

## Additional Mineralised Pegmatites Identified near Swanson

### HIGHLIGHTS

- Total number of prospective pegmatites under investigation are 200<sup>1</sup>, with the current program focused around the existing Swanson Ta/Li pegmatites, where a previously reported JORC resource, completed DFS and mine construction has commenced
- The fertile Swanson Mine Pegmatites<sup>2</sup> located on the mining licence (15 in total) form part of the pegmatite fields over EPL 5047 and EPL 7295
- **Initial field work on only 8 pegmatites has identified Tantalum rich pegmatites** over Arcadia's EPL's 5047 and EPL 7295
- Exploration has commenced over under-explored pegmatites with the **aim of increasing the Mineral Resources over EPL 5047 and EPL 7295 and to identify Tantalum and Lithium rich pegmatites for targeted drilling**
- Three of the eight pegmatites mapped and sampled to date indicate elevated Tantalum mineralisation at EPL 5047 near the Swanson Mine as follows:
  - Pegmatite A: 536 ppm Ta<sub>2</sub>O<sub>5</sub>
  - Pegmatite A: 785 ppm Ta<sub>2</sub>O<sub>5</sub>
  - Pegmatite A: 990 ppm Ta<sub>2</sub>O<sub>5</sub>
  - Pegmatite D: 1,063 ppm Ta<sub>2</sub>O<sub>5</sub>
  - Pegmatite A: 1,310 ppm Ta<sub>2</sub>O<sub>5</sub>
  - Pegmatite G: 2,498 ppm Ta<sub>2</sub>O<sub>5</sub>
  - Pegmatite D: 4,911 ppm Ta<sub>2</sub>O<sub>5</sub>
  - Pegmatite D: 21,839 ppm Ta<sub>2</sub>O<sub>5</sub>

**Arcadia Minerals Ltd (ASX:AM7, FRA:8OH) (Arcadia or the Company)**, the diversified exploration company targeting a suite of projects aimed at Tantalum, Lithium, Nickel, Copper and Gold in Namibia is pleased to announce the results of grab sampling campaign over eight of the more than 200 pegmatites within the Company's license areas (EPL's 5047 and 7295) (the Licenses).

<sup>1</sup> Refer to Asx Announcement 6 May 2022 "JORC Mineral Resource at Swanson Ta/Li Project Doubles in Size"

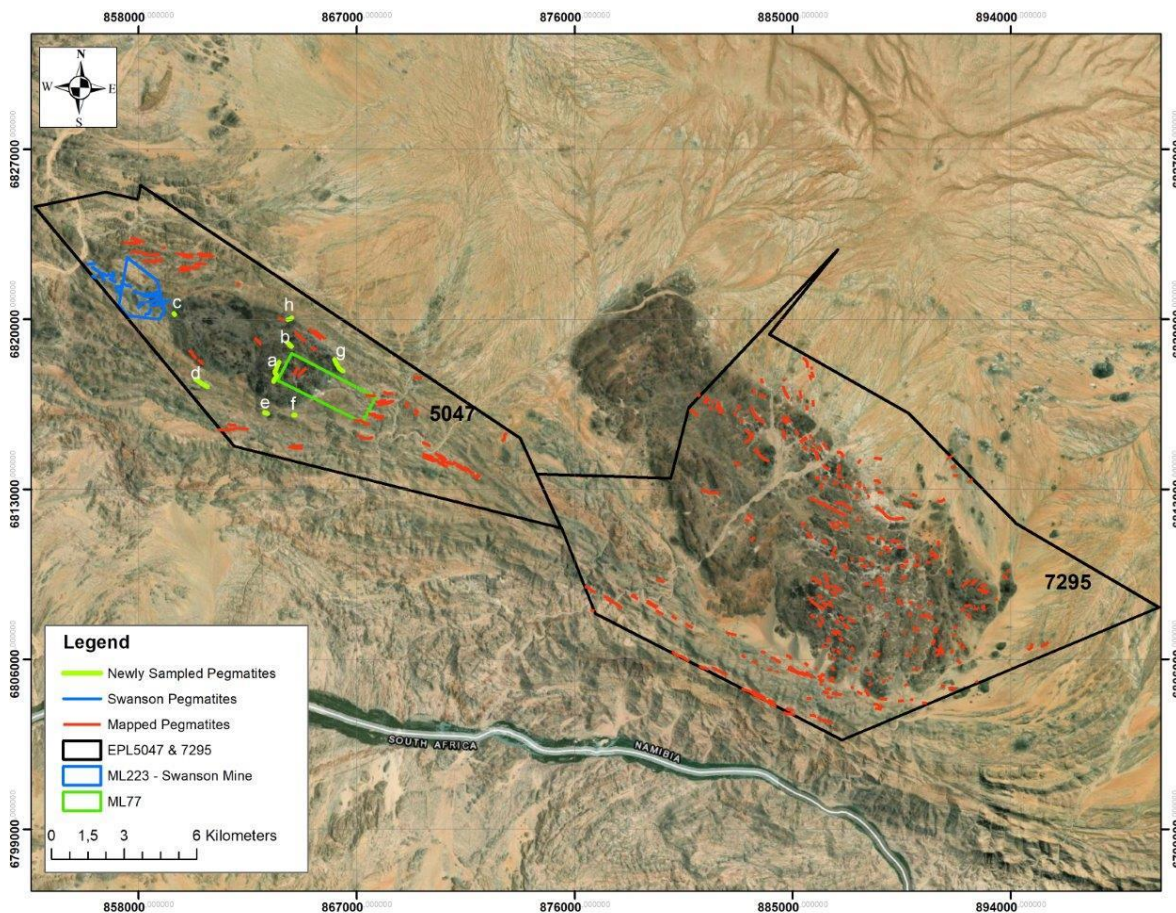
<sup>2</sup> Refer to Asx Announcements 31 May 2023 "DFS confirms Swanson Project significant cash generator" and 6 July 2023 "Commencement of Construction at Swanson"

**Philip le Roux, the Chief Executive of Arcadia stated:** *“We are very encouraged by the identification of a significant number of mineralised pegmatites as result of our teams’ field work. Of particular interest is the elevated levels of Tantalum mineralisation near our Swanson Tantalum mining project and the great number of LCT (Lithium-Cesium-Tantalum) pegmatites identified through field work where we’ve covered only a small proportion of the ground available to us. Our work will now focus on determining the geometry of the mineralised pegmatites, the extent of mineralisation and to possibly discover more mineralised pegmatites to prioritise drill targets.”*

**Introduction**

The Company explored the Licenses by taking 48 rock chips samples over eight outcropping pegmatites of the more than 200 known pegmatites identified over EPL 5047 and EPL 7295. The Licenses are held by Orange River Pegmatite (Pty) Ltd, in which Arcadia holds an 80% interest.

**Map 1:** Pegmatite fields over the Licenses, including the Swanson pegmatite swarm (in blue) and eight pegmatites sampled (yellow) which is the subject of this announcement



The Geological Survey of Namibia, in collaboration with the Council of Geoscience of South Africa, conducted a five year (2012–2017) detailed mapping program (1:50,000 scale) over large parts of Southern Namibia including EPL 5047 and 7295. As a result, several pegmatites were identified, including those identified by the Company.

The purpose of the Company's field mapping and sampling program was to test whether mineralisation of pegmatites occurs outside of the known mineralised Swanson pegmatite swarm where the Company has declared a JORC Mineral Resource<sup>3</sup> and conducted a positive definitive feasibility study<sup>4</sup> that led to the commencement of construction of the Swanson mine<sup>5</sup>.

To date eight of the more than 200 pegmatites identified by the Geological Survey of Namibia have been mapped and sampled. The eight pegmatites are all located on EPL 5047 **within trucking distance from the Swanson Mine**. An exploration program is foreseen to continue mapping and sampling of pegmatites over EPL 5047 and EPL 7295 during October 2023.

Three (pegmatites A, D and G, refer to Map 1) of the eight pegmatites showed elevated Tantalum mineralisation. Eleven of the 48 samples taken over the pegmatites delivered grades of more than 233 ppm Ta<sub>2</sub>O<sub>5</sub>, which was also the cut-off grade for the Swanson Mineral Resource.

Best and average assay results for each of the eight pegmatites are shown in the table below and the individual results for each sample are shown in Appendix 1.

**Table 1:** Best and average grades for Tantalum and Lithium of sampled Pegmatites

| Pegmatite No. | No. of Samples | Highest Ta <sub>2</sub> O <sub>5</sub> (ppm) | Highest Li <sub>2</sub> O (ppm) | Average Ta <sub>2</sub> O <sub>5</sub> (ppm) | Average Li <sub>2</sub> O (ppm) |
|---------------|----------------|--|---------------------------------|--|---------------------------------|
| A             | 5              | 1310   | 92                              | 753  | 42                              |
| B             | 1              | 8  | 11                              | 8  | 11                              |
| C             | 1              | 18   | <10                             | 18   | <10                             |
| D             | 14             | 21839  | 2171                            | 2015   | 738                             |
| E             | 1              | 15   | 26                              | 15   | 26                              |
| F             | 1              | 66   | 368                             | 66   | 368                             |
| G             | 23             | 2498   | 285                             | 192  | 106                             |
| H             | 2              | 8  | 17                              | 7  | 13                              |

The White City North pegmatites (mainly two bodies, labelled G in the table above) are hosted in the Tantalite Valley Complex (TVC) meta-gabbros, on the South-Eastern

<sup>3</sup> Refer to Asx Announcement 6 May 2022 "JORC Mineral Resource at Swanson Ta/Li Project Doubles in Size"

<sup>4</sup> Refer to Asx Announcements 31 May 2023 "DFS confirms Swanson Project significant cash generator"

<sup>5</sup> Refer to Asx Announcement 6 July 2023 "Commencement of Construction at Swanson"

margin of the complex and comprises of albite (cleavelandite), quartz, muscovite, biotite, zinnwaldite (locally termed lithian muscovite), lepidolite, garnet, apatite, tourmaline, beryl, spodumene, fluorite, columbite/tantalite in various proportions distributed within its poorly developed internal mineralogical zones. Tantalum mineralisation is visible in the field suggesting that these pegmatites are very prospective. The chip/channel sampling conducted over the pegmatite bodies was unbiased in its location and lithological placing within the pegmatites, but were also of a very small nominal sample size and therefore may not be representative of the average pegmatite composition.

Pegmatite H is a swarm of fine-grained intensely sheared pegmatites on the northern margin of the TVC. The pegmatites are parallel to the Poffader Shear Zone on the northern flank of the TVC. Its mineralogy encompasses aplitic albite (in most cases associated with sericite which resulted from shearing), pale green muscovite and fine-grained orange garnets. The pegmatites widths vary (with up to 5m in the middle) and they are boudinaged as well as pinches and swells probably due to deformations. Preliminary investigation anticipated possibly lithium mineralisation since the green colour of fine-grained muscovite is persistent and could be related to lithium in these pegmatites system.

The Beacon Pegmatite (denoted as A in table 1) is a long (at least 1km with minor breakups) but thin pegmatite (6-10m wide in the middle). This pegmatite extends roughly in a N-S orientation and dips to the West and crosscuts the TVC. Its mineralogy is mostly saccharoidal albite with subordinates of vuggy cleavelandite, orange and brown garnets, a discontinuous milky quartz core and fine-grained coloured tourmalines that may suggest presence of lithium. Despite its enormous length, the Beacon Pegmatite is very similar to some the pegmatites within ML77 (particularly the Valley and Signalberg pegmatites). Sporadic coarse grained Ta mineralisation is evident all along the pegmatite. Considering the length of this pegmatite, its Ta and Li content may increase with depth depending on the anatomy and geometry of this pegmatite below surface.

Pegmatites E and F are similar and wholly hosted by the para-gneisses and mylonite, hence completely out of the TVC boundary. A number of historical trenches on these NW-SE trending pegmatites exposed parallel sheared milky and grey quartz veins, green muscovite and altered aplitic albite. Trace copper oxide along fracture surfaces have been observed on these pegmatites, possibly remobilized from the hornfels on



the southern edge of the TVC. Historical workings and green mica attracted the exploration team for sampling.

Pegmatite C is hosted within the hybrid gabbro which is the unit hosting the Swanson deposit pegmatites. The pegmatite is reoriented and dissected by later shearing. Its inner zone is pegmatitic textured with mainly milky quartz and feldspars and an unknown metallic grey mineral that grades outwards as granitic to granitic pegmatite with no albite.

Pegmatite B forms part of a swarm that consists of quartz, feldspars, orange garnet and unknown specs of opaque minerals. These pegmatites are within a fault zone situated inside the TVC and deviates from proper pegmatites to granitic pegmatites. They are more than 100m long and strikes E-W with southern dips. Although situated within the fault zone, they are less deformed implying fault/fracture-filling and consequently, fast cooling (resulting in its fine-grained nature which is grading to granitic texture).

The Witkop pegmatite (noted as D in table 1) is a gigantic pegmatite on the southwestern side of the TVC (approximately 700m away from the TVC). The Witkop pegmatite is at least 500m long and about 80m thick in the middle and narrows towards its edges. This pegmatite is zoned, and sampling its different zones can yield different outcomes. The core zone comprises of milky, clear, grey and rose quartz with subordinate microcline. The zones are distributed from the core zones towards the margin of the pegmatite; massive cleavelandite zone, coarse lithian muscovite with grey quartz and blocky k-feldspar zone, the massive medium to fine-grained lithian muscovite zone and the outer border zone (garnet replacement zone). Historically, the Witkop pegmatite has been mined for its clean quartz and feldspars and because of its location outside of the TVC boundary, it has been considered infertile in terms of Ta and Li mineralisation. However, recent ORP sampling indicated that the Witkop pegmatite is highly prospective.

This announcement has been authorised for release by the Board of Directors of Arcadia Minerals Limited.

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**ARCADIA MINERALS LIMITED**

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## COMPETENT PERSONS STATEMENT & PREVIOUSLY INFORMATION

The information in this announcement that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by the Competent Person whose name appears below, who is a member of a Recognised Professional Organisation and a director of the Company. The Competent Person named below has sufficient experience relevant to the style of mineralisation and types of deposits under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012.

| Competent Person                                 | Membership  | Report/Document   |
|--|---|-------------------|
| Mr Philip le Roux<br>(Director Arcadia Minerals) | South African Council for Natural Scientific Professions #400125/09 | This announcement |

The information in the referenced announcements footnoted below in the table below that relates to Exploration Results, including the Mineral Resources contained within the Production Target (and forecast financial information derived from the production target) has previously been released on the ASX. The Company confirms that it is not aware of any information or data that materially affects the information included in the market announcement, and that all material assumptions and technical parameters underpinning the announcement continue to apply. 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.

| Release Date      | ASX Announcements  |
|-------------------|--|
| 23 September 2021 | <i>Maiden JORC Resource at Swanson Ta/Li Project</i>           |
| 6 May 2022        | <i>JORC Mineral Resource at Swanson Tantalum Project.</i>      |
| 31 May 2023       | <i>DFS confirms Swanson Project significant cash generator</i> |
| 6 July 2023       | <i>Commencement of Construction</i>                            |

### Mineral Resource – Swanson

The Company confirms that it is not aware of any new information or data that materially affects the information included in the Swanson Mineral Resource estimate and all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its updated resource announcement made on 6 May 2022. The Company confirms the form and context in which the Competent Person's findings are presented and have not been materially modified from the original market announcement.

### Ore Reserve – Swanson

The Company confirms that it is not aware of any new information or data that materially affects the information included in the Swanson Ore Reserve Statement and that all material assumptions and technical parameters underpinning the Ore Reserve Statement continue to apply and have not

materially changed. The information in this announcement has been extracted from the announcement dated 31 May 2023 (*Feasibility Study confirms Swanson Project as significant cash generator*). when referring to its updated resource announcement made on 6 May 2022. The Company confirms the form and context in which the Competent Person's findings are presented and have not been materially modified from the original market announcement.

### Swanson Tantalum Project Mineral Resource

At Swanson a revised JORC Mineral Resource of 2.59Mt at an average grade of 486g/t Ta<sub>2</sub>O<sub>5</sub>, 73g/t Nb<sub>2</sub>O<sub>5</sub> and 0.15% Li<sub>2</sub>O was announced on the 6 May 2022, which was derived from 52 drillholes drilled over 10 pegmatites.

**TABLE 1: SWANSON TANTALUM PROJECT MINERAL RESOURCE (JORC 2021)**

| D, E and F Classification | Area     | Tonnes (kt)  | Ta <sub>2</sub> O <sub>5</sub> Content (Tonnes) | Ta <sub>2</sub> O <sub>5</sub> ppm | Nb <sub>2</sub> O <sub>5</sub> ppm | Li <sub>2</sub> O % |
|---------------------------|----------|--------------|---|------------------------------------|------------------------------------|---------------------|
| Indicated                 | Total D  | 568          | 207   | 365                                | 87                                 | 0.27                |
| Indicated                 | Total EF | 577          | 334   | 578                                | 65                                 | 0.07                |
| <b>Subtotal Indicated</b> |          | <b>1,145</b> | <b>541</b>                                      | <b>472</b>                         | <b>76</b>                          | <b>0.17</b>         |
| Indicated                 | Total D  | 444          | 162   | 365                                | 79                                 | 0.34                |
| Indicated                 | Total EF | 995          | 554   | 557                                | 69                                 | 0.00                |
| <b>Subtotal Inferred</b>  |          | <b>1,439</b> | <b>716</b>                                      | <b>498</b>                         | <b>72</b>                          | <b>0.14</b>         |

### Swanson Tantalum Project Ore Reserve

Swanson Ore Reserve announced on 31 May 2023.

**TABLE 2: PROVED AND PROBABLE ORE RESERVES FOR THE SWANSON PEGAMATITIES**

| D & E F Ore Reserve | Area            | Mass (kt)  | Ta <sub>2</sub> O <sub>5</sub> (ppm) | Li <sub>2</sub> O (%) | Ta <sub>2</sub> O <sub>5</sub> (tonnes) |
|---------------------|-----------------|------------|--------------------------------------|-----------------------|---|
| Proved              | Total D         | 0          | 0                                    | 0                     | 0                                       |
|                     | Total EF        | 0          | 0                                    | 0                     | 0                                       |
|                     | <b>Subtotal</b> | <b>0</b>   | <b>0</b>                             | <b>0</b>              | <b>0</b>                                |
| Probable            | Total D         | 409        | 347                                  | 0.23%                 | 142                                     |
|                     | Total EF        | 457        | 550                                  | 0.07%                 | 251                                     |
|                     | <b>Subtotal</b> | <b>866</b> | <b>454</b>                           | <b>0.15%</b>          | <b>393</b>                              |

**Note:** Ore Resources are reported at 236 ppm Ta<sub>2</sub>O<sub>5</sub> cut-off. Only Lithium from D Pegmatites will be recovered.

## BACKGROUND ON ARCADIA

Arcadia is a Namibia-focused diversified metals exploration company, which is domiciled in Guernsey. The Company explores for a suite of new-era metals (Lithium, Tantalum, Platinum-Group-Elements, Nickel and Copper). The Company's strategy is to bring the advanced Swanson Tantalum project into production and then to use the cashflows (which may be generated) to drive exploration and development at the potentially company transforming exploration assets. As such, the first two pillars of Arcadia's development strategy (a potential cash generator and company transforming exploration assets) are established through a third pillar, which consists of utilising the Company's human capital of industry specific experience, tied with a history of project generation and bringing projects to results, and thereby, to create value for the Company and its shareholders.

Most of the Company's projects are located in the neighbourhood of established mining operations and significant discoveries. The mineral exploration projects include-

1. Bitterwasser Lithium in Clay Project – which project contains a potentially expanding JORC Mineral Resource from lithium-in-clays
2. Bitterwasser Lithium in Brines Project – which is prospective for lithium-in-brines within the Bitterwasser Basin area.
3. Kum-Kum Project – prospective for nickel, copper, and platinum group elements.
4. TVC Pegmatite Project – prospective for Lithium, Tantalum and other associated minerals.
5. Karibib Project – prospective for copper and gold.
6. The Swanson Mining Project – advanced tantalum mining project undergoing development to become a mining operation, and which contains a potentially expanding JORC Mineral Resource within the Swanson Project area.

As an exploration company, all the projects of the company are currently receiving focus. However, currently the Swanson project and the Bitterwasser Lithium projects may be considered as Arcadia's primary projects due to their potential to enhance the Company's value.

For more details, please visit [www.arcdiaminerals.global](http://www.arcdiaminerals.global)

## DISCLAIMER

Some of the statements appearing in this announcement may be forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Arcadia operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside Arcadia's control.

The Company does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of Arcadia, its directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

This announcement is not an offer, invitation, or recommendation to subscribe for, or purchase securities by the Company. Nor does this announcement constitute investment or financial product advice (nor tax, accounting, or legal advice) and is not intended to be used for the basis of making an investment decision. Investors should obtain their own advice before making any investment decision.



**APPENDIX 1:** Table of rock grab samples taken over eight pegmatites on EPL 5047

| Pegmatite | Sample No. | X      | Y       | Ta2O5 (ppm) | Li2O (ppm) |
|-----------|------------|--------|---------|-------------|------------|
| A         | X0880      | 277605 | 6821790 | 1310        | 92         |
| A         | X0881      | 277506 | 6821487 | 990         | 30         |
| A         | X0883      | 277464 | 6821411 | 536         | 15         |
| A         | X0884      | 277523 | 6821219 | 785         | 59         |
| A         | X0888      | 277424 | 6821013 | 145         | 16         |
| B         | X0879      | 277966 | 6822594 | 8           | 11         |
| C         | X0887      | 273184 | 6823578 | 18          | <10        |
| D         | G0108      | 274592 | 6820674 | 1063        | 80         |
| D         | G0110      | 274597 | 6820672 | 10          | 36         |
| D         | G0111      | 274281 | 6820877 | 22          | 125        |
| D         | X0889      | 274293 | 6820909 | 4911        | 187        |
| D         | X0890      | 274475 | 6820811 | 49          | 191        |
| D         | X0891      | 274501 | 6820718 | 9           | 100        |
| D         | X0892      | 274490 | 6820753 | 57          | 1931       |
| D         | X0893      | 274490 | 6820753 | 51          | 2042       |
| D         | X0894      | 274490 | 6820753 | 52          | 2171       |
| D         | X0895      | 274506 | 6820737 | 13          | 162        |
| D         | X0897      | 274512 | 6820756 | 20          | 263        |
| D         | X0898      | 274512 | 6820756 | 80          | 2109       |
| D         | X0899      | 274520 | 6820715 | 39          | 875        |
| D         | X0900      | 274536 | 6820688 | 21839       | 58         |
| E         | X0886      | 277251 | 6819655 | 15          | 26         |
| F         | X0885      | 278371 | 6819651 | 66          | 368        |
| G         | X1401      | 280064 | 6821678 | 112         | 65         |
| G         | X1402      | 280060 | 6821681 | 346         | 249        |
| G         | X1403      | 280056 | 6821682 | 12          | 244        |
| G         | X1404      | 280050 | 6821724 | 137         | 66         |
| G         | X1405      | 280071 | 6821715 | 20          | 74         |
| G         | X1406      | 280842 | 6821723 | 178         | 114        |
| G         | X1407      | 280032 | 6821714 | 48          | 88         |
| G         | X1408      | 280025 | 6821696 | 12          | 85         |
| G         | X1409      | 280014 | 6821709 | 12          | 25         |
| G         | X1410      | 280013 | 6821737 | 54          | 101        |
| G         | X1411      | 280011 | 6821809 | 20          | 81         |
| G         | X1412      | 280004 | 6821823 | 24          | 89         |
| G         | X1413      | 279988 | 6821829 | 53          | 5          |
| G         | X1414      | 279988 | 6821854 | 15          | 197        |
| G         | X1415      | 279980 | 6821868 | 37          | 285        |
| G         | X1416      | 279967 | 6821879 | 38          | 189        |
| G         | X1417      | 279925 | 6821938 | 15          | 109        |
| G         | X1418      | 279891 | 6821993 | 26          | 179        |
| G         | X1419      | 279852 | 6821997 | 87          | 120        |
| G         | X1433      | 279886 | 6821996 | 16          | 8          |
| G         | X1434      | 279882 | 6821995 | 369         | 10         |
| G         | X1435      | 279968 | 6821877 | 294         | 55         |
| G         | X1436      | 280083 | 6821696 | 2498        | 5          |
| H         | X0877      | 277996 | 6823613 | <6          | 17         |
| H         | X0878      | 277851 | 6823580 | 8           | <10        |

## APPENDIX 2

The following tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results and Mineral Resources.

## JORC TABLE 1 SECTION 1 SAMPLING TECHNIQUES AND DATA

| Criteria                     | JORC Code Explanation   | Commentary   |
|------------------------------|---|--|
| <b>Sampling techniques</b>   | <p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p> | <p>Sampling was undertaken using industry standard practices and consist of grab samples taken over seven pegmatites in July 2023.</p> <p>The average sample weight is 7.5 kg.</p> <p>All sample locations are mapped in WGS84 UTM zone 34S.</p> |
| <b>Drilling techniques</b>   | <p><i>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.).</i></p>   | No drilling was undertaken   |
| <b>Drill sample recovery</b> | <p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether</i></p>   | No drilling was undertaken   |

|  |  |   |
|--|--|---|
|  | <p><i>sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>   |   |
| <b>Logging</b>                                       | <p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>  |   |
| <b>Subsampling techniques and sample preparation</b> | <p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p> | <p>The samples were dry.</p> <p>At the laboratory the samples were crushed to 2 mm. A 200 g subsample of the crushed material was taken to be milled in a carbon milling pot to 90% &lt;75 micron.</p>  |
| <b>Quality of assay data and laboratory tests</b>    | <p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>   | <p>The samples were analysed at Scientific Services (Pty) Ltd, a laboratory based in Cape Town, South Africa.</p> <p>At the laboratory, the samples were crushed to 2 mm. A 200 g subsample of the crushed material was taken to be milled in a carbon milling pot to 90% &lt;75 micron.</p> <p>0.25 g of the milled material was prepared and analysed through inductively coupled plasma-optical emission spectroscopy (ICP-OES) analysis for tantalum, niobium, and lithium.</p> |

|  |  |  |
|--|--|--|
|  |  | The samples are measured against standards.  |
| <b>Verification of sampling and assaying</b> | <p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p> | <p>All samples and data were verified by the ORP exploration geologist.</p> <p>The database was structured in a format suitable for importing into ArcGIS and 3D modelling software.</p> <p>Snowden reviewed all available sample and assay reports and is of the opinion that the electronic database supports the field data in almost all aspects and suggests that the database can be used for resource estimation.</p> <p>All sample material was bagged and tagged on site as per the specific pegmatite it was located on. The sample intersections were logged in the field and were weighed at the sampling site.</p> <p>All hard copy data-capturing was completed at the sampling locality.</p> <p>All sample material was stored at a secure storage site at the company site office.</p> <p>The original assay data has not been adjusted.</p> |
| <b>Location of data points</b>               | <p><i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>  | The sample locations are global positioning system (GPS) captured using WGS84 UTM zone 34S.  |
| <b>Data spacing and distribution</b>         | <p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p>  | For the grab samples, each sampling point was carefully selected according to the physical quality of a sample point, normally on a 50 m interval, depending on the sample density required.   |

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|  | <i>Whether sample compositing has been applied.</i>   |   |
| <b>Orientation of data in relation to geological structure</b> | <p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p> | <p>The grab samples were also taken vertically from top to bottom of the pegmatites.</p> <p>Grab sampling conducted on pegmatite faces approximate right-angle intersections relative to the dip of the pegmatite at that specific location and thereof are unbiased by excessively oblique intersections.</p> <p>The tantalite is very fine and mostly not visible; therefore, no bias could take place when selecting the sample position.</p>                                |
| <b>Sample security</b>   | <i>The measures taken to ensure sample security.</i>  | <p>ORP maintained strict chain-of-custody procedures during all segments of sample handling, transport and samples prepared for transport to the laboratory are bagged and labelled in a manner which prevents tampering. Samples also remain in ORP’s control until they are delivered and released to the laboratory.</p> <p>An export permit was obtained from the Namibian Mining Department to transport the samples across the border.</p>                                |
| <b>Audits or reviews</b>                                       | <i>The results of any audits or reviews of sampling techniques and data.</i>  | <p>The deposit was visited by the Creo Competent Person during 2019 and Snowden during 2020. The visit was specifically to review the recent sampling campaign, and to review the sampling and assay procedures being used by the Company.</p> <p>Creo and Snowden considers that given the general sampling programme, geological investigations, check assaying and, in certain instances, independent audits, the procedures reflect an appropriate level of confidence.</p> |

**TABLE 1 SECTION 2: REPORTING OF EXPLORATION RESULTS**

| <b>Criteria</b>             | <b>JORC Code Explanation</b>   | <b>Commentary</b>   |
|-----------------------------|--|---|
| <b>Mineral tenement and</b> | <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such</i> | EPL 5047 and EPL7295 is located in the Karas region, southern Namibia, near the |



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| <b>land tenure status</b>                | <p><i>as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <p><i>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.</i></p> | <p>South African border, and approximately 15 km to the north of the Orange River.</p> <p>The EPL's is held by ORP and is (EPL 5047) 11 065 hectares (EPL7295) 21 734 hectares in size.</p> <p>ORP also obtained an Environmental Clearance Certificate on EPL 7295 ON 23 August 2022 and EPL 5047 10 May 2023 from the Ministry of Environmental and Tourism.</p> <p>A land-use agreement, including access to the property for exploration has been signed with the owners of the farms Norechab 130, Kinderzit 132 and Umeis 110 and Kum Kum</p>   |
| <b>Exploration done by other parties</b> | <p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>   | <p>Swanson Enterprises held various claims on the farms Kinderzit and Umeis on EPL 5047 and mined tantalite, beryl, spodumene and tungsten on these claims in the 1970s to early 1990s.</p> <p>A Canadian company, Placer, also conducted detailed exploration in this area between 1980 and 1982.</p> <p>The Geological Survey of Namibia in collaboration with the Council of Geoscience of South Africa conducted a detailed mapping programme (1: 50,000 scale) over large parts of Southern Namibia including EPL 5047 (2012 to 2017).</p> <p>Orp conducted exploration on EPL 5047 on the Swanson pegmatite swarm that resulted in a JORC compliant resource and positive feasibility study on 15 pegmatites.</p> |
| <b>Geology</b>                           | <p><i>Deposit type, geological setting and style of mineralisation.</i></p>   | <p>Mineralisation is in the form of pegmatites of the lithium-caesium-tantalum (LCT) type which intruded granitic gneisses, metasediments and gabbroic-troctolitic rocks of the Tantalite Valley Complex.</p> <p>The primary mineral commodities occurring are tantalum (<math>Ta_2O_5</math>) and spodumene <math>LiAl(SiO_3)_2</math>.</p>  |
| <b>Drillhole information</b>             | <p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i></p>  | <p>Grab sampling results has been listed in Appendix 1.</p> <p>All relevant data is included in the report.</p>   |

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|   | <ul style="list-style-type: none"> <li>• easting and northing of the drillhole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>• dip and azimuth of the hole</li> <li>• downhole length and interception depth</li> <li>• hole length.</li> </ul> <p>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.</p> |   |
| <b>Data aggregation methods</b>   | <p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>    | Information about data aggregation is not stated in the available documents.      |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</p>  | Grab samples were taken and this is not representative of the total pegmatite.    |
| <b>Diagrams</b>   | <p>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.</p>   | The appropriate diagrams and tabulations have been captured in a ARC GIS database |
| <b>Balanced reporting</b>   | <p>Where comprehensive reporting of all Exploration Results is not practicable,</p>   | This report has been prepared to present the obvious targets and results of       |

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|   | <i>representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>  | historical and recent exploration activities  |
| <b>Other substantive exploration data</b> | <i>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.</i> | <p>ORP conducted reconnaissance and later detailed geological mapping to identify and prioritise targets.</p> <p>ORP appointed Asset Mapping Solutions (Pty) Ltd, a Cape Town based company, to conduct a detail drone survey of the Swanson prospect area in 2018.</p> <p>African Geomatics, a Windhoek based survey company conducted a more detail drone survey of the Swanson area in 2022.</p> |
| <b>Further work</b>                       | <p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>                         | All pegmatites would be mapped and sampled. The pegmatites with the best volume and grade potential would then be channel samples to obtain amore representative grade of the pegmatite and this would be followed by a drilling program to prove a resource for each of the mineralised pegmatites.  |