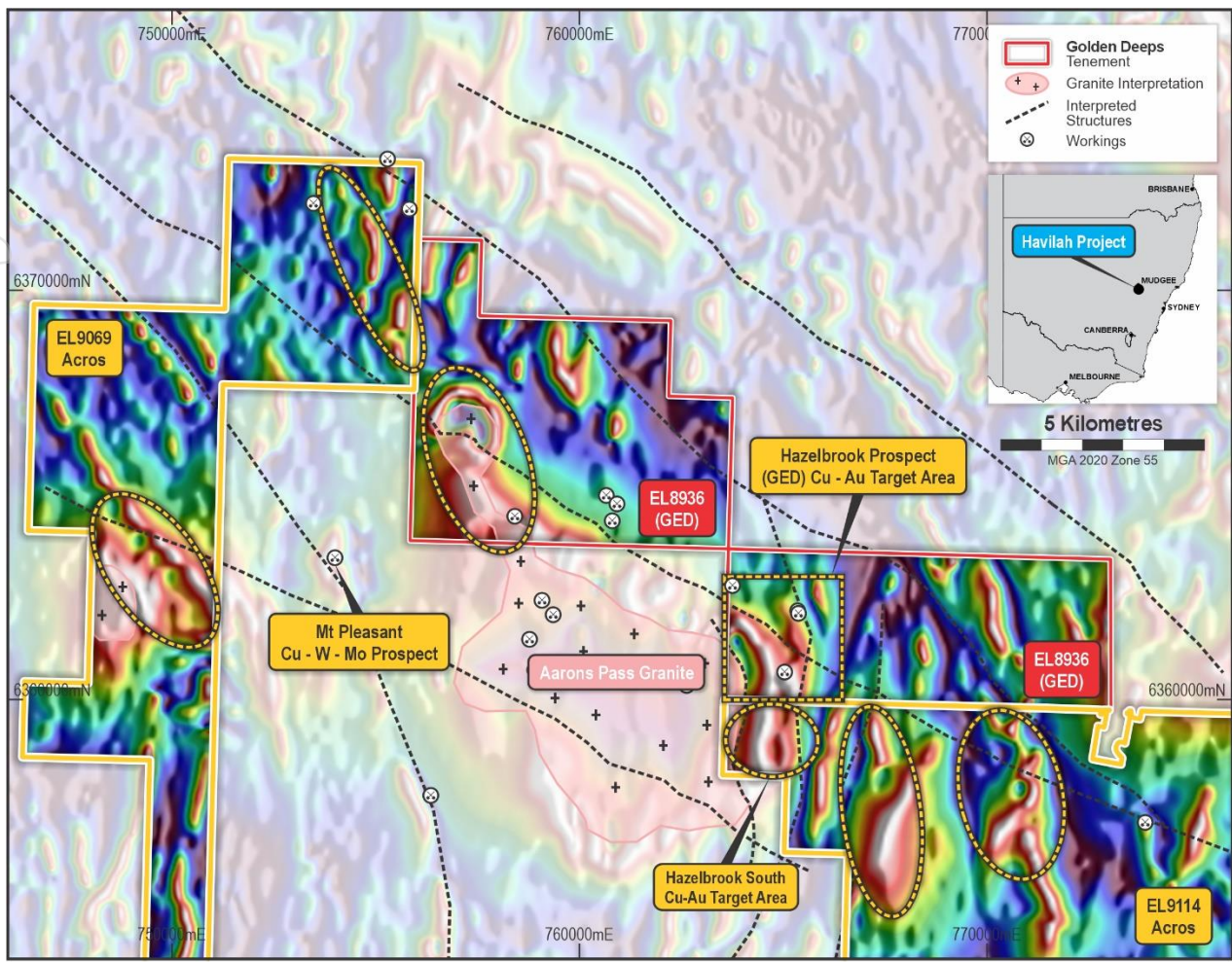


Figure 2: TMI Magnetics image, GED's Havilah tenement and adjoining Acros tenements and targets

**About the Acros and Crown Tenements**

Acros holds three exploration licences (EL9114, EL9069 and EL9118) and Crown one exploration licence (EL9060) near Mudgee in the Eastern Lachlan Fold Belt region of NSW (see Figure 1 for locations). Details of the tenements are shown in Table 1 below:

Table 1: Acros and Crown Tenements expenditure and commitments:

Company	Tenement	Grant	Expiry	Area (Km <sup>2</sup> )	Commitment p.a.
Acros Minerals Pty Ltd	EL9114	15/03/2021	15/03/2027	74	\$25,000
Acros Minerals Pty Ltd	EL9069	2/03/2021	2/03/2027	143	\$20,000
Acros Minerals Pty Ltd	EL9118	16/03/2021	16/03/2027	179	\$25,000
Crown Gold Resources Pty Ltd	EL9060	18/02/2021	18/02/2027	65	\$25,000
				<b>461</b>	<b>\$95,000</b>

The Acros and Crown tenements are located close to the eastern margin of the Lachlan Fold Belt and straddle the boundary between the Siluro-Devonian Hill End Trough - which contains the Hill End gold field (2Moz produced), and the **Rockley-Gulgong Volcanic Belt which is highly prospective for porphyry related copper-gold deposits** (see Figure 1).

In the eastern tenements (EL9114, EL9069 and EL9060), the Company is targeting porphyry/volcanic hosted copper-gold mineralisation in a belt of Ordovician age (Sofala) volcanic rocks in the Rockley-Gulgong Volcanic Belt. This belt is part of the Macquarie Arc in the Lachlan Fold Belt - a major geological province known for world-class copper-gold deposits such as Cadia-Ridgeway<sup>2</sup> and North Parkes<sup>4</sup> (see Figure 3, below). These major deposits are hosted by Ordovician volcanic rocks and associated with "porphyry" intrusives and sit within parallel volcanic belts to the west of the Rockley-Gulgong Belt.

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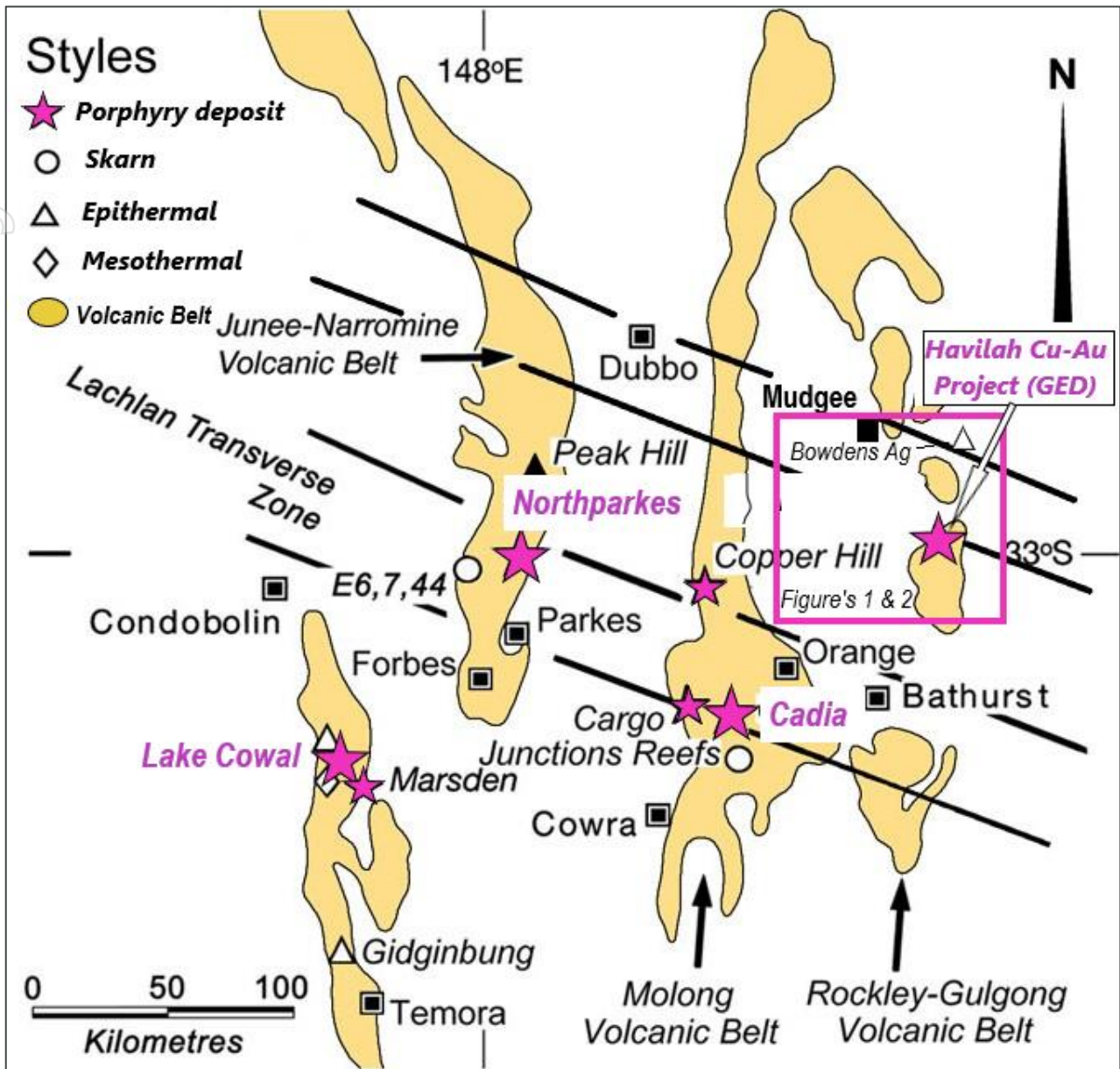


Figure 3: Lachlan Fold Belt Ordovician Volcanic Arcs with the location of the Cadia-Ridgeway and North Parkes Projects, and the Company's Havilah Project (adapted from Portergeo.com.au<sup>24</sup>).

The Acros EL9114 tenement adjoins Golden Deep's Havilah tenement where the Company is drill-testing copper-gold sulphide targets associated with large, sub-surface Induced Polarisation (IP) geophysical anomalies and surface soil and rockchip geochemical anomalies<sup>5</sup>. These targets are associated with the highly-prospective Ordovician Sofala Volcanics close to the northeastern margin of the Aaron's Pass Granite/porphyry complex (see Figure 2). The surface mineralisation on the Havilah tenement occurs within the magnetic aureole of the Aarons Pass Granite. **Magnetics imagery indicates the mineralised magnetic Sofala Volcanics pass under Permian cover to the south of EL8936 and into the Acros tenement EL9114 – where they have not been tested.** Detailed gravity and IP surveys are planned to detect sub-surface Cu-Au porphyry sulphide targets prior to drill targeting.

The Rockley-Gulgong Volcanic Belt also continues to the northwest of the Havilah tenement, into the Acros EL9069 tenement and Crown's EL9060. Magnetics indicate the presence of sub-surface porphyry intrusions intruding magnetic volcanics in both tenement areas (see Figure 2), and surface stream sediment geochemistry shows elevated Cu within this corridor. Further detailed geophysics (magnetics, gravity and IP) and surface geochemical programs will be carried out prior to drill targeting.

The region is also prospective for epithermal silver deposits, such as the Bowdens Silver Project located Also in the region is the

The Acros EL9118 tenement is located in the Hill End Trough sedimentary basin and covers projected extensions of the Hill-End – Hargreaves and Tuckers Hill gold mineralised corridors (Figure 1). The Hill End goldfield produced approximately two million ounces of gold from orogenic quartz-vein hosted deposits within folded Devonian-aged sediments of the Hill End Trough<sup>6</sup>.

Golden Deeps' EL9014 tenement includes the Tucker Hill gold prospect, where stacked high-grade gold bearing quartz veins are targeted. The Tuckers Hill project is at the northern end of Vertex Minerals Ltd's (ASX:VTX) Hill End Gold Project which has a Mineral Resource of 4.21Mt at 3.6 g/t Au (483,000oz contained gold)<sup>6</sup>. **The Hargreaves and Tuckers Hill trends continue to the north of EL9014 into EL9118 and are associated with historical gold workings which have not been tested by modern exploration** (Figure 1). The Company plans to carry out surface geochemical sampling programs prior to drill-targeting for high-grade gold veins in this area.

## References

<sup>1</sup> Hill End Goldfield – Hawkins Hill, Reward. PorterGeo Database - Ore Deposit Description

<sup>2</sup> Cadia Valley Operations – Ridgeway, Cadia Hill. [Portergeo.com.au/database/mineinfo.asp?mineid=mn228](http://Portergeo.com.au/database/mineinfo.asp?mineid=mn228)

<sup>3</sup> Golden Deeps Ltd, ASX 14 February 2024: Strong IP Porphyry Cu-Au Targets Identified at Havilah.

<sup>4</sup> Northparkes/Goonumbla, Endeavour. [portergeo.com.au/database/mineinfo.asp?mineid=mn232](http://portergeo.com.au/database/mineinfo.asp?mineid=mn232)

<sup>5</sup> Golden Deeps Ltd, ASX 03 March 2022. Outstanding Copper Soil and Rockchip Results, Havilah Project, NSW.

<sup>6</sup> Vertex Minerals Ltd (ASX:VTX). 28 June 2024. Reward Gold Mine Progress Update.

<sup>7</sup> Silver Mines Ltd. (ASX:SVL). 03 March 2016. Acquisition of Bowdens Silver Project.

This announcement was authorised for release by the Board of Directors.

\*\*\*ENDS\*\*\*

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## Cautionary Statement regarding Forward-Looking Information:

*This document contains forward-looking statements concerning Golden Deeps Ltd. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes. Forward looking statements in this document are based on the company's beliefs, opinions and estimates of Golden Deeps Ltd as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.*

## Competent Person Statement:

*The information in this report that relates to exploration results, mineral resources and metallurgical information has been reviewed, compiled and fairly represented by Mr Jonathon Dugdale. Mr Dugdale is the Chief Executive Officer of Golden Deeps Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM'). Mr Dugdale has sufficient experience, including over 34 years' experience in exploration, resource evaluation, mine geology and finance, relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Dugdale consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. The Company confirms that it is not aware of any new information or data that materially affects the information*

included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

**ASX Listing rules Compliance:**

*In preparing this announcement the Company has relied on the announcements previously made by the Company as listed under "References". The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement.*

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## Appendix 1: Significant Terms of the Acros and Crown Heads of Agreement (HOA)

The parties to the Acros and Crown Earn-In Heads of Agreement (HOA) are Acros Minerals Pty Ltd (Acros), Crown Gold Resources Pty Ltd (Crown), the sole shareholder of Acros and Crown, Mr James del Piano (JDP), and Golden Deeps Ltd (GED).

The significant terms of the Acros and Crown HOA are:

- i) A \$179,263.20 cash payment by GED to Acros and Crown to reimburse exploration expenditure on the tenements and discharge intercompany loans.
- ii) \$300,000 expenditure on exploration by GED within 3 years to earn an 80% interest in Acros and Crown.
- iii) Upon GED earning 80% in Acros and Crown, an incorporated joint venture (JV) will be formed between GED holding 80% and JDP holding 20% of Acros and Crown.
- iv) Following GED completing the earn-in and the JV being formed, JDP's 20% interest will be free carried to a Decision to Mine. After the Decision to Mine the JV partners will contribute in accordance with their respective interests or dilute in accordance with standard industry formula.