

ASX Announcement

21 October 2013

## WIDE COPPER ZONE IDENTIFIED AT DEBLIN



Strong sulphide copper (chalcopyrite) mineralisation in drill core from DBDD0001.

### KEY POINTS

- Diamond drilling at the Deblin Prospect in northern Namibia intersects wide zones of copper mineralisation,
- Intercepts include:
 

|                  |                                                       |
|------------------|-------------------------------------------------------|
| DBDD0002         | 29.00 m @ 1.00% Cu & 1.86 g/t Ag from 57 m            |
| <i>Including</i> | <b>1.66m @ 5.38% Cu &amp; 8.04 g/t Ag from 59.34m</b> |
| DBDD0001         | 2.73 m @ 2.79% Cu & 6.80 g/t Ag from 135 m            |
- Additional narrower high-grade zones intersected confirm previous results.
- Analysis of diamond core has resulted in a new structural interpretation which indicates the potential for multiple, broad zones of copper mineralisation.
- Revised model has generated new drilling targets.
- Shows the potential for open-pit copper resources at Deblin.

Golden Deeps Limited (ABN 12 054 570 777)



## 1 INTRODUCTION

Golden Deeps completed two diamond drill holes at Deblin during the June Quarter, with laboratory results now received. The assays show **wide zones of disseminated sulphide copper mineralisation** (as chalcopyrite) in DBDD0002, but also include narrower high-grade massive chalcopyrite zones.

These latest results suggest that Deblin has substantially greater potential than was previously recognised.

## 2 DEBLIN DIAMOND DRILLING

Diamond drilling at Deblin identified much broader copper mineralisation than previously encountered. Results from the two diamond drill holes include:

DBDD0002            29.00 m @ 1.00% Cu & 1.86 g/t Ag from 57 m

**Including            1.66m @ 5.38% Cu & 8.04 g/t Ag from 59.34m**

DBDD0001            2.73 m @ 2.79% Cu & 6.80 g/t Ag from 135 m

### ***A New Interpretation***

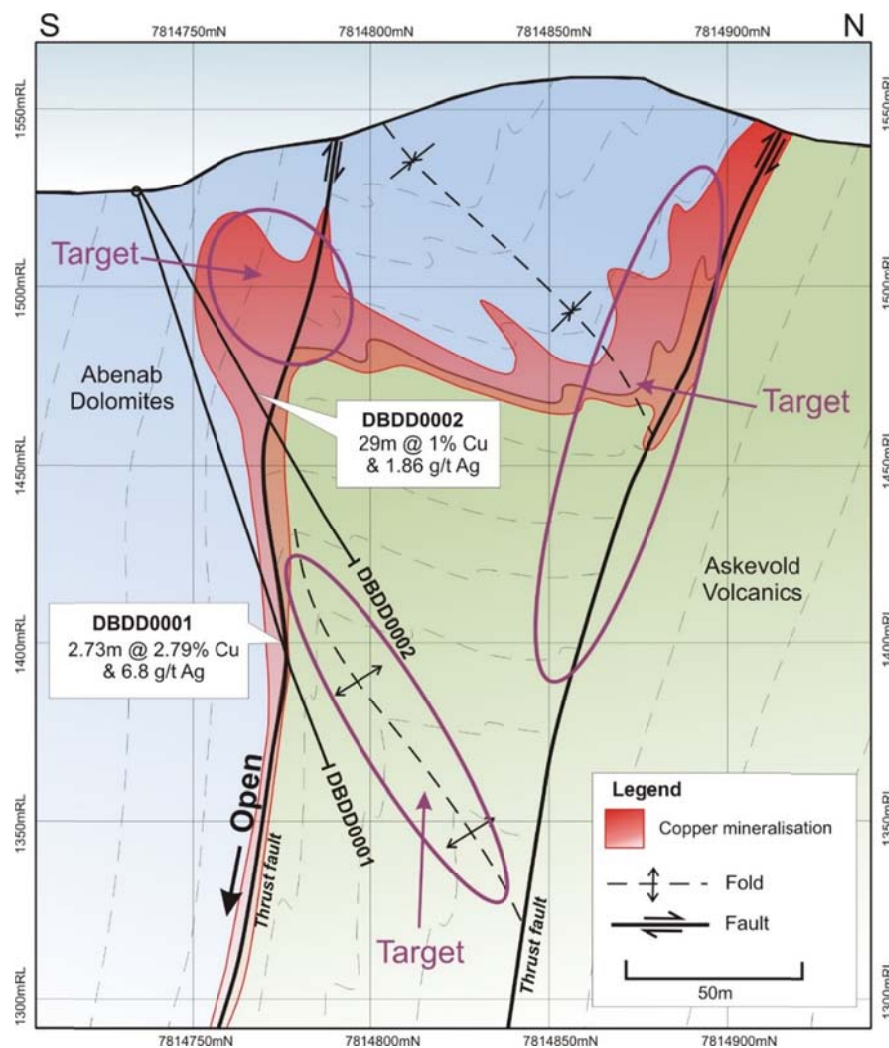
A detailed analysis of oriented diamond drill core has provided data for a new structural interpretation of Deblin. Previous RC drilling at Deblin had identified a **high-grade zone of copper mineralisation** on the contact between the Askeveld Volcanics and the overlying Abenab Dolomites. Better intersections included:

- **8m @ 1.28% Cu from 87m, including 3m at 2.96% Cu from 87m in DBRC0001,**
- **7m @ 3.23% Cu from 169m, including 3m @ 6.08% Cu from 172m in DBRC0002,**
- **7m @ 2.15% Cu from 72m, including 2m @ 4.12% Cu from 74m in DBRC0007,**
- **3m @ 1.37% Cu from 67m, including 1m @ 2.14% Cu from 68m in DBRC0005,**

The copper mineralisation at Deblin is indeed hosted along the contact of the dolomite and the mafic volcanic rocks (Figure 1), but this contact has been structurally disrupted. Thrusting has resulted in folding and faulting of the contact prior to the influx of copper mineralising fluids. Based on the available data, the deposit is now considered to have a folded geometry in cross section, with the two subvertical sections joined by a subhorizontal zone of mineralisation.

Intense hydrothermal alteration, the style and distribution of copper minerals, and the style and degree of folding and faulting are consistent with Deblin being a Kombat-style\* mesothermal copper deposit. This is at odds with previous interpretations that claimed Deblin was a volcanogenic massive sulphide (VMS) deposit, which is no longer considered likely.

\*The Kombat copper mine is located around 15 kilometres to the northeast of the Deblin prospect and produced in excess of 8.7 million tonnes @ 3.1% Cu, 1.1% Pb and 26 gpt Ag.

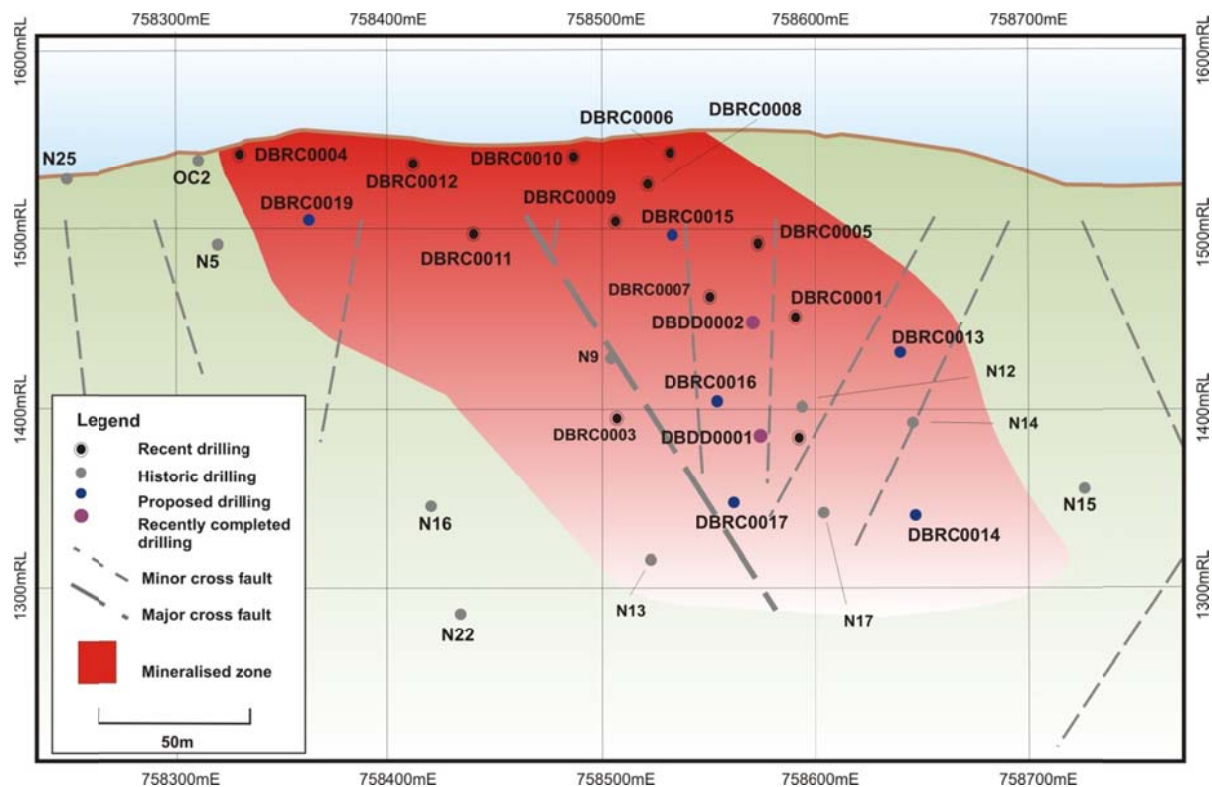


**Figure 1–** Interpreted geological cross section at 758545mE, looking west, and showing recently completed drill holes DBDD0001 and DBDD0002, new drill targets and new structural interpretation

### ***Future work at Deblin***

The new geological model for the Deblin deposit provides a number of targets for extensions to known copper mineralisation. The interpreted thrust positions and their related structures will be targeted for thick accumulations of copper mineralisation similar to those intersected in DBDD0002 (Figure 1).

Importantly, most mineralisation encountered at Deblin to date is within 100 metres of surface. The simple mineralogy of the Deblin deposit, the presence of a broad low-grade halo of copper mineralisation (in excess of 60 m) around the thickest intercept, and the newly interpreted geometry of the deposit (Figures 1 and 2), all combine to make Deblin potentially amenable to an open cut style of mining operation.



**Figure 2–** Longitudinal projection of Deblin looking north, showing recently completed drill hole pierce points DBDD0001 and DBDD0002 as large purple dots and the new thrust interpreted thrust position.

### 3 DEBLIN REGIONAL PROSPECTIVITY

Recent regional soil sampling and mapping programs have generated two very strong surface geochemical anomalies along strike from Deblin, at Deblin West (Figure 3). Both anomalies contain peak values in **excess of 1,000 ppm copper** and occur within a continuous zone of anomalous surface copper mineralisation (greater than plus 250 ppm copper) occurring over at least 1,600 metres of strike.

Follow-up exploration discovered a zone of strong outcropping copper mineralisation at Deblin West Anomaly 1. The outcropping mineralisation was channel sampled and mapped over an area that is similar in size to the surface expression of the Deblin mineralisation located some 750 metres along strike to the east.

The discovery of copper mineralisation at Deblin West complements the Deblin deposit. In addition, the recently discovered electromagnetic conductors to the south of Deblin provide sizeable targets in what is rapidly developing into a distinct copper 'camp'.

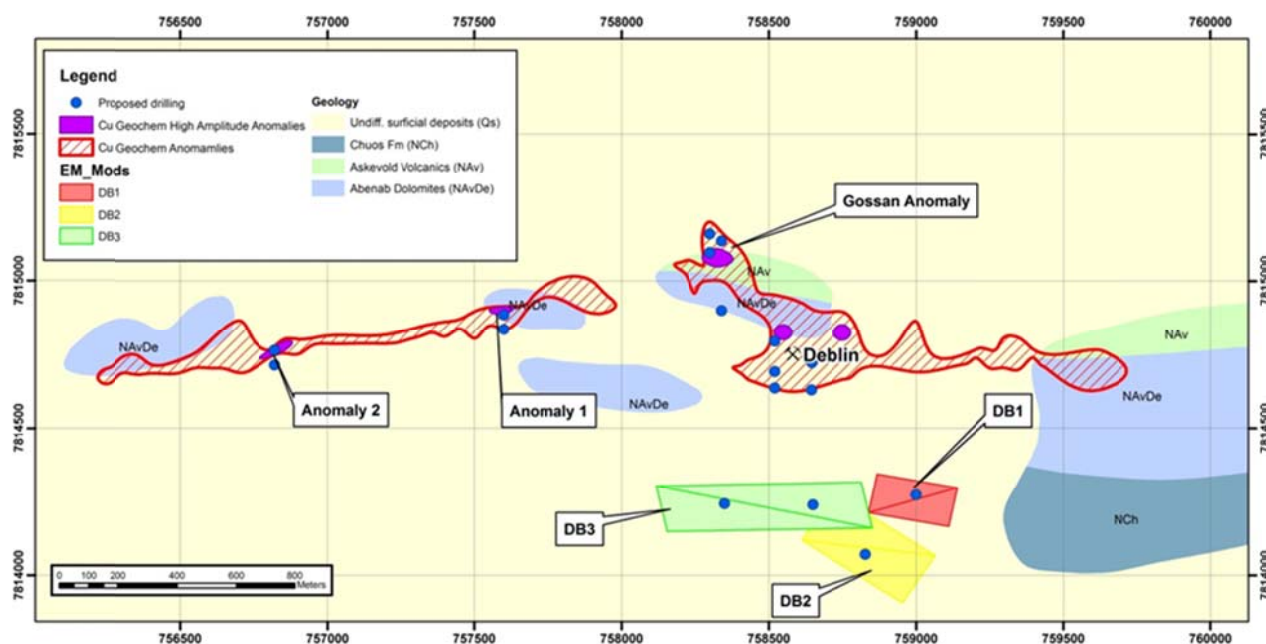


Figure 3– Geological map of the Deblin area showing the locations of geochemical anomalies and EM conductors

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[www.goldendeeps.com](http://www.goldendeeps.com)

**Competent Person Declaration**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Matthew Painter, who is a member of The Australasian Institute of Geoscientists. Dr Painter has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Dr Painter consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Forward-Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Golden Deeps Limited's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Golden Deeps Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.





## ABOUT GOLDEN DEEPS LIMITED

Golden Deeps Limited is an ASX listed company (ASX:GED) focused on the exploration for gold and base metals. The Company has projects in the Republic of Namibia, Western Australia and Victoria.

The Company's current focus is its 1,100km<sup>2</sup> Grootfontein Base Metal Project located in the Otavi Mountain Land (OML) of Northern Namibia, an area roughly bounded by a triangle linking the towns of Tsumeb, Grootfontein and Otavi. The region hosts several globally significant copper, zinc, lead, silver and vanadium mines, including the **Tsumeb, Khusib Springs, Abenab, Berg Aukas & Kombat** mines.

The region is well served by sealed roads, rail to port, high voltage power, telephone and water, and is close to major towns and mining processing facilities, including the Kombat copper concentrator and Tsumeb Smelter complex (one of only five operating smelters in Africa).

The Grootfontein Project has a number of significant prospects near historical production centres located on its licence package. These prospects include the Askevoid Copper trend, the Abenab/Christiana Zinc-Vanadium Lead trend and the Khusib Springs Copper prospect.

The Company is actively exploring its Project area with a view to an early definition of mineral resources.

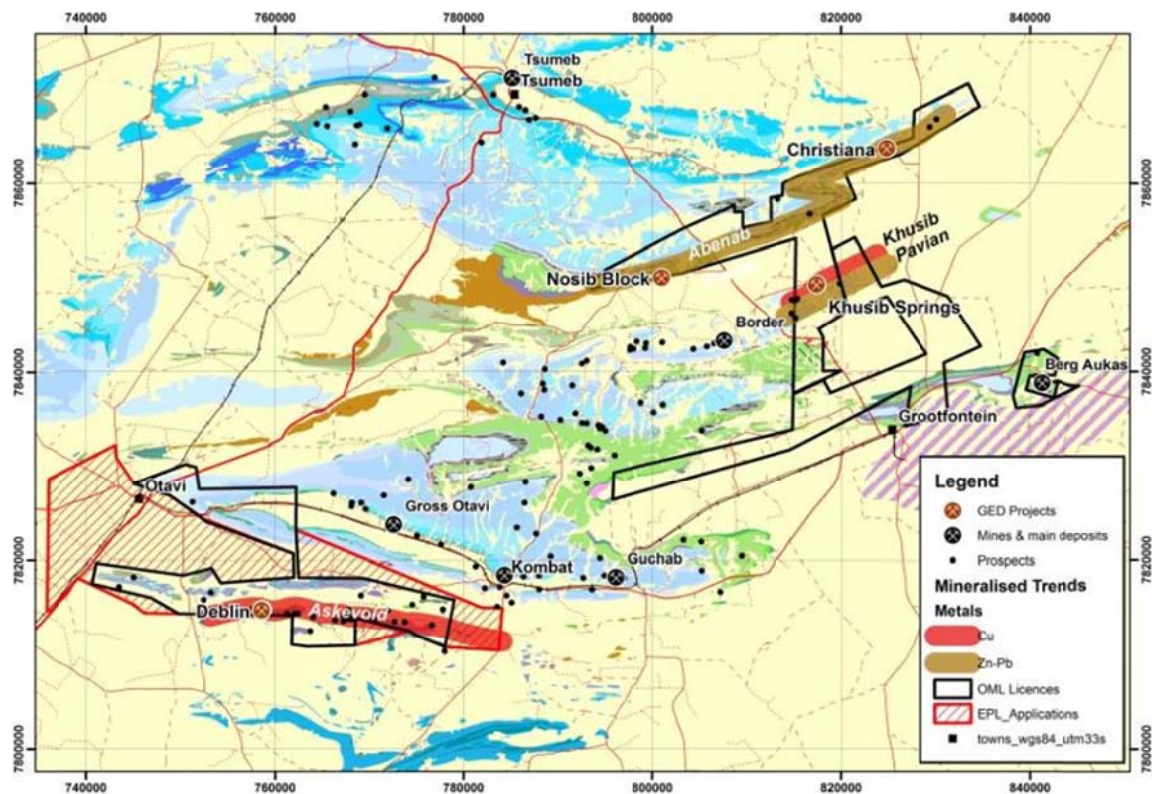


Figure 4 – The Grootfontein Base Metal Project, Otavi Mountain Land, Namibia



## APPENDIX 1 – Deblin Diamond Drill Results

| Hole ID  | Depth | Collar Location WGS84 Z33 |         |      | Dip | Azimuth | From<br>m | To<br>m | Cu Grade<br>% | Width<br>m | Intersection Description      |
|----------|-------|---------------------------|---------|------|-----|---------|-----------|---------|---------------|------------|-------------------------------|
|          |       | East                      | North   | RL   |     |         |           |         |               |            |                               |
| DBDD0002 | 120   | 758547                    | 7814735 | 1527 | -60 | 0       | 29        | 57      | 1             | 29         | 29m @ 1.00% Cu, 1.86g/t Ag    |
|          |       |                           |         |      |     | incl    | 59.34     | 61      | 5.38          | 1.66       | 1.66m @ 5.38% Cu, 8.04g/t Ag  |
| DBDD0001 | 170.5 | 758547                    | 7814734 | 1527 | -72 | 0       | 135       | 137.73  | 2.79          | 2.73       | 2.73m @ 2.79% Cu, 6.80g/t Ag  |
|          |       |                           |         |      |     | incl    | 136.5     | 137.73  | 5.74          | 1.23       | 1.23m @ 5.74% Cu, 14.08g/t Ag |

## APPENDIX 2 – JORC 2012

The following section is provided to ensure compliance with the JORC (2012) requirements for the reporting of exploration results.

### Section 1 Sampling Techniques and Data

| <b>Criteria</b>                     | <b>Explanation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sampling techniques</b>          | <p>Exploration results are based on industry best practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC) drilling samples are collected as 1m composite samples through a cyclone which are riffle or cone split for analysis. Each 1m split sample is analysed with a handheld XRF analyser. Anomalous samples are submitted to Bureau Veritas Laboratory in Swakopmund for more precise analysis. Core samples are taken as half NQ core, cut with a diamond blade core saw and sampled on nominal 1m intervals, with sampling breaks adjusted to geological boundaries where appropriate. For soil samples, a bulk sample is collected from approximately 10cm below surface with analyses undertaken by handheld XRF analyser.</p> <p>All drill samples submitted to the laboratory are crushed and pulverised followed by a four acid total digest and multi-element analysis by inductively coupled plasma optical emission spectrometry (ICP-OES) and inductively coupled plasma mass spectrometry (ICP-MS). Gold and precious metal analysis is completed by a 40g fire assay collection and Atomic Absorption Spectrometer analysis (AAS). Sample preparation and analysis are undertaken at Bureau Veritas Laboratory in Swakopmund, Namibia.</p> |
| <b>Drilling techniques</b>          | <p>RC drilling is completed by a 5 ¼ inch diameter hole drilled with a face sampling hammer. Diamond drill holes are collared using HQ2 and switch to NQ2 when the formation becomes solid. In some cases where the target is deep, RC pre-collars are drilled, cased off and tailed with NQ2 diamond tails. All coordinates are quoted in WGS84 datum unless otherwise stated.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Drill Sample Recovery</b>        | <p>The quality of RC drilling samples is optimised by the use of a face sampling hammer, riffle and/or cone splitters and the logging of various criteria designed to record sample size, recovery and contamination, and use of field duplicates to measure sample precision.</p> <p>The quality of diamond core samples is monitored by the logging of various geotechnical parameters, and logging of core recovery and competency.</p> <p>The quality of analytical results is monitored by the use of internal laboratory procedures together with certified standards, duplicates and blanks and statistical analysis on a monthly basis to ensure that results are representative and within acceptable ranges of accuracy and precision.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Logging</b>                      | <p>All logging is completed according to industry best practice. RC drill chips are wet sieved on 1m intervals and stored in plastic chip trays for future reference. Diamond core is stored in clearly labelled core trays. Logging is completed using a standard Maxwell logging template. The resulting data are uploaded to a Datashed database and validated. Once validated, the data are exported to 3D modelling software for visual validation and interpretation.</p> <p>Detailed information on lithology, sample quality, structure, geotechnical information, alteration and mineralisation are collected in a series of detailed self-validating logging templates.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Sub- sampling techniques and</b> | <p>Core is cut using a brick saw fitted with a special blade designed for cutting core. Half core is taken for sampling.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



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|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><i>sample preparation</i></b>                                      | <p>RC samples are riffle split on 1m intervals when dry. When wet, samples are dried out before riffle splitting takes place.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique is logged and is undertaken as per industry best practice.</p> <p>Field duplicated are taken every 20 samples to ensure the samples are representative. Quality control reports are undertaken routinely to monitor the performance of field standards and duplicates.</p> <p>Sample sizes are appropriate to the grain size of the material being sampled</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b><i>Quality of assay data and laboratory tests</i></b>              | <p>The samples have been sorted, dried, crushed and pulverised. Primary preparation has been by crushing the whole sample. The samples have been split with a riffle splitter, if required, to obtain a 3kg sub-fraction which has then been pulverised in a vibrating pulveriser.</p> <p>The sample(s) have been digested with a mixture of four acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids for a total digest.</p> <p>Ag, As, Cd, Co, Ga, In, Mo, Sn, W have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry.</p> <p>Al, Ca, Cu, Fe, K, Mg, Mn, Na, Pb, S, V, Zn have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry.</p> <p>Au and PGEs are determined by a 40g fire assay collection with Inductively Coupled Plasma (ICP) Optical Emission Spectrometry finish.</p> <p>Field Standards and Blanks are inserted every 10 samples , Laboratory inserts its own standards and blanks at random intervals, but several are inserted per batch regardless of the size of the batch.</p> |
| <b><i>Verification of sampling and assaying</i></b>                   | <p>All significant intercepts are reviewed and confirmed by at least three senior personnel before release to the market.</p> <p>No adjustments are made to the raw assay data. Data are imported directly to Datashed in raw original format.</p> <p>All data are validated using the QAQCR reporter validation tool with Datashed. Visual validations are then carried out by senior staff members.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b><i>Location of data points</i></b>                                 | <p>Holes are set out using a handheld 12 channel GPS. Collars are picked up by a licenced surveyor on completion of the hole.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b><i>Data spacing and distribution</i></b>                           | <p>Data spacing and distribution used to determine geological continuity is dependent on the deposit type and style under consideration. Where a mineral resource is estimated, the appropriate data spacing and density is decided and reported by the competent person.</p> <p>For mineral resource estimations, grades are estimated on composited assay data. The composite length is chosen based on the statistical average, usually 1m. Sample compositing is never applied to interval calculations reported to market. A sample length weighted interval is calculated as per industry best practice.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b><i>Orientation of data in relation to geological structure</i></b> | <p>Orientation of sampling is as unbiased as possible based on the dominating mineralised structures and interpretation of the deposit geometry.</p> <p>If structure and geometry is not well understood, sampling is orientated to be perpendicular to the general strike of stratigraphy and/or regional structure.</p> <p>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this would be assessed and reported if considered material.</p> <p>Drilling is at an angle to surface and drilled to maximise perpendicular intersection with the known interpretation of the strike of previously intersected mineralisation.</p>                                                                                                                                                                                                                                                                                                                                      |
| <b><i>Sample security</i></b>                                         | <p>All samples remain in the custody of company geologists, and are fully supervised from point of field collection to laboratory drop-off.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b><i>Audits and reviews</i></b>                                      | <p>None yet undertaken for this dataset</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |





## Section 2 Reporting of Exploration Results

| <b>Criteria</b>                                                         | <b>Explanation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mineral tenement and land tenure status</b>                          | <p>The Company controls four Exclusive Prospecting Licences (EPL's) in the Otavi Mountainland, namely EPL3743, EPL3745, EPL3744 and EPL3543. All tenure was in good standing at the time of reporting. There are no known impediments with respect to obtaining a licence to operate in the area.</p> <p>The Company maintains an 80% interest in the aforementioned EPL's, and a 3% government royalty is in place on any base metal production. There are no known native title interests, historical sites, wilderness or national park areas or environments impediments.</p> |
| <b>Exploration done by other parties</b>                                | <p>Several other parties have undertaken exploration in the area between the early 1900's through to 1997. These parties include South West Africa Company, Falconbridge, Goldfields Namibia and Tsumeb Corporation.</p> <p>Appraisal of previous work has been limited to high level review of historical reports as very limited data are available in either digital or hardcopy format. In most cases Golden Deeps Limited has had to re-collect the data.</p>                                                                                                                |
| <b>Geology</b>                                                          | At Deblin and the Askevold trend the target is structurally controlled hydrothermal copper mineralisation located close to the contact between a carbonate sequence and a mafic volcanic package.                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Drill hole Information</b>                                           | All relevant drill hole information is supplied in the appendix of the announcement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Data aggregation methods</b>                                         | <p>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.</p> <p>No high grade cut-offs are applied. A nominal low grade cut-off of 0.3% Cu is used with a maximum internal dilution of 3m.</p>                                                                                                                                                                                                                                              |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <p>Mineralisation at Deblin is interpreted to be striking at 105 degrees true azimuth with a dip of -45 degrees towards 195 true azimuth.</p> <p>All holes are drilled to be as perpendicular as practicable to the above orientation. Therefore intercept lengths are interpreted to be close to true thickness.</p>                                                                                                                                                                                                                                                             |
| <b>Diagrams</b>                                                         | A comprehensive set of relevant diagrams are included in the body of the announcement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Balanced reporting</b>                                               | Information relating to geophysical and geochemical testwork is included in the announcement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Further work</b>                                                     | Plans for further work are outlined in the body of the announcement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |