

## POSITIVE LITHIUM DRILL ASSAYS RECEIVED AT THE MADUBE PAN

## HIGHLIGHTS

- Drill assay results received from recently completed drilling campaign at the Madube Pan<sup>1</sup>
- The central portion of the Madube Pan indicates elevated lithium results similar to the Eden Pan, where a JORC Mineral Resource was defined of 286,909t Li<sub>2</sub>CO<sub>3</sub> (LCE)<sup>2</sup>
- As at the Eden Pan, mineralisation at the Madube Pan is elevated in the green clay units, which are also located in the centre of the pan
- Average depth of the mineralised zone at the Madube pan is 7.5m compared to an average depth of 5.5m in the Eden Pan
- Both the Eden and Madube Pans have only been drilled to a depth of up to 18m from surface, so the potential for further mineralised zones at depth exists over both prospects
- An updated Mineral Resource statement for the Bitterwasser Clay Project arising from the Madube pan is expected by Q2 of 2023
- Metallurgical testwork using both sulphuric acid and organic acids nears completion, with results expected in February

**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 assay results for all the holes drilled at Madube pan, indicating similar grades to the Eden Pan, where a Lithium JORC resource has previously been defined<sup>1</sup>.

**Philip le Roux, Chief Executive of Arcadia stated:** *"The assay results at Madube pan confirms the presence of mineralisation over the Bitterwasser Pan district and bodes well for a meaningful expansion of the Mineral Resource resident over the Bitterwasser Lithium Clay Project. Additional work over other pans are now planned to possibly expand the Clay Mineral Resource to the best extent possible."* 

<sup>&</sup>lt;sup>1</sup> Refer to Asx Announcement 22 November 2022 "*Lithium Confirmed at Madube Pan With 44% Thicker Green Clay Unit than Eden Pan*"

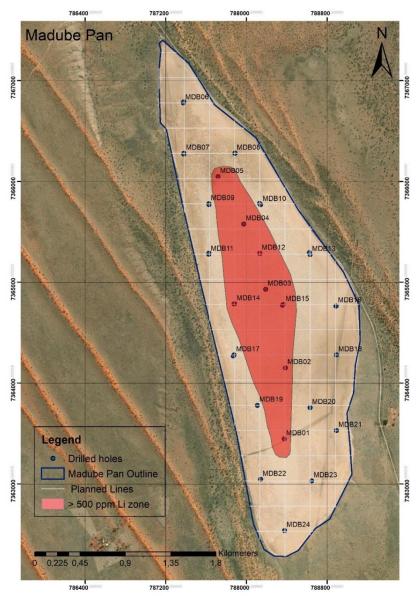
<sup>&</sup>lt;sup>2</sup> Refer to Asx Announcement 24 August 2022 "Over 500% Increase in Lithium Resource with 287Kt of LCE Declared at Bitterwasser"

ARBN 646 114 749



## Assay Results from Drilling Program

Assay results were received from the drilling campaign completed at the Madube Pan during December 2022. Drillhole locations and results are respectively tabled in **Annexures 1 and 2**. A total of twenty-three holes were drilled at the Company's Bitterwasser Lithium Clay Project in the Madube Pan prospect, which is one of 14 exposed pans within the Bitterwasser Basin. Results from the drilling campaign at the Madube Pan confirms that the central portion of the Madube Pan returned elevated lithium levels from green clay lithological units, which is similar to what is encountered at the Eden Pan where a JORC Mineral Resource was defined of 286,909t Li2CO3 using a 500ppm Li cut-off. In applying a cut-off of 500ppm at the Madube Pan, eight of the holes drilled intersected clays of more than 500 ppm Lithium content.



*Figure 1:* Map showing the location of the holes drilled and + 500 ppm Li mineralisation at the Madube pan (the red shaded zone indicates grades >500 Li mineralization).



The Madube Pan is 517 hectares in extent and is the second of 14 exposed pans drilled within the Bitterwasser Clay Project. Drilling operations commenced in October 2022 and was completed in December 2022. Samples were sent to Scientific Services in South Africa in December 2022 for analyses and the results of the final assays were received late in January 2023.

An independent JORC compliant Mineral Resource statement for the Madube pan is expected to be completed by April 2023. The Eden Pan, which is 1,414 hectares in size, has revealed similar lithology and mineralisation as to what is seen at the Madube Pan. The Mineral Resource at Madube Pan is expected to meaningfully expand the lithium in clays tonnage of the Bitterwasser Lithium Clay Project. Please refer to table 1 below to compare the lithology and grades between holes drilled at the Madube pan to the holes drilled at the Eden pan.

Notably, both the Eden and Madube pans have only been drilled to a depth of up to 18m from surface, so the potential for further mineralised zones at depth exists over both prospects. In addition, the Company has been doing testwork at the University of Stellenbosch to extract the lithium from the clays using both sulphuric acid and organic acid. The Company expects to provide the results from this work during February.

Pan	No Holes	Intersected Brown Clay	Intersected Green Clay	% Intersected Green Clay	Average Depth of Green Clay
Madube	23	23	18	78%	7.5 m
Eden	77	77	53	69%	5.5 m

Table 1: Comparison Table Madube vs Eden Pans

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 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
1. 24 August 2022	Over 500% increase in Lithium Resource with 287Kt of LCE declared at Bitterwasser
2. 22 November 2022	Lithium Confirmed at Madube Pan With 44% Thicker Green Clay Unit than Eden Pan

#### BITTERWASSER LITHIUM IN CLAYS PROJECT MINERAL RESOURCE

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).



# SUMMARY OF ESTIMATED JORC COMPLIANT MINERAL RESOURCES FOR THE BITTERWASSER PROJECT

CATEGORY	UNIT	TONNAGE	GRADE	CONTAINED
		ton	Li ppm	Li ton
Cut-off Grade	e 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 Grad	e of 500 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 Grad	e of 600 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

Cut-off Grade of 650 ppm Li					
	Upper	-	-	-	
Indicated	Middle			-	
	Total Indicated	-	-	-	
	Upper	-	-	-	
Inferred	Middle	29 572 282	761.84	22 529	
	Total Inferred	29 572 282	761.84	22 529	



#### 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 www.arcadiaminerals.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 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.



					Brown Clay	Brown Clay	Brown Clay	Green Clay	Green Clay	Green Clay
Hole_ID	WGS84_UTM33S_X	WGS84_UTM33S_Y	End of Hole	Dip	From	То	Width	From	То	Width
MDB01	788375	7363449	12,00	-90	0	2,0	2,0	2,0	15,0	13,0
MDB02	788389	7364151	15,00	-90	0	4,6	4,6	4,6	12,0	7,4
MDB03	788189	7364924	17,80	-90	0	3,4	3,4	3,4	17,8	14,4
MDB04	787975	7365577	16,00	-90	0	4,0	4,0	4,0	16,0	12,0
MDB05	787720	7366039	10,20	-90	0	3,4	3,4	3,4	10,2	6,8
MDB06	787374	7366779	3,00	-90	0	3,0	3,0			
MDB07	787381	7366279	3,40	-90	0	4,8	4,8			
MDB08	787886	7366279	3,00	-90	0	3,0	3,0			
MDB09	787630	7365779	12,40	-90	0	3,8	3,8	3,8	12,4	8,6
MDB10	788141	7365771	13,20	-90	0	4,4	4,4	4,4	12,4	8,0
MDB11	787626	7365276	5,40	-90	0	1,6	1,6	1,6	4,8	3,2
MDB12	788134	7365287	19,00	-90	0	4,0	4,0	4,0	19,0	15,0
MDB13	788634	7365274	7,60	-90	0	1,2	1,2	1,2	7,6	6,4
MBD14	787884	7364785	19,00	-90	0	3,0	3,0	3,0	19,0	16,0
MBD15	788371	7364779	14,00	-90	0	4,6	4,6	4,6	14,0	9,4
MDB16	788889	7364764	1,20	-90	0	1,0	1,0	1,0	1,2	0,2
MDB17	787879	7364279	5,40	-90	0	2,2	2,2	2,2	5,4	3,2
MDB18	788895	7364279	1,40	-90	0	1,4	1,4			
MDB19	788110	7363779	6,00	-90	0	3,8	3,8	3,8	6,0	2,2
MDB21	788894	7363529	1,40	-90	0	1,4	1,4			
MDB22	788386	7363029	2,00	-90	0	3,8	3,8	2,0	3,8	1,8
MDB23	788882	7363036	7,00	-90	0	2,8	2,8	2,8	7,0	4,2
MBD24	788379	7362536	3,20	-90	0	0,8	0,8	0,8	3,2	2,4

## ANNEXURE 1 Table 2 - Drillhole Locations and Lithological Intersection (in meters) at Madube Pan



#### **ANNEXURE 2**

					Width	
Borehole ID	East	North	From	То	(m)	Li (ppm)
MDB01	788375	7363449	3	15	12	589
MDB02	788389	7364151	1,4	7,6	6,2	506
MDB03	788189	7364924	3,4	17,8	14,4	642
MDB04	787975	7365577	2,4	12,6	10,2	592
MDB05	787720	7366039	3,4	10,2	6,8	523
MDB12	788134	7365287	5,4	19	13,6	599
MDB14	787884	7364785	14	19	5	555
MDB15	788371	7364779	4,6	14	9,4	566

## Table 3 - >500 ppm Li Intersections from Holes drilled at Madube Pan

## Table 4 - <500 ppm Li Intersections from Holes drilled at Madube Pan

Borehole ID	East	North	From	То	Width (m)	Li (ppm)
MDB06	787374	7366779	0	3.0	3.0	257
MDB07	787381	7366279	0	4.8	4.8	199
MDB08	787886	7366279	0	3.0	3.0	111
MDB09	787630	7365779	0	12.4	12.4	382
MDB10	788141	7365771	0	14.6	14.6	341
MDB11	787626	7365276	0	5.4	5.4	205
MDB13	788634	7365274	0	7.6	7.6	158
MDB16	788889	7364764	0	1.2	1.2	221
MDB17	787879	7364279	0	5.4	5.4	277
MDB18	788895	7364279	0	1.4	1.4	228
MDB19	788110	7363779	0	16.2	16.2	336
MDB21	788894	7363529	0	1.2	1.2	172
MDB22	788386	7363029	0	3.8	3.8	147
MDB23	788882	7363036	0	7.0	7.0	351
MDB24	788379	7362536	0	3.2	3.2	130



#### ANNEXURE 3 - JORC 2012 Tables

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

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling 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.</li> <li>Drilling at the Madube pan Commenced in October 2022 and the 23 holes program was completed in 5 December 2022.</li> <li>All drill holes are vertical</li> <li>To date a total of 181 samples, including 9 QA QC has been taken from for the 23 boreholes.</li> <li>To minimize sample contamination, the collected sediment samples 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 33S</li> </ul>
Drilling techniques	• 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).	<ul> <li>Total of twenty-three (23) vertical hand-auger drillholes were drilled perpendicular to the long axis of the Madube Pan.</li> <li>The 23-hole program over Madube Pan was drilled on a 500 m x 500 m grid.</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<ul> <li>Total meters drilled for the drilling program was 210,4m</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 3 m to 19 m.</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 holes drilled 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>ALL 24 drillholes drilled been logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to</li> </ul>	<ul> <li>Each 20 cm (sample tube length) sample were split into smaller sub- samples (A-samples and B-samples).</li> <li>The 20cm sample was 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> </ul>

MDB20 was not drilled for this programme.



Criteria	JORC Code explanation	Commentary
	<ul> <li>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>Within the same lithological unit the sample length was taken around 1m.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The samples for MDB01 were analysed at Scientific Services in Cape Town.</li> <li>Sodium peroxide fusion ICP-OES with an ICP-MS finish for analysis of Li (ppm), K (%) 7and Mg (%).</li> <li>The QAQC samples consisted of African Minerals Standards (Pty) Ltd's (AMIS) certified reference materials AMIS0339 (standard),) and AMIS0439 (blank) were added. QC testing of the crushing (CRU-QC) and pulverizing (PUL-QC) efficiency is conducted on random samples.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All samples and data were verified by the project geologist.</li> <li>Philip le Roux 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</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> </ul>	<ul> <li>done in field notes and transferred to and electronic data base following the Standard Operational Procedures.</li> <li>No twin holes were drilled.</li> <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.</li> </ul>
Data spacing and distribution	<ul> <li>Quality and adequacy of topographic control.</li> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The drill holes over Madube pan were spaced on a 500 m x 500 m grid.</li> <li>The Upper Unit was composite sampled at an interval of approximately 2 -3m Middle Unit (Green Clay) was sampled at an average interval of 1 m</li> <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> <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>
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</li> </ul>	<ul> <li>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> </ul>

MDB20 was not drilled for this programme.



Criteria	JORC Code explanation	Commentary
	introduced a sampling bias, this should be assessed and reported if material.	• The relationship between the sampling orientation and the orientation of key mineralized structures is not considered to have introduced a sampling bias.
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> </ul>
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>Philip le Roux 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</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> </ul>



Criteria	JORC Code explanation	Commentary
	any known impediments to obtaining a licence to operate in the area.	<ul> <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 and the Owner of the Madube Pan.</li> </ul>
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> </ul> </li> </ul>	<ul> <li>Drill results have been described in section Annexure 1 of this report.</li> <li>Borehole elevation still need to be accurately surveyed</li> <li>All relevant data is included in the report.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
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 lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>The drill holes were all drilled vertical, with the clay units being horizontal.</li> <li>The mineralized clay thickness intercepted range from 3 m to 19 m.</li> </ul>
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• The appropriate diagrams and tabulations are supplied in the reports referred to the announcements referenced in the footnotes.



Criteria	JORC Code explanation	Commentary
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<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 previously</li> </ul>
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>Based on these drilling results at Madube pan a resource for the Madube pan would be estimated.</li> <li>The resource for Madube pan is expected to be completed in Q2 2023.</li> </ul>