

# FURTHER DRILLING INDICATES POTENTIAL TO GROW BITTERWASSER LITHIUM RESOURCE

# HIGHLIGHTS

- Drilling commenced over additional exposed clay pans at Bitterwasser, with the first hole at the Madube Pan (one of fourteen pans) **intersecting similar lithology** to the drilled Eden Lithium Pan
- Current JORC Mineral Resource defined over the Eden Lithium Pan of 286,909t Li2CO3 (LCE)<sup>1</sup>
- First auger hole at Madube Pan intersected lithological units similar to Eden Lithium Pan
- Initial observations confirm that **green clay units** (which contained high lithium grades at Eden Lithium Pan) were intersected at Madube
- From the first auger hole at the Madube Pan green clay units were observed to be 44% thicker than the widest intercept of similar lithology at the Eden Lithium Pan
- Drilling to continue over the Madube Pan, as well as other pans until the end of November

**Arcadia Minerals Ltd (ASX:AM7, FRA:80H) (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 commencement of further drilling at its Bitterwasser Lithium-in-Clay Project and to report that similar lithology to that of the Eden Pan, where a Lithium JORC resource has previously been defined<sup>2</sup>, has been intersected in the first drill hole at the Madube Pan.

**Philip le Roux, the CEO of Arcadia stated:** *"It is very encouraging that, from observations of the core of our first auger hole at the Madube Pan, the lithology and* 

<sup>&</sup>lt;sup>1</sup> Refer to Asx Announcement 24 August 2022 "Over 500% Increase in Lithium Resource with 287Kt of LCE Declared at Bitterwasser"

<sup>&</sup>lt;sup>2</sup> Refer to Asx Announcement 03 November 2021 "Arcadia Acquires Adjacent Lithium Project with JORC Mineral Resources"

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thicknesses are comparable to those intersected at the Lithium enriched Eden Pan, where Arcadia has recently increased the Lithium-in-Clay resource over the Bitterwasser Pans district. Should analyses confirm Lithium mineralisation to a similar tenor than what we saw at the Eden Lithium Pan, we'd expect to see an increase of the current JORC resource over the Bitterwasser Lithium-in-Clay Project. Drilling at the Madube Pan will be followed up by further drilling at other known exposed, progress of which will be communicated regularly."

# Similar Lithology Intersected at Madube Pan to that of Eden Pan

The Company has continued its exploration activities on the clay deposits at the Bitterwasser Lithium Clay Project. Previously, drilling only took place over the Eden pan, which resulted in a JORC<sup>1</sup> Mineral Resource being defined of **286,909-ton Lithium Carbonate** wholly classified in the Inferred Category.

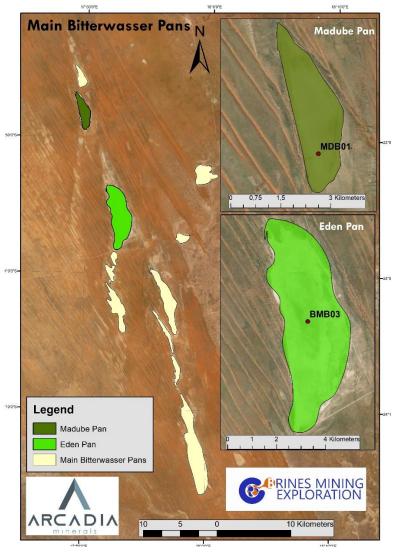
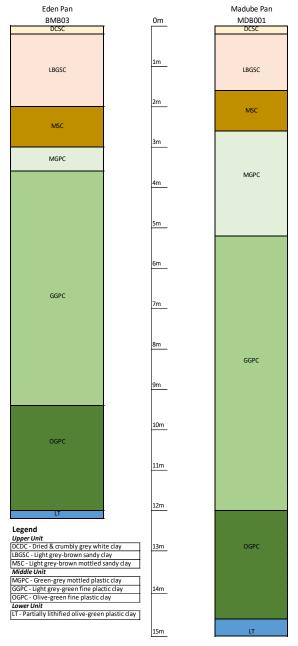


Figure 1: Map showing the location of the Eden and Madube pan and the drill hole locations



The Eden pan, which is 1,831 Hectares in size, is one of 14 exposed clay pans located within the Bitterwasser Lithium in Clay Project area and to date the only pan that has been entirely drilled by the Company.

Auger drilling has now commenced on the Madube Pan (517 hectares in size), with a total of 15 holes planned as part of an exploratory third phase drilling program. If positive lithium mineralisation is intersected elsewhere on the Madube Pan, an extended drilling program would be implemented.



**Figure 2:** A comparison between drillholes MDB01 (Madube Pan) and drillhole BMB003 (Eden Lithium Pan), both of which were drilled at the centre of the respective pans



Based on the fact that the widest intercepts and highest lithium grades were intersected in the centre of the Eden pan, drillhole MDB01 was drilled in the middle of the Madube Pan. This hole intersected all the lithological "green clay" units observed during the Eden drilling campaign and which contained the highest Lithium grades. The width of the green clay unit intersected in borehole MDB01 is 13m wide compared to the maximum width of 9m intersected at the Eden Lithium Pan. A comparison between the widths of intercepted lithology at the two pans is shown in figure 2 above.

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

For further information please contact: Jurie Wessels Executive Chairman Arcadia Minerals Limited info@arcadiaminerals.global



## **COMPETENT PERSONS STATEMENT & PREVIOUSLY REPORTED INFORMATION**

The information in this announcement that relates to Exploration Results and Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by the Competent Person(s) whose name(s) appears below, each of whom is either an independent consultant to the Company and a member of a Recognised Professional Organisation or a director of the Company. The Competent Person(s) named below have 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.

Mr Philip le Roux has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Persons as defined in the 2012 Edition of the JORC Code. Mr Le Roux is the competent person for has relied on information and data generated by the Company, including but not limited to a geological model, drill core, a database and expertise gained from site visits. Mr Le Roux consents to the inclusion in this announcement of matters based on his information in the form and context in which it appears.

Competent Person	Membership	Report/Document
Mr Philip le Roux	South African Council for Natural	This announcement and JORC Tables
(Director Arcadia	Scientific Professions #400125/09	
Minerals)		

The Company confirms that the form and context in which a Competent Person's previous findings are presented in the footnotes above and noted in the table below have not been materially modified from the original market announcements.

Release Date	ASX Announcements
24 August 2022	Over 500% increase in Lithium Resource with 287Kt of LCE declared at Bitterwasser

### MINERAL RESOURCE ESTIMATES

The Company confirms that it is not aware of any new information or data that materially affects the information included in the Bitterwasser 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 24 August 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.



The information in this announcement that relates to Mineral Resources complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

CATEGORY	UNIT	TONNAGE	GRADE Li ppm	CONTAINED Li ton	
Cut-off Grade of 0 p	Cut-off Grade of 0 ppm Li				
	Upper	-	-	-	
Indicated	Middle	-	-	-	
	Total Indicated	-	-	-	
	Upper	61 518 571	464.60	28 582	
Inferred	Middle	92 382 945	568.85	52 552	
	Total Inferred	153 901 516	527.18	81 134	
Cut-off Grade of 50	0 ppm Li		-		
	Upper	-	-	-	
Indicated	Middle	-	-	-	
	Total Indicated	-	-	-	
	Upper	28 192 877	556.86	15 699	
Inferred	Middle	56 955 751	670.72	38 201	
	Total Inferred	85 148 628	633.03	53 900	
Cut-off Grade of 60	0 ppm Li				
	Upper	-	-	-	
Indicated	Middle	-	-	-	
	Total Indicated	-	-	-	
	Upper	2 878 041	634.69	3 659	
Inferred	Middle	21 292 230	729.82	28 282	
	Total Inferred	44 516 575	717.50	31 941	

## Summary of estimated JORC compliant Mineral Resources for the Bitterwasser Project



#### **BACKGROUND ON ARCADIA**

Arcadia is a Namibia-focused diversified metals exploration company, which is domiciled in Guernsey. The Company explores for a suite of Gold and new-era metals (Lithium, Tantalum, Palladium, 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. Karibib Project prospective for copper and gold.
- 5. The Swanson Project advanced tantalum project undergoing a feasibility study, and which contains a potentially expanding JORC Mineral Resource within the Swanson Project area and neighbouring tenements held by the Company.

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

For more details, please visit <u>www.arcadiaminerals.global</u>

#### 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 forwardlooking 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 forwardlooking 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.



### **ANNEXURE 1**

# **Drillhole Locations and Intersections**

List of all auger holes refer to in this announcement.

AUGER ID	WGS84_ UTM33S_ X	WGS84_ UTM33S_ Y	ESTIMATED ELEVATION (MAMSL)	AZIMUTH (°)	INCLINATION (°)	DATE FROM	DATE TO	EOH (M.B.G.L.)
BMB03	793000	7350502	1226	N/A	-90	2019/10/11	2019/10/12	12.20
MDB01	788378	7363447	1233	N/A	-90	2022/10/04	2022/10/6	15



# ANNEXURE 2

# JORC 2012 Tables

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results and Mineral Resources at the Bitterwasser Lithium-in-Clays Project.

### Section 1 Sampling Techniques and Data

Criteria J	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling probles. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Sampling was undertaken using industry standard practices and consist of hand-auger drilling by Bitterwasser Lithium Exploration (Pty) Ltd. conducted during 3 phases.</li> <li>Phase I during 2019 and Phase II from 2021 to Jan 2022 and Phase III, which commenced in October 2022.</li> <li>All drill holes are vertical</li> <li>During Phase I, a total of 89 samples were taken from the core of the drilling campaign, of these 74 where for chemical/metallurgical analysis and 15 for QAQC purposes.</li> <li>Samples ranged from 1012 g to 42 g.</li> <li>An additional 15 density samples were taken from the core of the drilling campaign, of these 352 where for chemical analysis and 45 for QAQC purposes.</li> <li>Phase III sampling is yet to be completed.</li> <li>An additional 138 density samples were collected from phase II</li> <li>To minimize sample contamination, the collected sediment samples</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>were placed on a canvas cloth, while the clay-bit was cleaned with a wet cloth and water after every sample.</li> <li>All drill hole and sample locations are mapped in WGS84 UTM zone 335</li> <li>During 2010 sampling was undertaken using industry standard practices and consisted of surface sampling by Botha &amp; Hattingh (2017).</li> <li>24 soil samples were taken from pits of 1.5 m depth. Two (2), 500 ml groundwater samples were taken from taps attached to the wind pumps.</li> <li>Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used are not known, because this information is not recorded in available documents.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>During Phase I, sixteen (16) vertical hand-auger drillholes were drilled perpendicular to the long axis of the Eden Pan.</li> <li>The holes were drilled on a 500 m x 500 m grid and have a total core length of 93.10 m.</li> <li>A 250 mm long auger clay-bit with a 90 mm outer diameter was used.</li> <li>The depth of the holes ranged from 0.8 m to 12.20 m.</li> <li>During Phase II, a total of 64 vertical hand-auger drillholes were drilled, which comprise of 52 normal drillholes and 12 drillholes for geostatistical reasons over the Eden pan.</li> <li>The normal holes were drilled on a 500 m x 500 m grid and have a total core length of 273.20 m. The geostatistical holes surround</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>drillhole BMB03 (Phase I), with each drill line comprising of 3 holes spaced at 62.5 x 62.5 x 125 m from BMB03. The total drilling depth is 139.40 m</li> <li>The results of Phase III in this announcement relates to a single drill hole in the centre of the Madube Pan, whereas Phase I and Phase II refers to drillholes that was drilled on the Eden Pan.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Core recovery of the single hole at Madupe Pan was almost 100% due to the cohesive nature of the clay.</li> <li>Core loss was recorded as part of the operational procedures where the core loss was calculated from the difference between actual length of core recovered and penetration depth measured as the total length of the drill string after subtracting the stick-up length.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples is not recorded in available documents.</li> <li>No apparent bias was noted between sample recovery and grade.</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 drill holes were fully logged and are qualitative.</li> <li>The core has been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Phase I: The total length of the mineralized clay logged is 85.80 m and the percentage is 92%.</li> <li>Phase II: The total length of the mineralized clay logged for the normal holes is 258.80 m and the percentage is 95%. For the geostatistical holes total length of the mineralized clay logged is 136.80 m and the percentage is 98%.</li> </ul>



Criteria	JORC Code explanation	Commentary
Criteria Sub-sampling techniques and sample preparation	<ul> <li>JORC Code explanation</li> <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 in-situ 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>Commentary</li> <li>Phase III: Total of 15 m has been logged from one drillhole</li> <li>The soil samples of Botha &amp; Hattingh, (2017) have been logged according to industry standards.</li> <li>Phase I: Each of the 74 samples was split into two. One split was for chemical analysis and the other split for initial sequential leach (metallurgical) test work.</li> <li>The Upper Unit was composite sampled at an interval of 0.90 m and 478 g/composite sample (45 % of total sample material collected), while the Middle Unit was sampled at an average interval of 1.45 m and 643 g/composite sample.</li> <li>Phase II: Each 20 cm (sample tube length) sample were split into smaller sub-samples (A-samples and B-samples). A-samples were shipped to the lab for analysis, while the B-samples were stored and used for duplicates and bulk sampling.</li> <li>Phase III: Sampling is yet to take place.</li> <li>A composite sample were collected according to lithology units. Samples didn't cross over lithological boundaries. A representative sample were taken of each 20 cm run, taking in account the sample weight and size. i.e., one composite sample contain a weighted sample of each run.</li> <li>No information is available on sub-sampling techniques and sample</li> </ul>
		<ul> <li>No information is available on sub-sampling techniques and sample preparation of Botha &amp; Hattingh (2017), because such procedures are not documented in available documents. It is assumed that sampling was undertaken using industry standard practices.</li> </ul>
Quality of assay data	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered	Phase I: The samples were analysed at SGS laboratory in Randfontein, South Africa.



Criteria	JORC Code explanation	Commentary
and laboratory tests	<ul> <li>partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Sodium peroxide fusion ICP-OES with an ICP-MS finish for analysis of Li (ppm), K (%), AI (%), Cr (%), Si (%), Ti (%), As (ppm), Cd (ppm), Fe (%), Mg (%), Mn (%), P (%), Co (%) and Y (%) was done.</li> <li>Sequential leach (metallurgical) test work (Acid leach).</li> <li>The QAQC samples consisted of African Minerals Standards (Pty) Ltd's (AMIS) certified reference materials AMIS0339 (standard), AMIS0341 (standard), AMIS0342 (standard), AMIS0355 (standard) and AMIS0439 (blank) and were inserted on average every 6 – 7 m within the sampling stream.</li> <li>Phase II: The samples were analysed at ALS Laboratories in Okahandja Namibia.</li> <li>Sodium peroxide fusion with ICP-MS finish major element analysis were conducted.</li> <li>For every 34 samples analysed, 2 Blanks, 2 CRMs and 2 duplicates were added. QC testing of the crushing (CRU-QC) and pulverizing (PUL-QC) efficiency is conducted on random samples.</li> <li>The QA/QC samples inserted by BLE consisted of African Minerals Standards (Pty) Ltd.'s (AMIS) certified reference materials AMIS0577 (blank), AMIS0683 (standard), AMIS0578 (blank) and AMIS0684 (standard).</li> <li>The Botha &amp; Hattingh (2017) samples were submitted to the University of Stellenbosch Central Analytical Facility in Stellenbosch South Africa for analysis, between 20 April and 13 July 2010</li> <li>The samples were analysed of lithium, boron and the cations Ca, Mg, K and Na.</li> <li>Lithium and boron analysis was conducted using ICP analysis, while</li> </ul>



Criteria	JORC Code explanation	Commentary
Verification	The verification of significant intersections by either independent or	<ul> <li>the cations were analysed using AAS.</li> <li>Only samples which yielded Li values above 300 ppm were included in the cation analysis.</li> <li>Sample preparation for Li, B and cation analysis was by acid digestion.</li> <li>Phase III: Sample is yet to be sent to the laboratory for analyses</li> <li>It is assumed that industry best practices were used by the laboratories to ensure sample representivity and acceptable Bitterwasser Lithium assay data accuracy, however the specific QAQC procedures used are not recorded in available documents</li> <li>All samples and data were verified by the project geologist.</li> </ul>
of sampling and assaying	<ul> <li>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>Creo 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.</li> <li>All sample material was bagged and tagged on site as per the specific drill hole it was located in. The sample intersections were logged in the field and were weighed at the sampling site.</li> <li>All hard copy data-capturing was completed at the sampling locality.</li> <li>All sample material was stored at a secure storage site.</li> <li>The original assay data has not been adjusted.</li> <li>Recording of field observations and that of samples collected was done in field notes and transferred to and electronic data base following the Standard Operational Procedures.</li> <li>No twin holes were drilled.</li> </ul>



Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The locations of all the samples were recorded.</li> <li>The sample locations are GPS captured using WGS84 UTM zone 33S.</li> <li>The quality and accuracy of the GPS and its measurements is not known, because it is not stated in available documents.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul> <li>Phase I The drill holes are spaced on a 500 m x 500 m grid.</li> <li>The Upper Unit was composite sampled at an interval of 0.90 m and 478 g/composite sample (45 % of total sample material collected), while the Middle Unit was sampled at an average interval of 1.45 m and 643 g/composite sample</li> </ul>
	• Whether sample compositing has been applied.	• Phase II: The normal holes were drilled on a 500 m x 500 m grid and the geostatistical holes surround drillhole BMB03 (Phase I), with each drill line comprising of 3 holes spaced at 62.5 x 62.5 x 125 m from BMB03.
		<ul> <li>Phase III: is currently a single hole drilled in the middle of the Madube Pan.</li> </ul>
		<ul> <li>The samples collected are a composite sample that represents each 20 cm run (sample tube length) as best as possible and do not extend over lithological boundaries. The composite sample contain between 33-50% of each 20 cm sample depending on the size. Composite samples contain as close to equal amount as possible from top to bottom of each lithological unit sampled</li> </ul>
		<ul> <li>The data spacing and distribution of the drill holes and samples is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied</li> </ul>



Criteria	JORC Code explanation	Commentary
		• For the Botha & Hattingh (2017) samples, the PO2 pits were spaced at 900 m and the PO3 pits were spaced at 2500 m.
Orientation of data in relation to geological 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>During Phase I, II and III the holes were all drilled vertical and perpendicular to the sediment horizons and all the sediment horizons were sampled equally and representative.</li> <li>The lithium is not visible; therefore, no bias could take place when selecting the sample position.</li> <li>The orientation of the Botha &amp; Hattingh (2017) sample pits is vertical and sampling occurred perpendicular to the soil horizons and all the soil horizons were sampled equally and representative.</li> <li>The orientation of the sampling is unbiased.</li> <li>The relationship between the sampling orientation and the orientation of key mineralized structures is not considered to have introduced a sampling bias.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>Bitterwasser Lithium Exploration (Pty) Ltd. 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 Bitterwasser Lithium Exploration (Pty) Ltd control until they are delivered and released to the laboratory.</li> <li>An export permit was obtained from the Namibian Mining Department to transport the samples across the border.</li> <li>Measures taken by Botha &amp; Hattingh, (2017) to ensure sample security have not been recorded in available documents.</li> </ul>



Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>Audits and reviews were limited to the Standard Operational Procedures in as far as data capturing was concerned during the sampling.</li> <li>Creo considers that given the general sampling programme, geological investigations and check assaying, the procedures reflect an appropriate level of confidence.</li> </ul>

# Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Bitterwasser Project area is east of Kalkrand in south central Namibia, some 190 km south of Windhoek in the Hardap Region.</li> <li>The Bitterwasser Lithium Project comprise of three exclusive exploration licences, EPLs 5353, 5354 and 5358, all held by Bitterwasser Lithium Exploration (Pty) Ltd.</li> <li>The project covers a total area of 59 323.09 hectares.</li> <li>Environmental Clearance Certificates was obtained by Bitterwasser Lithium for all three EPLs.</li> <li>A land-use agreement, including access to the property for exploration has been obtained through the Ministry of Agriculture, Water and Forestry of Namibia.</li> </ul>



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>A regional reconnaissance investigation in the form of a systematic field survey covering the entire southern Namibia and some parts of the Northern Cape Province of South Africa was done during 2009 and 2010. The reconnaissance investigation was aimed at establishing the prospectiveness of the area that could potentially sustain economic exploitation of soda ash and lithium (Botha &amp; Hattingh, 2017).</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Eden and Madube Pans form part of the Cenozoic aged Kalahari Group and comprises a lithium, potassium and boron enriched sulphate-, chlorite- and carbonate- saltpan.</li> <li>The presence of an active deep-seated connate/hydrothermal water circulation network is suggested, which acts as a transport mechanism for lithium bearing brines into the overlying Gordonia Formation pan sediments.</li> <li>High evaporation rates (&gt;3200 mm/year) occurring in the area are favourable for brine formation and salt-concentration.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from</li> </ul>	<ul> <li>Drill results have been described in section 7.3 of this report.</li> <li>All relevant data is included in the report.</li> </ul>



Criteria	JORC Code explanation	Commentary
	the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>A lower cut-off grade of 500 ppm Li was used. The estimated volumes and grades are based on this cut-off grade.</li> </ul>
Relationship between mineralisation widths and intercept	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there</li> </ul>	<ul> <li>The drill holes were all drilled vertical, with the clay units being horizontal.</li> <li>The mineralized clay thickness intercepted range from 0.40 m to 10.20 m.</li> </ul>
lengths Diagrams	<ul> <li>should be a clear statement to this effect (eg 'down hole length, true width not known').</li> <li>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.</li> </ul>	The appropriate diagrams and tabulations are supplied in the reports referred to the announcements referenced in the footnotes.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of	<ul> <li>This report has been prepared to present the prospectivity of the project and results of historical and recent exploration activities.</li> <li>All the available reconnaissance work results have been reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	Exploration Results.	
Other substantive exploration data	<ul> <li>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         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> </li> </ul>	<ul> <li>The Namibian Government conducted a regional magnetic survey in the area.</li> <li>The Namibian Government conducted a radiometric survey of potassium in the area.</li> <li>An electromagnetic (EM) survey was done by the groundwater consultancy Geoss during October 2019.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg 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 next exploration phase should focus on the further exploration of the Eden Pan, while also conducting exploration on some of the other pans in the region.</li> <li>See section 13 for detailed recommended and planned further exploration activities.</li> </ul>