

## **ASX ANNOUNCEMENT**

07 August 2023

ASX: GED

## Drilling of High-Grade Gallium-Germanium Targets Well Underway

- Drilling to test high-grade gallium-germanium (+ V-Cu-Pb-Ag) targets at Nosib after initial test of Tsumeb analogue geophysical target west of Khusib Springs
- New diamond drilling program well underway in Namibia's world-class Otavi Mountain Land Copper Belt, targeting two priority high-grade gallium-germanium/energy metals targets.
- The first diamond hole is <u>testing a large and intense geophysical (NSAMT) low-resistivity target</u><sup>1</sup> 2km southwest of the high-grade Khusib Springs mine (past production: 300,000t @ 10% Cu, 584 g/t Ag<sup>2</sup>). The target is analogous to the major Tsumeb deposit, 30km northwest of Khusib Springs, which produced 30Mt @ 4.3% Cu, 10% Pb, 3.5% Zn<sup>3</sup> and <u>included a high-grade 50 g/t germanium</u>.
- The program will also include diamond drilling of western extensions to the Nosib discovery under shallow cover, as well as a large diameter metallurgical hole, which will be <u>drilled through</u> <u>the high-grade gallium-germanium (+ vanadium-copper-lead-silver) zone</u> which produced the previously announced intersections in NSBDD008<sup>4</sup> of:
  - o <u>8.70m @ 128 g/t Ga, 11.3 g/t Ge</u> (1.84% Cu, 1.88% V<sub>2</sub>O<sub>5</sub>, 10.2% Pb, 3.6 g/t Ag) from surface<sup>1</sup>
    - including <u>3.26m @ 189 g/t Ga, 14.7 g/t Ge</u> from surface.
    - In 53.52m @ 3.6% CuEq\* (1.15% Cu, 0.62% V<sub>2</sub>O<sub>5</sub>, 3.49% Pb, 4.57 g/t Ag) from surface<sup>4</sup>
- Initial gravity concentration test-work that commenced September 2022 is nearing completion at Nagrom Laboratories in Perth<sup>5</sup>. This work will generate a high-grade vanadium, copper, lead, silver concentrate with <u>significant levels of gallium and germanium expected</u>. Further hydrometallurgical testwork is then planned to extract the high-value metals for green-energy and technology products.

## Golden Deeps Ltd CEO Jon Dugdale commented:

"We are very pleased to get this drilling program underway - as the two key targets being tested are in areas of strong polymetallic mineralisation, containing high-grades of copper, vanadium, zinc, lead, antimony and silver as well as high gallium and germanium values.

"Gallium and germanium have been positively impacted by China's imposition of export restrictions on these rare metals, which are used in computer chips, semi-conductors and other green energytechnology components.

"Other key energy metals being targeted include copper, vanadium, zinc and antimony.

"The initial hole is testing a major geophysical target to the west of the high-grade Khusib Springs copper-silver-zinc mine, which has similarities to the Tsumeb mine - a major producer of copper, lead, zinc, silver and germanium. Drilling will also test extensions of the Nosib vanadium-copper-lead-silver deposit, where shallow high-grade gallium and germanium intersections were recently announced.

"We are also looking forward to the results from our initial metallurgical concentrate test work on the high-grade Nosib vanadium-copper-lead-silver deposit, which is also expected to yield high gallium-germanium values."



**Golden Deeps Ltd** ("Golden Deeps" or "the Company") (ASX: GED) is pleased to announce that a new drilling program testing key rare metals targets is well underway at the Company's Khusib Springs and Nosib projects. These key targets are located within Namibia's highly-prospective Otavi Mountain Land Copper Belt (see tenements and prospects location, Figure 1, below).

The targets being tested include western extensions of the **Nosib** discovery, where **high-grade gallium-germanium (+vanadium-copper-lead-silver) intersections** were recently announced<sup>1</sup>, and a **major geophysical target 2km SW of Khusib Springs**<sup>2</sup>, analogous to the neighbouring Tsumeb deposit. The Tsumeb mine produced **30Mt @ 4.3% Cu, 10% Pb, 3.5% Zn**<sup>3</sup> as well as **50 g/t germanium (Ge)** (Figure 1).

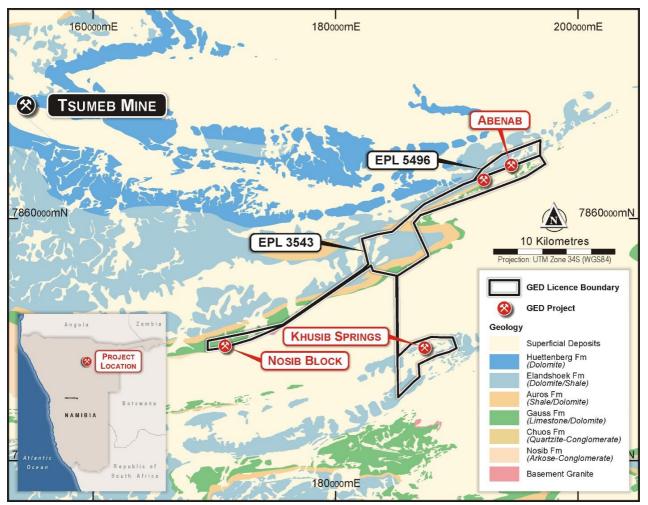


Figure 1: Golden Deeps Otavi Copper Belt licences with location of Nosib, Khusib Springs and Abenab projects.

#### Drilling of the Nosib V-Cu-Pb-Ag + Ga-Ge Deposit

The drilling at the Company's **Nosib** discovery will include testing of extensions to the high-grade polymetallic deposit west of the previously drilled zone. Potential for extensions under shallow cover have been highlighted by resource modelling, interpretation of geophysical imagery and previous geochemistry.

An initial 3-6 shallow diamond drillholes for approximately 400-600m will test this zone, targeting extensions to the current resource model.

In addition, a large-diameter (PQ) metallurgical hole will be drilled through the central part of the deposit, close to the site of previous diamond drillhole NSBDD008<sup>4</sup> (Figure 2), which generated the recently announced high-grade gallium-germanium (+ vanadium-copper-lead-silver) intersections which included:

# 8.70m @ 128 g/t Ga, 11.3 g/t Ge (1.84% Cu, 1.88% V₂O₅, 10.2% Pb, 3.6 g/t Ag)<sup>1</sup> from surface, including 3.26m @ 189 g/t Ga, 14.7 g/t Ge from surface.

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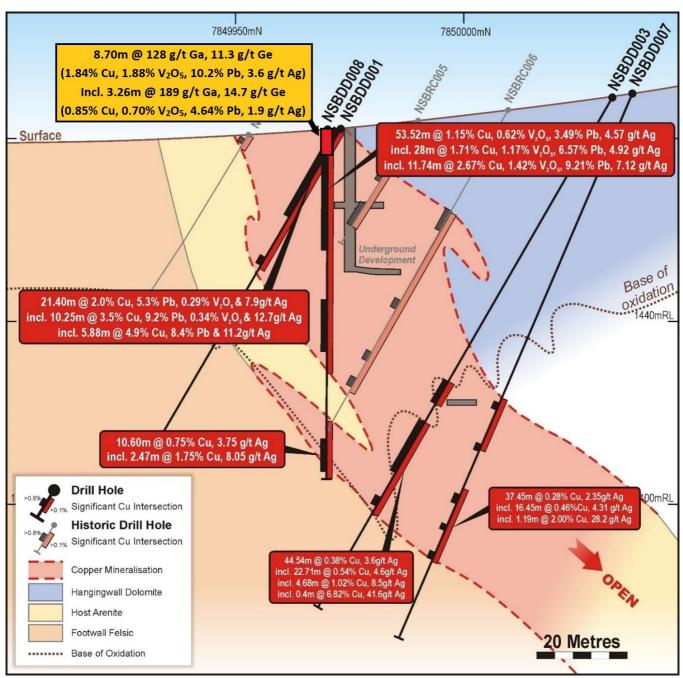


Figure 2: Nosib cross section through NSBDD008 showing at surface significant germanium and gallium intersection

Samples from the new metallurgical hole will be combined with material from a surface excavation by the Company to produce a large bulk sample (~500kg) for further gravity concentrate metallurgical test-work. This will build on the gravity concentration testwork that commenced in September 2022 which is nearing completion at Nagrom Laboratories in Perth<sup>5</sup>. The testwork will aim to generate a high-grade vanadium, copper, lead, silver concentrate with significant levels of germanium and gallium expected.

Downstream hydrometallurgical leach testing will then be carried out on the concentrate using the flowsheet previously applied to concentrate samples from the Abenab vanadium (zinc-lead-copper) project (Figure 1). The Abenab testwork showed vanadium extraction rates of up to 95% and high extraction of lead, zinc and copper<sup>7</sup>.

Gallium and germanium can also be recovered through hydrometallurgical leaching and will be included in future downstream test-work on the Nosib concentrate samples.

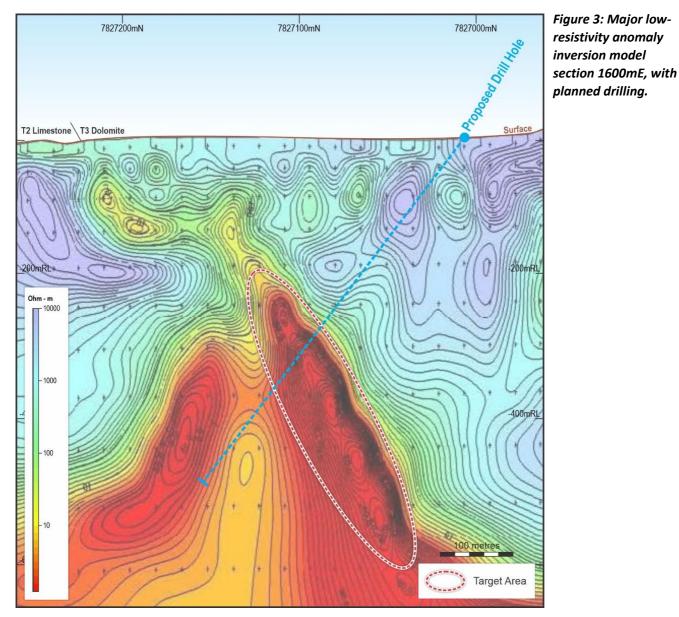


The metallurgical work on both the Abenab and Nosib deposits will be used to develop a processing flow-sheet to produce high-value vanadium products as well as copper, lead, zinc and silver by-products, with potential to produce gallium and germanium as substantial value-adding products. The price of germanium is around US\$2,700/kg and gallium is around US\$600/kg (99.999% purity)<sup>7</sup>. This compares to vanadium (V<sub>2</sub>O<sub>5</sub>) at around US\$17/kg and copper at around US\$9/kg.

## Drilling of Major "Tsumeb Analogue" Geophysical Target Southwest of Khusib Springs

The first new, up to 600m deep, diamond drill hole of the program is underway, testing a large Natural Source Audio-Magneto-Telluric (NSAMT) **low-resistivity geophysical anomaly located 2km southwest of the high-grade Khusib Springs mine (previous production 300,000t @ 10% Cu, 584 g/t Ag<sup>2</sup>).** 

The NSAMT anomaly corresponds with extensions of the T3 dolomite/T2 limestone contact (see 2-D inversion models, Figures 3 and 4)<sup>8</sup>. This major anomaly is interpreted to steepen across the carbonate stratigraphy from about 250m below surface to 600m below surface (Figure 3). This is a similar scenario to the setting of the major Tsumeb deposit (past production: **30Mt @ 4.3% Cu, 10% Pb, 3.5% Zn, 50 g/t Ge**<sup>3</sup>) which is in the equivalent stratigraphy to Khusib Springs and located 30km to the northwest (see Figure 1).





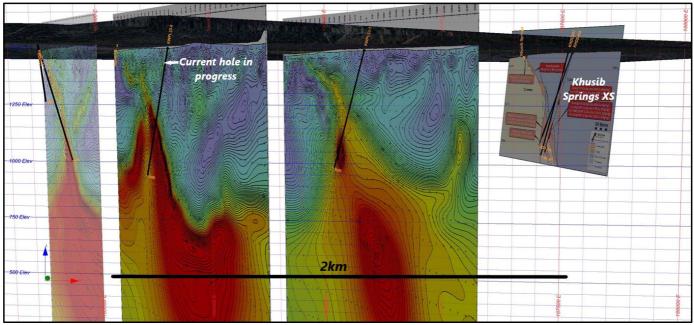


Figure 4: Khusib Springs 3-D image with 2-D NSAMT inversion models and Khusib Springs Cross section<sup>8</sup>.

## About the Golden Deeps Otavi Mountain Land Copper Belt Projects

The Company's key projects in the world-class Otavi Mountain Land Copper Belt of Namibia are located on two, recently renewed, Exclusive Prospecting Licences - EPL5496 and EPL3543 (see location, Figure 1).

The Otavi Belt includes major historical mines such as the **Tsumeb** deposit which produced **30Mt grading 4.3% Cu, 10% Pb and 3.5% Zn<sup>3</sup>** from 1905 to 1996 (see Figure 1). Tsumeb was also a significant silver (100 g/t Ag) and germanium (50 g/t Ge) producer.

The Company's exploration and development programs are focused on the **Abenab** high-grade vanadiumzinc-lead resource; the **Nosib** high-grade vanadium-copper-lead-silver discovery and the **Khusib Springs** high-grade copper-silver deposit (Figure 1).

At **Abenab**, the Company has a Mineral Resource estimate of an Inferred **2.80Mt** @ **0.66%** V<sub>2</sub>O<sub>5</sub>, **2.35%** Pb, **0.94%** Zn at a **0.2%** V<sub>2</sub>O<sub>5</sub> cut-off<sup>9</sup>. The results of gravity testwork on a bulk sample of the Abenab vanadium-zinc-lead resource produced an exceptionally high-grade vanadium-zinc-lead (descloizite - PbZn(VO<sub>4</sub>)(OH)) concentrate grading **15.6%** V<sub>2</sub>O<sub>5</sub>, **11.2%** Zn, **38.2%** Pb and **0.8%** Cu<sup>10</sup>.

The high-grade concentrate sample generated by the Abenab testwork represents an 18-times upgrade of the representative drill-core composite sample and the new metallurgical results will be incorporated into the Abenab resource model to allow **finalisation of the Mineral Resource update for the deposit**.

**Nosib** is a new discovery that has produced a number of exceptional, thick and high-grade, vanadium-copper-lead-silver drilling intersections over the last 2 years<sup>4,11</sup>. Mineral Resource modelling and estimation is currently being carried out by Shango Solutions, focussed on the supergene vanadium-copper-lead-silver zone at Nosib. The resource model is currently being open-pit optimised to allow finalisation and sign-off for reporting. Metallurgical testwork focussed on gravity concentration of the vanadium (+/- copper, lead, zinc) minerals, descloisite and mottramite, as well as gallium and germanium, is close to completion. The next step will then be hydrometallurgical testwork using the flow-sheet developed for Abenab, to generate high-value energy and/or technology metals products<sup>5</sup>.

Key operating and capital cost information will be derived from the processing testwork on both projects for input to the integrated mine development and processing study<sup>6</sup> on the Company's near surface, high-grade, vanadium with copper, lead, zinc and silver deposits (with strong gallium and germanium values).



### **References:**

<sup>1</sup> Golden Deeps Ltd ASX announcement, 07 July 2023. High-Value Germanium and Gallium Identified at Nosib. <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>3</sup> Tsumeb, Namibia. PorterGeo Database: <u>www.portergeo.com.au/database/mineinfo.asp?mineid=mn290</u>

<sup>4</sup> Golden Deeps Ltd ASX announcement 4 April 2022 Exceptional Copper-Vanadium Intersection at Nosib.

<sup>5</sup> Golden Deeps Ltd ASX announcement, 21 June 2022. Major Study on High-Grade Vanadium Cu-Pb-Ag Development.

<sup>6</sup> Golden Deeps Ltd ASX announcement, 12 January 2023. Exceptionally high-Grade V-Zn-Pb Concentrate from Abenab

<sup>7</sup> tradingeconomics.com/commodity/germanium or gallium.

<sup>8</sup> Golden Deeps Ltd ASX announcement, 17 May 2023. Renewal of Key Tenements Paves Way for New Khusib Drilling.
<sup>9</sup> Golden Deeps Ltd ASX announcement, 31 January 2019. Major Resource Upgrade at Abenab Vanadium Project.

<sup>10</sup> Golden Deeps Ltd, ASX 21 March 2022. Outstanding Vanadium Extraction of up to 95% from Abenab.

<sup>11</sup> Golden Deeps Ltd ASX announcement, 22 February 2022. Nosib Very High-Grade Copper & Vanadium Intersected.

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

#### \*\*\*ENDS\*\*\*

#### Please refer to the Company's website or contact:

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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.



#### **Appendix 1: Copper Equivalent Calculation**

#### Equivalent Copper (CuEq) Calculation

The conversion to equivalent copper (CuEq) grade must take into account the plant recovery/payability and sales price (net of sales costs) of each commodity.

Approximate recoveries/payabilities and sales price are based on preliminary and conservative leaching information<sup>1</sup> from equivalent mineralogy samples from the Abenab vanadium, lead, zinc +/- copper, silver deposit located approximately 20km along strike from the Nosib Block Prospect.

The prices used in the calculation are based on market for  $V_2O_5$  as well as Cu, Pb, Zn and Ag sourced from the website <u>www.vanadiumprice.com</u>. The saleable vanadium product is assumed to be Vanadium Pentoxide,  $V_2O_5$  (98% pure) at the time of release<sup>2</sup>.

The table below shows the grades, process recoveries and factors used in the conversion of the poly metallic assay information into an equivalent Copper Equivalent (CuEq) grade percent.

| Metal    | Average<br>grade (%) | Metal Prices |             | Overall<br>Recovery/payability<br>(%) | Factor | Factored<br>Grade<br>(%) |
|----------|----------------------|--------------|-------------|---------------------------------------|--------|--------------------------|
| Cu       | 1.15                 | \$4.70/lb    | \$10,359/t  | 0.60                                  | 1.00   | 1.15                     |
| $V_2O_5$ | 0.62                 | \$12.20/lb   | \$26,889/t  | 0.62                                  | 2.60   | 1.61                     |
| Zn       | 0.03                 | \$1.87/lb    | \$4,121/t   | 0.54                                  | 0.40   | 0.01                     |
| Pb       | 3.49                 | \$1.09/lb    | \$2,402/t   | 0.62                                  | 0.23   | 0.81                     |
| Ag       | 0.000457             | \$24.83/oz   | \$798,300/t | 0.80                                  | 77.06  | 0.04                     |
|          |                      |              |             |                                       | CuEq   | 3.62                     |

Using the factors calculated above the equation for calculating the Copper Equivalent (CuEq) % grade is:

#### $CuEq\% = (1 \times Cu\%) + (2.60 \times V_2O_5\%) + (0.23 \times Pb\%) + (0.40 \times Zn\%) + (77.06 \times Ag\%)$

In the example above, applying these factors to the NSBDD008 intersection of 53.52m @ 1.15% Cu, 0.62% V<sub>2</sub>O<sub>5</sub>, 3.49% Pb, 4.57 g/t Ag, 0.03% Zn produces the following CuEq grade percent:

 $(1 \times 1.15\%) + (2.60 \times 0.62\%) + (0.23 \times 3.49\%) + (0.40 \times 0.03\%) + (77.06 \times 0.000457\%) = 3.62\%$  CuEq



## Appendix 2: Nosib drillhole details:

| Drillhole | Coordinates UTM |           | RL    | Grid O | rientation | De   | pth   |
|-----------|-----------------|-----------|-------|--------|------------|------|-------|
| Hole_ID   | East            | North     | Mts   | Dip°   | Azi.°      | From | То    |
| NSBD008   | 800,992         | 7,849,969 | 1.465 | -90    | 180        | 0.00 | 76.31 |



## APPENDIX 3 JORC 2012 Edition - Section 1 Sampling Techniques and Data

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

| Criteria                 | JORC Code explanation  | Commentary  |
|--------------------------|--|---|
| Sampling<br>techniques   | <ul> <li>Nature and quality of sampling (e.g., 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 (e.g., '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 (e.g., submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul> <li>Previous exploration drillholes at Khusib Springs and Nosib the reverse circulation drilling was used to obtain 1 m samples from which approximately 3 kg were pulverised from which a small charge will be obtained for multi-element analysis using the ICP-MS method.</li> <li>Current diamond drilling sampled on approximately 1m intervals (varied subject to geological contacts) and analysed using the same procedure.</li> </ul> |
| Drilling<br>techniques   | • Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., 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).  | <ul> <li>Previous exploration drillholes at Khusib Springs and Nosib<br/>were Reverse Circulation percussion drilling method (RC<br/>drilling).</li> <li>Current drilling is diamond drillcore, HQ sized core.</li> </ul>   |
| Drill sample<br>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>   | <ul> <li>Diamond drilling recovery is reported in the detailed log.<br/>Where lost core is recorded assay grades are assumed to<br/>be zero.</li> <li>RC drilling from the exploration drillholes at Khusib Springs<br/>and Nosib were bagged on 1m intervals and an estimate of<br/>sample recovery has been made on the size of each<br/>sample.</li> </ul>   |



| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
|   |   | <ul> <li>The cyclone is shut off when collecting the sample and released to the sample bags at the completion of each metre to ensure no cross contamination. If necessary, the cyclone is flushed out if sticky clays are encountered.</li> <li>Samples were weighed at the laboratory to allow comparative analysis.</li> </ul>  |
| 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>Diamond drilling logging intervals based on geological contacts.</li> <li>Logging of RC samples from exploration drillholes at Khusib Springs and Nosib based on 1m intervals.</li> </ul>   |
| Sub-sampling<br>techniques<br>and sample<br>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 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 insitu 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> | <ul> <li>No information is provided on the sampling method for<br/>the historical drillholes.</li> <li>For exploration drillholes at Khusib Springs and Nosib         <ul> <li>Every 1m RC interval was sampled as a dry primary<br/>sample in a calico bag off the cyclone/splitter.</li> <li>Diamond drilling sampling half to quarter core sampled<br/>on approximately 1m intervals using core-saw or<br/>splitter.</li> <li>Drill sample preparation (Intertek, Namibia) and<br/>analysis (Intertek, Perth) carried out at registered<br/>laboratory.</li> </ul> </li> <li>Field sample procedures involve the insertion of registered<br/>Standards every 20m, and duplicates or blanks generally<br/>every 25m and offset.</li> <li>Sampling is carried out using standard protocols as per<br/>industry practice.</li> <li>Sample sizes range typically from 2 to 3kg and are deemed<br/>appropriate to provide an accurate indication of<br/>mineralisation.</li> </ul> |



| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| Quality of<br>assay data<br>and<br>laboratory<br>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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</li> </ul> | <ul> <li>All samples are submitted to the Intertek Laboratories sample preparation facility at the Tschudi Mine near Tsumeb in Namibia where a pulp sample is prepared. The pulp samples are then transported to Intertek in Perth Australia for analysis.</li> <li>Pulp sample(s) have been digested with a mixture of four Acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids for a total digest.</li> <li>Cu, Pb, Zn, V, Ag, Sb have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry.</li> <li>Hand-held XRF spot readings on drill-core are used to provide a guide regarding mineralised intervals and cannot be used for the purposes of estimating intersections.</li> </ul> |
| Verification<br>of sampling<br>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>For current Khusib Springs and Nosib drilling all significant intercepts are reviewed and confirmed by two senior personnel before release to the market.</li> <li>No adjustments are made to the raw assay data. Data is imported directly to Datashed in raw original format.</li> <li>All data are validated using the QAQCR validation tool with Datashed. Visual validations are then carried out by senior staff members.</li> <li>Vanadium results are reported as V<sub>2</sub>O<sub>5</sub> % by multiplication by atomic weight factor of 1.785.</li> </ul>   |
| Location of<br>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>The majority of the drill data was captured using the UTM33S grid.</li> <li>Location of the exploration drillholes at Khusib Springs and Nosib provided in Appendix 2.</li> </ul>   |
| Data spacing<br>and<br>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</li> </ul>   | • Exploration drill holes were drilled at close spacing, commonly 20m to 30m or less because of the relatively   |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
|   | <ul> <li>Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>  | short strike length of the initial target and the plunging orientation of the mineralisation.   |
| Orientation<br>of data in<br>relation to<br>geological<br>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>Holes were angled to best intersect the plunging mineralisation.</li> <li>The majority of the angled diamond drillholes at Khusib Springs holes were drilled on azimuth 315 degrees true at dips ranging from -60 degrees to vertical (UTM33S grid).</li> </ul>  |
| Sample<br>security  | • The measures taken to ensure sample security.  | <ul> <li>Recent drilling at Khusib Springs and Nosib - secure<br/>transport to registered laboratories.</li> </ul>  |
| Audits or<br>reviews  | • The results of any audits or reviews of sampling techniques and data.  | <ul> <li>All previous 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> <li>No previous exploration drilling is recorded for the Nosib prospect, apart from the work conducted by Golden Deeps Ltd.</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<br>tenement and<br>land tenure<br>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 deposit located on Golden Deeps Limited (Huab Energy Ltd) EPL3543 located near the town of Grootfontein in northeast Namibia.</li> <li>EPL3543 and EPL5496 have both been renewed for a further two years to 3/5/25 and 4/4/25 respectively. Mining lease applications are planned to ensure security of tenure beyond this time.</li> <li>There are no material issues or environmental constraints known to Golden Deeps Ltd which may be deemed an impediment to the continuity of EPL3543 or EPL5496.</li> </ul>  |
| Exploration<br>done by other<br>parties          | Acknowledgment and appraisal of exploration by other parties.  | <ul> <li>No prior drilling identified for the Nosib Block Prospect.<br/>Previous work limited to underground sampling of<br/>historical workings.</li> <li>The Khusib Springs copper prospect was primarily drilled<br/>by Goldfields Namibia from 1993 onwards following the<br/>intersection of massive tennantite in drill holes KH06 and<br/>KH08.</li> </ul>   |
| Geology  | Deposit type, geological setting and style of mineralisation.  | <ul> <li>The Nosib Mine was worked historically to produce copper<br/>and vanadium. The deposit is arenite / sandstone-hosted<br/>with chalcopyrite, bornite, galena and pyrite as well as<br/>secondary descloizite (Lead-Vanadium hydroxide). The<br/>mineralization is associated with prominent argillic<br/>alteration and occurs within an upper pyritic zone of the<br/>Nabis Formation sandstone, which is locally gritty to<br/>conglomeratic. The main zone of mineralization at Nosib<br/>cross-cuts the stratigraphy and also includes stratiform<br/>mineralization with significant chalcopyrite, striking<br/>northeast-southwest and dipping moderately to NW.</li> </ul> |



| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
|   |   | • The Khusib Springs deposit is a small but high-grade pipe-<br>like body that plunges steeply within brecciated carbonate<br>rocks. The deposit resembles the Tsumeb deposit near the<br>town of Tsumeb to the northeast.  |
| Drill hole<br>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 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> | <ul> <li>See Appendix 2 for drillhole details reported in this release.</li> <li>Refer to previous ASX announcements for previous drillhole details.</li> </ul>   |
| Data<br>aggregation<br>methods                          | <ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., 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>  | <ul> <li>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.</li> <li>Voids/lost core intervals are incorporated at zero grade.</li> <li>The assumptions used for reporting of metal equivalent values are detailed in Appendix 1 of this release.</li> </ul> |
| Relationship<br>between<br>mineralisation<br>widths and | <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> </ul>  | • Drill holes and drill traverses were designed to intersect the targeted mineralised zones at a high angle where possible. Intersections reported approximate true width.  |



| Criteria                                    | JORC Code explanation   | Commentary  |
|---|---|---|
| intercept<br>lengths                        | • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').  |   |
| Diagrams                                    | <ul> <li>Appropriate maps and sections (with scales) and tabulations of<br/>intercepts should be included for any significant discovery being<br/>reported These should include, but not be limited to a plan view of<br/>drill hole collar locations and appropriate sectional views.</li> </ul>   | <ul> <li>Figure 1 is a regional scale plan-view showing geology and<br/>prospect locations. Figure 2 is a cross section through the<br/>Nosib deposit. Figure 3 is a cross section through the<br/>NSAMT inversion model 1600mE at Khusib Springs. Figure<br/>4 is a 3-D compilation of NSAMT inversion models and the<br/>Khusib Springs deposit.</li> </ul>   |
| Balanced<br>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.   | <ul> <li>Intersections in all drillholes above designated cut-off<br/>grades are reported in Table 1 of the referenced releases.</li> </ul>   |
| Other<br>substantive<br>exploration<br>data | <ul> <li>Other exploration data, if meaningful and material, should be<br/>reported including (but not limited to): geological observations;<br/>geophysical survey results; geochemical survey results; bulk samples<br/>– size and method of treatment; metallurgical test results; bulk<br/>density, groundwater, geotechnical and rock characteristics;<br/>potential deleterious or contaminating substances.</li> </ul> | <ul> <li>A series of Natural Source Audio-Magneto-Telluric<br/>(NSAMT) profiles were measured. NSAMT surveys utilise<br/>the same effects as CSAMT surveys but work with natural<br/>sources such as solar winds and electrical storms. The<br/>presence of very low frequency EM waves makes possible<br/>very large investigation depths, up to several kilometers.<br/>receivers allow the collection of scalar, vector or tensor<br/>data which can be processed and 2-d inversion models<br/>derived as shown on Figures 3 and 4.</li> </ul> |
| Further work                                | <ul> <li>The nature and scale of planned further work (e.g., 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>The diamond drilling results from the current program will interpreted and modelled prior to further drilling being planned.</li> <li>Conductors detected using MLEM and NSAMT geophysics will be modelled for further drill testing.</li> <li>The results of metallurgical work and mining studies on the Abenab and Nosib mineralisation will be integrated into the integrated Development Study in progress.</li> </ul>  |