

#### **ASX ANNOUNCEMENT**

10 May 2021

## ASX code: **GED**

# COPPER MINERALISATION INTERSECTED DURING RC DRILLING AT HISTORIC KHUSIB SPRINGS COPPER-SILVER MINE

#### Highlights:

- Drilling commenced on the 24 April at the high-grade Khusib Springs copper-silver deposit
- Copper carbonate mineralisation was already intersected in two drill holes near shallow surface workings
- Drilling at the Khusib Mine is testing for high-grade copper mineralisation on the margins of the historic stopes.
- Historic intersections at Khusib Springs include:
  - o KH006 4.5m at 35.19% Cu, 3.67% Pb, 2.23% Zn, 2090.91g/t Ag from 30m<sup>2</sup>
  - o KH008 14.0m at 8.12% Cu, 0.75% Pb, 0.52% Zn, 385.06g/t Ag from 37m<sup>2</sup>
- Khusib Springs was a very high-grade copper-silver mine that produced 300,000t at 10% Cu and 584g/t Ag<sup>3</sup>
- Following completion of the drilling at Khusib Springs the drill rig will move to the historic Nosib
   Mine to continue the drilling program
- Underground channel sample results at Nosib included:

NOUG0001 6m at 9.3% Cu, 4.72% Pb, 7.92g/t Ag<sup>4</sup>

NOUG0005 6m at 1.51% Cu, 10.59% Pb, 7.15g/t Ag, 1.12% V<sub>2</sub>O<sub>5</sub><sup>4</sup>

Golden Deeps Limited ("Golden Deeps" or "Company") is pleased to announce that drilling has commenced at the historic Khusib Springs copper deposit on the Company's exploration licences in the Otavi Mountain Land in Namibia.

The Company is pleased to report that copper carbonate mineralisation (malachite and azurite) was intersected in two of the holes drilled into the up dip extension of the deposit near shallow surface workings.



Figure 1: Reverse circulation drill rig in operation at Khusib Springs



Drilling contractor Ferrodrill Namibia commenced the planned drilling program at Khusib Springs on 24 April 2021 (Figure 2-3). The Reverse Circulation (RC) drilling program will target the high-grade copper-silver mineralisation in the upper part of the deposit adjacent to the historic stopes. The drilling will also test for up plunge extensions to the deposit that was mined from underground but not extended to surface.

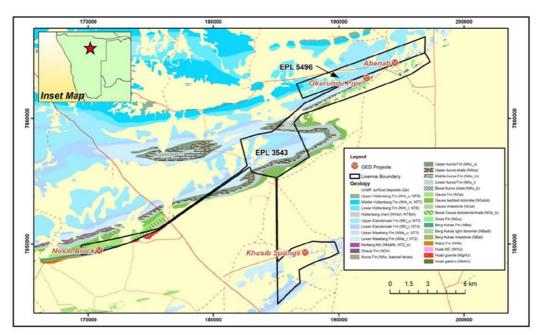


Figure 2: Location plan EPL3543 showing the location of the main prospects.

The Khusib Springs copper-silver mine is located on EPL3543 near the town of Grootfontein in Namibia (Figure 1). Khusib Springs was a very high-grade copper-silver mine which produced approximately **300,000t of ore grading 10% Cu, 1.8% Pb and 584g/t Ag**<sup>1</sup>. Previous drill intersections at Khusib Springs include:

KH006 4.5m at 35.19% Cu, 3.67% Pb, 2.23% Zn, 2090.91g/t Ag from 30m<sup>2</sup> KH008 14.0m at 8.12% Cu, 0.75% Pb, 0.52% Zn, 385.06g/t Ag from 37m<sup>2</sup>

Khusib Springs was mined between 1996 and 2003 after which it closed due to the very low copper price at the time and depletion of easily minable high-grade ore. At the beginning of 2003, towards the end of mining, the copper price had fallen to \$1,500 per tonne.

The Khusib Springs mine is considered analogous with the Tsumeb Mine 40km to the northwest that between 1905 and 1996 produced **30Mt of ore grading 4.3% Cu, 10% Pb and 3.5% Zn<sup>3</sup>**:

In late 2020, Golden Deeps engaged South Africa based geological consultancy Shango Solutions to complete a study on Khusib Springs to validate the historic drilling data and digitally capture hardcopy mine plans including underground development and stoping plans with a view to assess the potential for further minable ore remaining in the mine. The study was completed by Shango in January 2021.

The study demonstrates that there are remanent zones of copper-silver mineralisation on the margins of the mined stopes as well as at depth (Figure 3). The remnant ore on the margins of the stopes was probably left because of the grade in the light of the then prevailing low copper prices. Copper mineralisation has been mapped in a small working at the surface above the deposit (Figure 4-5).

The drilling program at Khusib Springs will comprise ~18 holes for 750m and will target the upper part of the deposit. Holes have been designed to test for near surface mineralisation above the old stopes and shallow remnant mineralisation on the margins of the old stopes.



Further deeper targets identified by the Shango Solutions study will be drill tested in subsequent drilling programs.

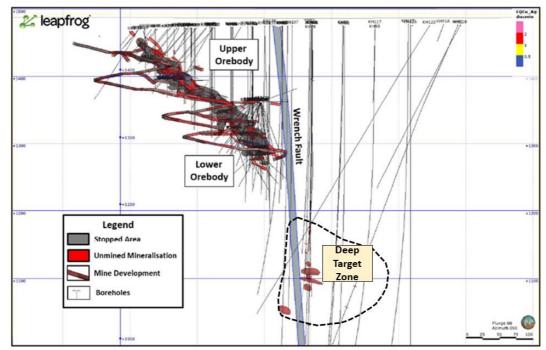


Figure 3: Cross section of Khusib Springs Mine showing stopped area, mine development and unmined mineralisation



Figure 4: Shallow working above the Khusib Springs deposit.

Figure 5: Carbonate rock with malachite and azurite

Following completion of the drilling program at Khusib Springs the drill rig will be moved to the historic Nosib copper-vanadium mine where 11 RC holes are planned on three traverses.

The Nosib Block mine was a high-grade copper-vanadium mine located at the western end of EPL3543 16km west of Khusib Springs (Figure 1). Copper mineralisation was discovered at Nosib in 1915 with mine access development work between 1917 to 1920. The historic No 2 shaft was developed on three levels to a depth of 120m but not mined. Golden Deeps' geologists accessed the three levels of the mine. The high-grade copper-silver-vanadium-lead mineralisation dips moderately to the north and is hosted by conglomerate and sandstone (mine sequence) in contact with dolomite to the north and basement granite to the south. The mineralisation shows good continuity and remains insitu because the stopes were not mined.



Underground sampling was conducted by Golden Deeps along the development drives on three levels. Best channel results include:

NOUG0001 6m at 9.3% Cu, 4.72% Pb, 7.92g/t Ag<sup>4</sup>

NOUG0005 6m at 1.51% Cu, 10.59% Pb, 7.15g/t Ag, 1.12% V<sub>2</sub>O<sub>5</sub><sup>4</sup>

#### References

#### **Cautionary Statement**

- The Exploration Results for the Khusib Springs Project have been reported by former owners;
- The source and date of the Exploration Results reported by the former owners have been referenced in the body of this announcement where Exploration Results have been reported;
- The historical Exploration Results have not been reported in accordance with the JORC Code 2012;
- A Competent Person has not done sufficient work to disclose the historical Exploration Results in accordance with the JORC Code 2012;
- It is possible that following further evaluation and/or exploration work that the confidence in the prior reported Exploration Results may be reduced when reported under the JORC Code 2012;
- That nothing has come to the attention of Golden Deeps that causes it to question the accuracy or reliability of the historical Exploration Results; but
- Golden Deeps has not independently validated the historical Exploration Results and therefore is not to be regarded as reporting, adopting or endorsing those results;
- A summary of the work programs on which the Exploration Results quoted in this announcement are based is included in Appendix 2;
- There are no more recent Exploration Results or data relevant to the understanding of the Exploration Results;
- An assessment of the additional exploration or evaluation work that is required to report the Exploration Results in accordance with JORC Code 2012 will be undertaken.

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

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

#### For further information, please refer to the Company's website or contact:

Martin Stein Company Secretary Golden Deeps Limited +61 (08) 9481 7833

#### **Caution Regarding Forward-Looking Information**

This document contains forward-looking statements concerning Golden Deeps. 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.

<sup>&</sup>lt;sup>1</sup> Melcher, F. et. al. 2005. Geochemical and mineralogical distribution of germanium in the Khusib Springs Cu-Zn-Pb-Ag sulphide deposit, Otavi Mountain Land, Namibia.

<sup>&</sup>lt;sup>2</sup> King C M H 1995. Motivation for diamond drilling to test mineral extensions and potential target zones at the Khusib Springs Cu-Pb-Zn-Ag deposit. Unpublished Goldfields Namibia report.

<sup>&</sup>lt;sup>3</sup> Tsumeb, Namibia. PorterGeo Database: <u>www.portergeo.com.au/database/mineinfo.asp?mineid=mn290</u>

<sup>&</sup>lt;sup>4</sup> Golden Deeps Pty Ltd announcement, 26<sup>th</sup> August 2013. High-grade copper and lead at Nosib Block.



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 announcement that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Martin Bennett. Mr Bennett is a consultant to Golden Deeps Limited and is a member of the Australian Institute of Geoscientists. Mr Bennett 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 Bennett consents to the inclusion in the report of the matters based on their 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 announcements.



**APPENDIX 1 Khusib Springs Prospect – Drill Hole Details** 

BHID	Section	Dip	Azimuth	From (m)	To (m)	Interval (m)	Cu %	Pb %	Zn %	Ag g/t
KH006	E125	-50	323	30	34.5	4.5	35.19	3.67	2.23	2090.91
KH008	E125	-50	323	37	51	14	8.12	0.75	0.52	385.06

### **APPENDIX 2**

## JORC 2012 Edition - Section 1 Sampling Techniques and Data

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

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</li> </ul>	<ul> <li>Exploration drill holes KH06 and KH08 were drilled by a diamond core drill rig. The diameter of the diamond core is not stated.</li> <li>Sample intervals were based on geological boundaries and zones of mineralisation identified during logging.</li> <li>No information is provided on how the samples were taken.</li> </ul>



Criteria	JORC Code explanation	Commentary
	submarine nodules) may warrant disclosure of detailed information.	
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>	<ul> <li>Exploration drill holes KH06 and KH08 were drilled by a diamond core drill rig. No information is provided on the size of the diamond core or how the samples were taken.</li> </ul>
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 information is provided on the drill recovery.
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>	<ul> <li>All holes were logged for lithology, structure and mineralisation.</li> <li>Logging intervals are based on geological contacts.</li> </ul>
Sub-sampling	If core, whether cut or sawn and whether quarter, half or all core	No information is provided on the sampling method.
techniques	taken.	
and sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary 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 sub-sampling 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> </ul>	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	



Criteria	JORC Code explanation	Commentary
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>	No information is provided on the assay method or the quality assurance quality control (QAQC) methods used by Goldfields Namibia.
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>	<ul> <li>No information is provided on the data management and verification procedures.</li> <li>All drill data relating to the Khusib Springs project (including holes KH06 and KH08) generated by Goldfields Namibia or other companies was reviewed and validated in detail by Shango Solutions, a geological consultancy based in South Africa. No significant errors were found in the data.</li> </ul>
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>	The majority of the drill data was captured using the UTM33S grid.
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>Exploration drill holes were drilled at close spacing, commonly 15m or less because of the small diameter and plunging orientation of the orebody.</li> </ul>
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Holes were drilled vertically or were angled to best intersect the plunging orebody.



Criteria	JORC Code explanation	Commentary
geological structure	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.	The majority of the angled holes were drilled on azimuth 323 degrees at a dip of -50 degrees (UTM33S grid).
Sample security	The measures taken to ensure sample security.	No information is provided on the security of samples.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>All drill data relating to the Khusib Springs project generated by Goldfields Namibia or other companies was reviewed and validated in detail by Shango Solutions, a geological consultancy based in South Africa.</li> <li>The data review included scanning level plans and cross sections to verify the position of drill holes in the 3D model.</li> </ul>



## **JORC 2012 Edition - 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>Drilling results are from the Khusib Springs copper prospect located on Golden Deeps Limited (Huab Energy Ltd) EPL3543 located near the town of Grootfontein in northeast Namibia.</li> <li>EPL3543 expires 6<sup>th</sup> July 2022.</li> <li>There are no material issues or environmental constraints known to Golden Deeps which may be deemed an impediment to the continuity of EPL3543.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The Khusib Springs copper prospect was primarily drilled by Goldfields Namibia from 1993 onwards following the intersection of massive tennantite in drill holes KH06 and KH08.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Khusib Springs deposit is a small but high-grade pipelike body that plunges steeply within brecciated carbonate rocks. The deposit resembles the Tsumeb deposit near the town of Tsumeb to the northeast.</li> <li>Khusib Springs is on the northern limb of the Harasib-Olifantsfontein syncline and is hosted by carbonates of the Maieberg Formation (Lower Tsumeb Subgroup).</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 Material drill holes:         <ul> <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> </ul> </li> <li>If the exclusion of this information is justified on the basis that the</li> </ul>	Refer to Appendix 1 of the ASX announcement.



	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.	
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>	All exploration results are reported by a length weighted average. This ensures that short lengths of high-grade material receive less weighting than longer lengths of low grade material.
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>	Drill holes and drill traverses were designed to intersect the targeted mineralised zones at a high angle where possible.
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.	Refer to Figure 3 of the ASX announcement.
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.	Drillholes KH06 and KH08 are representative of the high grade tennantite rich massive sulphide zones in the deposit.
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 other data is material to this report.



Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>RC drilling commenced in May 2020 testing areas marginal to the historic stopes in the upper part of the deposit.</li> </ul>
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling	
	areas, provided this information is not commercially sensitive.	