

ARCADIA ACQUIRES ADJACENT LITHIUM PROJECT WITH JORC MINERAL RESOURCES

Arcadia Minerals Ltd (ASX:AM7) (**Arcadia**), the diversified exploration company targeting a suite of projects aimed at Lithium, Tantalum, Nickel, Copper and Gold in Namibia, is pleased to announce that its 50%-owned associate, Brines Mining and Exploration Namibia (Pty) Ltd (**BME**), has conditionally agreed to acquire 100% of three licenses containing an inferred JORC Mineral Resource.

HIGHLIGHTS

- JORC Mineral Resource is defined over only one of seven mineralised clay pans containing Li, K, and B
- Mineral Resource area represents only 6% of the newly acquired exposed clay pans
- Auger Drilling to possibly expand resource planned to commence in November 2021
- Licenses to be acquired contain an inferred JORC Mineral Resource of 15.1 million tons @ 828ppm Li and 1,79% K (at a cut-off of 680ppm Li)
- Li grades in the Mineral Resource compare favourably with similar clay deposits in Clayton Valley, Nevada, USA
- Licenses hold the potential to host lithium-in-brine aquifers
- Bench scale metallurgical test work regarding the potential recoveries of Li from the Clay Units has been successfully completed
- Terms of the acquisition include:
 - the right to acquire 25% for a consideration of Nam\$1M (~A\$87,000) by ~May2022
 - the right to acquire 100% for a consideration of Nam\$2M (~A\$176,000)
 within 2 years following the initial acquisition, and
 - additional consideration of N\$7M (~A\$615,000) at completion of a DFS over a resource containing >500,000 tons of LCE arising from lithium-inbrines
- The three licenses abut Arcadia's ~3,438km² Bitterwasser Lithium Project

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- Potential exists to increase resource over exposed clay pans, and potential also exists to discover sub-surface clay pans in the existing 3,438Km² Bitterwasser Lithium Project area
- Proof-of-Concept study for Lithium Brine and sub-surface clay potential at Bitterwasser underway to guide exploration over a geological feature known as the "Kalkrand Half-Graben", which displays first order requirements to possibly qualify as the world's latest district scale Lithium province
- If the acquisition is approved, Arcadia's land holding will enlarge to 4,031Km²

Arcadia Minerals Ltd (ASX:AM7) (**Arcadia** or the **Company**) is pleased to announce that BME, has taken cession (**Deed of Cession**), subject to approval by shareholders of the Company (as is required by Asx), of an acquisition agreement (**Acquisition Agreement**) to acquire up to 100% of the Exclusive Prospecting Licenses 5358, 5354 and 5353 (**Licenses**) in Namibia.

The Licenses contain an **inferred JORC Mineral Resource of 15.1 million tons** @ 828ppm Li and 1,79% K (at a cut-off grade of 680ppm Li) and holds the potential to host a lithium-inbrines aquifer.

Acquisition Agreement

LexRox Management Services (Pty) Ltd (**LexRox**), a South African company owned and operated by the executive directors of Arcadia, entered into the Acquisition Agreement to acquire the Licenses on 1 February 2019. No consideration in relation to the cession and assignment is to be paid by BME or Arcadia to LexRox except to reimburse expenses amounting to \$18,000 associated with the preservation of the EPL's and to keep the Acquisition Agreement in good standing.

In pursuance of the Acquisition Agreement, the Licenses, all of which are located near the towns of Kalkrand and Hoachanas in the Hardap Region of central Namibia, were transferred with approval from the Ministry of Mines and Energy of Namibia from the License-holder to Bitterwasser Lithium Exploration (Pty) Ltd (**BLE**), a company that was formed for the purpose of developing the exploration potential of the Licenses.

Further details of the EPL's can be found in Annexure 4 below. In terms of the Acquisition Agreement, BLE is currently 100% owned by the original owner of the Licenses, Mr Leon van Neel, until completion of the acquisitions pursuant to the Acquisition Agreement.

In terms of the Deed of Cession entered into between LexRox and BME, all rights, title and interest incumbent upon LexRox in terms of the Acquisition Agreement were ceded, assigned, transferred, and made over by LexRox to BME. Following completion of the Deed of Cession, LexRox will no longer hold proprietary rights to the EPL's, or in the share capital of BLE or hold



any personal rights in relation to the Acquisition Agreement. To complete the Deed of Cession, BME has acceded in writing to the terms of the Acquisition Agreement.

In terms of the Acquisition Agreement:

- LexRox has the right to cede and assign its rights and obligations in terms of the Acquisition Agreement to any third party subject to such third party agreeing to accede to the terms of the Acquisition Agreement;
- BME (as cessionary) is entitled to appoint two directors out of three until completion of the terms of the Acquisition Agreement;
- BME (as cessionary) has the right to conduct further exploration up to 16 May 2022, before which date BME may exercise an option (first option) to acquire 25% in the share capital of BLE from Mr. Leon van Neel for a consideration of N\$1M (~A\$87,000), to be funded by Arcadia through budgetary savings;
- BME (as cessionary) has the right and a second option to conduct further exploration operations for an additional 2-year period after it completed the first option to acquire the balance of Mr. Leon van Neel's equity interests in BLE of 75% for a consideration of N\$2M (~A\$176,000), the second payment term is due outside the current budget scope, and;
- BME (as cessionary) must pay an additional consideration equal to N\$7M (~A\$615,000) upon the completion of a definitive feasibility study (DFS) over a resource containing not less than 500,000 tons of LCE arising from potential lithiumin-brines resident under the Licenses at a minimum viable grade that results in a positive DFS.

Shareholder approval for the proposed transaction will be sought pursuant to ASX Listing Rule 11.1.2. A notice of meeting will shortly be dispatched to shareholders wherein full disclosure will be made of the proposed transaction in pursuance of the Deed of Cession and the Acquisition Agreement, including an independent technical report and a solicitor's report on the tenements, a detailed work program and the proposed use of funds in relation to the Licenses being acquired.

Exploration will be funded by Arcadia in accordance with the terms of the BME shareholders' agreement as disclosed in the Company's Replacement prospectus of 15 April 2021 to the effect that the Company continues to be responsible for sole funding all expenditure incurred until completion of the minimum work program, at which time the Company will then assess progress to make an election to move forward or dilute.

The potential acquisition is expected to complement Arcadia's 3,438km² tenure at the adjacent Bitterwasser Lithium-in-Brines Project. The proximity and relationship between the BME and BLE exclusive prospecting licenses are indicated in Annexure 5. If completed, the Acquisition will lead to BME holding an extensive land package of approximately 4,031Km² in



extent, which covers most of the prospective ground over the Kalkrand Half-Graben. The Kalkrand Half-Graben displays first order requirements to possibly qualify as the world's latest district scale Lithium province similar to Clayton Valley in Nevada, USA.

Mineral Resources

The JORC Mineral Resource, defined as a maiden resource for the Bitterwasser Lithium-inclay Project, comprises **15.1 million tons @ 828ppm Li and 1,79% K (at a cut-off grade of 680ppm Li)**, which is wholly classified in the Inferred category. A Mineral Resource statement for the Bitterwasser Lithium-in-clay Project is presented in Annexure 1 and further details as are required in terms of a JORC Mineral Resource are set out in the tables provided in Annexure 3. A total of 16 hand-auger holes were drilled into the clay sediments of which 14, which intersected lithologies, were sampled. A table of all the drill-holes is included in Annexure 2. **The Mineral Resource represents only 6% of the exposed clay pans within the three new EPL's covering ~593km² and provides the Company with extensive geological knowledge, which will greatly assist the Company in its understanding of the Lithium potential on its existing ~3,438km² of clay pans and brines potential.**

A cut-off grade of 680 ppm lithium was applied in selection of the resource blocks that were to be included in the calculation of the Mineral Resource. This is considered an economic cut-off based on cash-flow analysis conducted by the Competent Person. However, some resource blocks that are below the cut-off grade are included within the 5-Year Forecast plan in instances where the blocks are required to be mined to extract the economic pay portion of the total resource, either for geological or geotechnical considerations.

Sufficient information in the form of crucial modifying factors exists to permit the estimation of a Mineral Resource for this deposit. Bench scale metallurgical test work of the potential recoveries of Li from the Clay Units has been successfully completed. Leaching test work of the Clay Units demonstrated that:

- Li is recoverable using feasible volumes of sulphuric acid,
- a viable sequential precipitation method of deleterious magnesium (and other cations) sulphates is achievable, and;
- the extraction of lithium to a marketable lithium carbonate (or hydroxide) product is possible.

However, detailed investigations concerning mining-, processing-, metallurgical-, infrastructure-, economic-, marketing-, legal-, environmental-, government- and social factors ("modifying factors'; JORC, 2012) have not been undertaken to date at Bitterwasser.

The volume estimated for the drilled resource area is 9 465 100 m³. Using the average calculated density of 1.6 g/cm^3 for the Upper and Lower clay, the estimated resource is 15 144 160 tons at grades of 828 ppm Li and 1.79% K.



Estimated Volume (m ³)	S.G. (g/cm ³)	Estimated tonnage (ton)	Li Grade (ppm)	K Grade (%)
9 465 100	1.6	15 144 160	828	1.79

Table 1: The estimation results based on a cut-off grade of 680 ppm Li.

The Mineral Resource covers approximately 6% of the exposed clays in the 7 known pans contained in the Bitterwasser Pan District. Mineralisation at the Bitterwasser main pan may extend in a northerly and southerly direction and to depth.

Seventy-four auger drill hole samples of both clay lithological units were collected and prepared for ICP-OES and ICP-MS rare earth element analysis (Li only) and density determinations. Both the analyses were done by SGS South Africa laboratories. A clear geochemical distinction between the Upper- and Lower clay units was identified, with the Lower Clay Unit being relatively more enriched in Li, and K were found to exist. Drillholes across the central and marginal portions of the pan displayed average grade values for the Upper Clay Unit as 551 ppm Li and 1.56 % K, with an average thickness of 2.47 m, while the average grades for the Lower Clay Unit are 767 ppm Li and 1.75 % K at an average thickness of 5.00 m. Both the Upper clay and Lower Clay Units demonstrate a correlation between increasing K content and increasing Li content, with both elements appearing to be correlated to each other. Refer to Annexure 8 for more borehole information illustrating this correlation.

Comparable Clay Projects

Lithium production from clays on a commercial scale is still in its infancy; however, several companies are currently working towards implementation of recently developed lithium recovery techniques from clays.¹

Clay deposits in similar geological settings are presently being developed in Clayton Valley in Nevada USA, by Cypress Development and Noram Ventures in close proximity (within 1.5km²) to the Lithium-in-Brine operations of Albermarle Corp. and Pure Energy Minerals.²

	Arcadia	Noram	Cypress
Resource in tonnes	15.1Mt*	363Mt	1,304Mt
Resource Classification	Inferred	Meas. and Ind.	Indicated
Cut-off	680ppm	400ppm	400ppm
Stage of Development	Discovery	Pre-PEA	PFS
Average. Grade	828ppm	923ppm	904ppm

¹Refer https://www.cypressdevelopmentcorp.com/news/2021/cypress-development-enters-into-license-agreementwith-chemionex-for-their-dle-technology-equipment-for-clayton-valley-lithium/.

² Refer https://noramlithiumcorp.com/resource/clayton-valley/

Att. Interest	50%	100%	100%
Land Package	403,100ha	2,197ha	2,197ha
	(4 031km ²)	(23.94Km ²)	(21.9Km ²)
Brine Potential	To be determined	1.6km from	Adjacent to Pure
		Albermarle Corp's	Energy Ltd and
		Silver Peak Brine	Albermarle Corp's
		operations.	Lithium-in-Brine
			operations

Table 2: Peer comparison of clay projects in Clayton Valley, Nevada, USA.

* - Over only 6% of exposed clay pans. Potential exists to increase resource over exposed clay pans and potential sub-surface clay pans over the existing 3,438Km² of the Bitterwasser Lithium Project

Cypress Development initially (before additional exploration) reported average lithium grades of 867 ppm Li, while Noram Ventures reported lithium grades of 858 ppm Li, which is very similar to the estimated average grade of the Mineral Resources reported to date within the Bitterwasser Main Pan.³

Electromagnetic Survey and Brines Potential

An electromagnetic (EM) survey was completed by groundwater consultancy Geoss during October 2019. This survey involved the dragging of an EM antenna (rings) at a 40 m or 20 m grid spacing behind a vehicle (See Annexure 9). An electrical conductivity map was generated using the data acquired from the EM survey (See Annexure 10). The north section indicates a highly saline body (red to yellow contours) in the centre of the section. The conductivity measures from -500 to -250 mS/m which in this case is interpreted as a concentrated saline body and was measured with the 40 m coil separation. The southern section which was done with the 20 m coil separation, and this clearly does not show such a prominent body. However, negative conductivity (interpreted as highly saline material) is still clearly indicated in the south section. The conductivity in this section ranges from -200 to -50 mS/m.

The difference between the 20 m and 40 m coil separation is clear on the conductivity map (Figure 7) and confirms that the body delineated by the 40 m coil separation extends deeper than 30 m (known depth extent of 20 m coil separation) and shallower than 60 m (know depth extent of 40 m coil separation).

It was found that the geological and environmental requirements for the formation of significant lithium brine deposits are present⁴. Sufficient evidence exists to suggest the

³ Refer to https://www.cypressdevelopmentcorp.com/projects/nevada/technical-reports/ for Cypress and the Noram NI 43-101 resource estimate report downloadable from the link referred to in footnote 2 above).

⁴ Independent Geological Report –Lithium Resource at the Bitterwaser Pan, Hardap Region Namibia – Nov. 2021, Dr Johan Hattingh, Creo Design (Pty) Ltd



presence of several lithium bearing brine aquifers in the Kalkrand Half-Graben. This evidence includes water-quality data (total dissolved solids and electrical conductivity) from Government borehole data, that indicate the presence of brines in the Bitterwasser basin (the brines were however never tested for Li) as well as the presence of conducive structures (observed from magnetic geophysical data) that form an enclosed basin.

Other economically significant lithium saltpan complexes around the world are associated with anomalous Li, K and B values. The lithium mineralisation associated with the drilled area of the Bitterwasser Main Pan, Li > 800 ppm, B values of > 400 ppm and K values > 1.7 %, emphasises the geochemical similarities with other globally significant lithium brine complexes. Radiometric data over the basin also show anomalous K values associated with the Bitterwasser Salt Complex.

Next steps

As potential exists to increase the existing resource over exposed clay pans, Auger Drilling is planned to commence in November 2021 over the Main Bitterwasser Pan and to test extensions of mineralisation over the rest of the Bitterwasser Clay Pan District. If successful, the drill results will be utilised to possibly increase the resource.

Sub-surface clay potential is also to be investigated through Auger Drilling over the existing 3,438Km2 of the Bitterwasser Lithium Project.

A "Proof-of-Concept" study for Lithium Brine potential at Bitterwasser is underway to guide exploration over a geological feature known as the "Kalkrand Half-Graben".

BME has linked up with a German lithium processing company Anzaplan (Dorfner Group) that will conduct detailed mineralogical and bench scale metallurgical test work on 200kg each of the Upper and Lower Clay Units with the aim of producing a preliminary process flow chart. The detailed mineralogical and bench scale metallurgical test work would later be complimented with a bulk sampling campaign.

Additional Information: Bitterwasser Pan District

Exploration work conducted by LexRox since 2019 was limited to the Bitterwasser main pan. The work included a ground electrical conductivity survey, the hand-auger-drilling of 16 drillholes on a 500m grid over the central parts of the main pan and the analysis of 74 auger drill core samples. The ground electrical conductivity survey conducted identified an anomalous electrical-conductive body that may indicate the presence of a lithium-in-brine aquifer at depth.



The shallow hand auger drilling programme, which forms the basis of the Mineral Resource, covered approximately 26 % of the entire surface area of the Bitterwasser main saltpan. Results from the drilling program indicated the presence of significant lithium-in--clay mineralisation overlying the anomalous electrical-conductive body identified during the ground electrical conductivity survey. The lithium-clay mineralisation intersected within the relatively small area prospected was spatially continuous, trended moderately sub-parallel to the long axis of the saltpan and consistently yielded prospective Li grades. The clays increased in thickness and lithium content towards the central portions of the pan where Li grades approaching 1,200 ppm were encountered, which is in-line with similar projects situated near producing lithium mines in other parts of the world.

The exploration programme was aimed at characterizing the general stratigraphic sequence and to investigate the pan's lithium potential in terms of economic viability. Auger sampling confirmed the presence of a lithium-in-clay resource comparable in grade and extent to that owned by major exploration companies in Nevada, USA. In addition, it was found that the geological and environmental requirements for the formation of significant lithium-in-clay and lithium-in-brine deposits are present. However, the lithium grade in the indicated brines are yet to be confirmed through appropriate exploration techniques. Sufficient evidence exists to suggest the presence of a lithium-in-brine aquifer in the Bitterwasser Saltpan district.

Supporting evidence comes from geological and environmental indicators identified through Bitterwasser Lithium Exploration (Pty) Ltd's reconnaissance exploration efforts to date. Such evidence includes water-quality data (total dissolved solids and electrical conductivity) from domestic water supply boreholes in the area, lithium-in-clay grades from hand auger drilling and associated electrical-conductive anomalies, the presence of conducive regional tectonic structures, favourable source rocks and climatic conditions in proximity to an enclosed basin. Such geological and environmental indicators are comparable in nature to known lithium-inbrine districts in other parts of the world.

Other economically significant saltpan districts around the world are associated with anomalous K and B values. The lithium mineralisation associated with the lithologies documented at Bitterwasser's main saltpan yielded B values of > 400 ppm and K values consistently > 1.8 wt. %. This emphasises the geochemical similarities with other globally significant saltpan districts.

The Bitterwasser Saltpan District is associated with the depositional development of the western portions of the greater Kalahari basin. It lies remarkably close to the inferred source of mineralisation, being the alkaline Brukkaros volcanic field. Elevated groundwater temperatures, as high as 39 °C, have been reported from domestic water-supply boreholes in close vicinity to the saltpans suggesting a deep-seated geothermal heat source and mineralisation mechanism. The thickness of the sedimentary packages which make up the



Bitterwasser saltpans range between 30 m to 100 m thick and are of sufficient size and porosity to accommodate substantial brine aquifers. Annexure 6 shows the location of the Bitterwasser Saltpan District.

The discovery of the Bitterwasser Saltpan District was preceded by the sampling of saltpan clay sediments from several saltpan districts throughout southern Namibia and north-western South Africa over a total area of some 450 km x 200 km. Out of the 130 samples taken over all the pans in the area, the Bitterwasser Saltpan District showed anomalous lithium values. At this initial stage, 26 surface samples were taken from the Bitterwasser saltpans of which 16 samples returned values between 300 to 550 ppm Li and Boron values as high as 400 ppm.

The Bitterwasser Main Saltpan (1,550 ha in surface area) forms part of the Cenozoic aged Kalahari Group and comprises a lithium, potassium and boron enriched sulphate, chlorite and carbonate saltpan district consisting of 7 pans, totalling 6,939 ha in surface area. The pan sediments can be divided into two stratigraphic units. A lower, relatively lithium poor, partially consolidated and/or indurated, poorly sorted and graded unit; dominated by sand, grit and pebbly-grit, with minor to moderate clay constituents and an Upper, lithium enriched, unconsolidated, well sorted and reasonably homogenous unit; dominated by clay and silty-clay. A well-developed redox (reduction-oxidation) boundary occurs throughout the pan which crosscuts the Upper Unit. The redox boundary is recognized through a change in colour of the clays with increasing depth. Near surface oxidized clay exhibit white, brown, greybrown or orange (sometimes mottled) colours (Upper Clay), while the colour of the deeper reduced clays gradually changes from light olive green to dark olive green with increasing depth (Lower Clay). Refer to Annexure 7 for stratigraphy of the Bitterwasser Main Saltpan.

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 listed in Annexure 1 below is based on, and fairly represents, information and supporting documentation prepared by the Competent Person whose name appears, who is either an independent consultant to the Company and a member of a Recognised Professional Organisation or a director of the Company. The persons 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 quality as a Competent Person as defined in the JORC Code 2012.

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) and that has been compiled, assessed, and created under the supervision of Dr Johan Hattingh B.Sc. (Hons.) Ph.D. who is a member of South African Council for Natural Scientific Professions and the Principal of Creo Design (Pty) Ltd a consultant to the Company. Dr Hattingh has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Dr Hattingh is the company, including but not limited to the geological model, database and expertise gained from site visits. Dr Hattingh consents to the inclusion in this announcement of matters based on his information in the form and context in which it appears. The Mineral Resource is based on standard industry practises for drilling, logging, sampling, assay methods including quality assurance and quality control measures as detailed in Annexure 3.

С	ompetent Person	Membership	Report/Document
D	r Johan Hattingh	South African Council for	Independent Geologist Report –
В.	.Sc. (Hons.), Ph.D.	Natural Scientific Professions	Lithium Prospect at the
		#400112/93	Bitterwasser Pans, Hardap
			Region Namibia – March 2021
			Independent Geological Report
			on the Lithium Resource at the
			Bitterwasser Pan, Hardap
			Region, Namibia, Dr. Johan
			Hattingh, Nov. 2021



Mr Philip le Roux	South African Council for This announcement
B.Sc. (Hons.)	Natural Scientific Professions
	#400125/09

The information relating to Exploration Results and Mineral Resources in this announcement is extracted from the Company's Replacement Prospectus that can be found at <u>www.arcadiaminerals.global</u>. The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results and Mineral Resource information included in the Prospectus and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the Prospectus continue to apply and have not materially changed. The Company confirms that the form and context in which the applicable Competent Persons' findings are presented have not been materially modified from the Prospectus.

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 several 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.



MINERAL RESOURCE STATEMENT FOR THE BITTERWASSER LITHIUM-IN-CLAYS PROJECT

Miner	ral Reserve	e Catego	ry	Mineral Resource Category										
Classification	(kt) Grade Li (ton)		Classification	Tonnage (kt)	Li Grade ppm	Contained Li (ton)	Lithium Carbonate Equivalent							
Total Probable	0			Total Indicated	0	0	0	0						
				Total Inferred	15 100	828	12 503	66 929						
Total Reserves	0			Total Resources	15 100	828	12 503	66 929						

Table 3: Mineral Resource Statement

Notes:

The Mineral Resource Estimate was completed using the following parameters:

Strike and drill spacing	Drill lines are orientated east-west (perpendicular to the strike of the pan) and spaced 500 m apart.
Style of Mineralisation	Mineralisation in the Bitterwasser Pan comprises a lithium, potassium and boron enriched sulphate-, chlorite- and carbonate- salts in pan sediments. The lithium mineralisation took place in the pan surface sediments where interaction between basin sediments and pore-water brines governed by the chemical equilibrium reactions of cation exchange and mineral solubility resulted in the precipitation of lithium in the clays in the pan.
Description of Drilling	Auger drillholes were spaced on a 500 m x 500 m grid, with 3 drill lines and 5 to 6 holes per drill line, drilled to a maximum depth of ~12m. A total of 16 holes were drilled totalling 93.10 m.
Samples analyses	SGS laboratory in Randfontein, South Africa. Sodium peroxide fusion ICP-OES with an ICP-MS finish analysis for major elements. Initial sequential leach (metallurgical) test work.
Quality control protocols	Standard Operation Procedures were followed including the use of duplicate, blank and reference samples. The reference samples consisted of African Minerals Standards (Pty) Ltd (AMIS) certified reference materials and were inserted on average every 6 – 7 m within the sampling stream.



Drillholes - grid (WGS84 projection) and UTM	WGS84 UTM zone 33S
Zone 335	
Azimuth / Dip / Vertical	Drillholes were drilled vertical
Cut-off grade to construct geological domains	A cut-off grade of 680 ppm Li has been applied
cut-on grade to construct geological domains	during estimations.
Intersections used in the interpretation are listed	in Annexure 2.
	Wireframes constraining mineralisation were
	based on a minimum down-hole depth of 3 m
Posourco modelling	grading >680 ppm Li. Mineralisation envelopes
Resource modelling	were projected quarter drillhole spacing at
	edges of the deposit when mineralisation was
	open.
Geostatistical methods used to estimate block	Block grades were calculated by Ordinary
	Kriging and Inverse Distance Squared
grades	methodology for quoting the resource.
	The model was constrained by using the
Constraining of model	intercept table in Surpac and verified against
	cross sections of the model.
	Block model Surpac was used for the estimate
Block model software used for the estimate and	with a block size of 60 m ³ , 20 m on strike and
block sizes and sub-blocking	3m in the dip direction, with sub-blocking to
	15m ³ .
	A density value of 1.6 g/cm ³ was used during
Bulk density values and source of values.	estimations and was sourced from Heckroodt,
	1991.
The deposit has been classified as an Inferred Min	neral Resource based on data quality and sample
spacing.	
	Bitterwasser Lithium Exploration (Pty) Ltd is to
	execute further exploration work on the clays
	of the pan complex and to potentially delineate
Recommendations	the saline and/or brine aquifer system in the
Netoninienuations	Bitterwasser saltpan complex. Priority should
	be given to the underlying sandy clay unit and
	areas to the north and south of the area
	explored.

These notes should be read in conjunction with the information detailed in Annexure 3.



DRILLHOLE INTERCEPTS USED IN MINERAL RESOURCE ESTIMATE⁵

										Wt	Al	Si	As	Li	Fe	Mg	к	Mn
Auger_ID	WGS84_Lat /Long_X	WGS84_Lat /Long_Y	WGS84_UTM 33S_X	WGS84_UTM 33S_Y	From (m)	To (m)	Thickness (m)	Sample Weight (g)	Major Unit	g	%	%	ppm	ppm	%	%	%	ppm
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	0	0.2	0.2	486	Upper clay	486	2.93	22.6	36	534	1.66	7.86	1.7	312
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	0.2	2	1.8	846	Upper clay	846	2.4	19.1	51	667	1.37	9.45	1.67	273
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	2	3	1	942.5	Upper clay	942.5	2.31	19.6	208	668	1.36	10.3	1.67	271
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	3	4	1	500	Upper clay	500	2.24	18.2	48	687	1.36	10.1	1.59	268
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	4	4.4	0.4	562	Lower clay	562	2.33	18.8	32	704	1.39	10.4	1.62	266
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	4.4	5.2	0.8	732	Lower clay	732	2.17	17.9	116	774	1.32	11	1.66	259
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	5.2	6.4	1.2	859	Lower clay	859	2.23	18.3	78	757	1.3	10.9	1.7	240
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	6.4	7.6	1.2	682.5	Lower clay	682.5	1.92	17	108	863	1.16	11.7	1.47	220
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	7.6	9	1.4	1012.5	Lower clay	1012.5	2.11	23.6	<30	693	1.08	8.99	1.75	183
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	9	10	1	776	Lower clay	776	2.95	>25	93	935	1.65	8.37	2.83	269
BMB01	17.8781459	-23.921298	793000.3401	7351501.106	10	11	1	792.5	Lower clay	792.5	3.1	>25	39	936	1.77	8.17	2.93	287
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	0	0.2	0.2	317	Upper clay	317	3.17	23.6	68	545	1.79	8.17	1.79	345
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	0.2	1.2	1	538.5	Upper clay	538.5	2.54	20.9	63	683	1.47	9.88	1.69	292
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	1.2	2.4	1.2	570	Upper clay	570	2.37	21.2	87	630	1.36	9.7	1.64	270
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	2.4	3.2	0.8	574	Upper clay	574	2.52	21.5	47	628	1.43	9.48	1.77	273
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	3.2	4	0.8	823	Lower clay	823	2.15	18.6	72	828	1.28	11.8	1.67	240
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	4	5.6	1.6	657.5	Lower clay	657.5	2.09	17.3	116	757	1.26	11.3	1.7	236
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	5.6	7.2	1.6	601.5	Lower clay	601.5	1.93	16.8	46	943	1.19	11.9	1.54	222
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	7.2	8.8	1.6	570.5	Lower clay	570	5	1.76	18.5	1060	1.1	12	1.52	201
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	8.8	9.8	1	663.5	Lower clay	663.5	2.7	20.4	<30	1190	1.66	10.1	2.64	277
BMB02	17.8782459	-23.925807	793000.3401	7351001.254	9.8	10.6	0.8	559	Lower clay	559	2.7	19.2	141	1070	1.74	9.58	2.7	337

⁵ Independent Geological Report on the Lithium Resource at the Bitterwasser Pan, Hardap Region, Namibia, Dr. Johan Hattingh, Nov. 2021



											Wt	Al	Si	As	Li	Fe	Mg	К	Mn
U	Auger_ID	WGS84_Lat /Long_X	WGS84_Lat /Long_Y	WGS84_UTM 33S_X	WGS84_UTM 33S_Y	From (m)	To (m)	Thickness (m)	Sample Weight (g)	Major Unit	g	%	%	ppm	ppm	%	%	%	ppm
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	0	0.2	0.2	159	Upper clay	159	2.99	23.4	77	478	1.67	7.27		315
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	0.2	1	0.8	356	Upper clay	356	2.65	20.3	34	686	1.48	9.89	1.62	292
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	1	2	1	471.5	Upper clay	471.5	2.38	21.1	44	696	1.35	10.4	1.71	275
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	2	3	1	358.5	Upper clay	358.5	2.4	20.2	45	677	1.39	10.4	1.69	277
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	3	3.6	0.6	291.5	Lower clay	291.5	2.52	19.8	74	680	1.46	10.4	1.77	286
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	3.6	5.6	2	535.5	Lower clay	535.5	2.25	19.4	60	813	1.35	11	1.84	250
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	5.6	7.6	2	440.5	Lower clay	440.5	1.84	17.6	81	961	1.18	11.6	1.57	220
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	7.6	9.4	1.8	772	Lower clay	772	1.75	19.1	48	1090	1.04	11.9	1.57	186
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	9.4	10.7	1.3	559	Lower clay	559	2.67	22.9	31	1180	1.65	9.43	2.57	267
	BMB03	17.8783415	-23.930313	792999.8925	7350501.738	10.7	12	1.3	621.5	Lower clay	621.5	3.08	>25	54	784	1.92	4.63	2.81	291
	BMB04	17.8832481	-23.930221	793499.8563	7350501.738	0	0.2	0.2	345	Upper clay	345	3	22.4	45	470	1.64	7.87	1.5	317
	BMB04	17.8832481	-23.930221	793499.8563	7350501.738	0.2	2.2	2	705	Upper clay	705	2.34	19.7	31	579	1.29	9.36	1.53	268
	BMB04	17.8832481	-23.930221	793499.8563	7350501.738	2.2	3.6	1.4	562.5	Upper clay	562.5	2.49	19.7	58	649	1.39	9.77	1.8	269
	BMB04	17.8832481	-23.930221	793499.8563	7350501.738	3.6	4.2	0.6	537	Upper clay	537	2.53	19.7	99	763	1.5	10.8	1.94	291
	BMB04	17.8832481	-23.930221	793499.8563	7350501.738	4.2	4.8	0.6	668	Lower clay	668	2.65	17.9	38	838	1.55	10.7	1.97	292
	BMB04	17.8832481	-23.930221	793499.8563	7350501.738	4.8	6	1.2	756	Lower clay	756	2.45	20.4	91	806	1.38	10.1	1.82	260
	BMB04	17.8832481	-23.930221	793499.8563	7350501.738	6	7.4	1.4	628.5	Lower clay	628.5	2.06	19.3	36	1010	1.28	11.8	1.74	235
	BMB05	17.8830523	-23.92121	793500.3039	7351500.659	0	0.2	0.2	486	Upper clay	486	2.5	>25	<30	349	1.39	5.63	1.33	255
	BMB05	17.8830523	-23.92121	793500.3039	7351500.659	0.2	2.4	2.2	555.5	Upper clay	555.5	2.57	20.9	76	493	1.43	8.56	1.7	273
	BMB05	17.8830523	-23.92121	793500.3039	7351500.659	2.4	3.2	0.8	468	Upper clay	468	2.76	21	<30	472	1.56	8.35	2.02	288
	BMB05	17.8830523	-23.92121	793500.3039	7351500.659	3.2	4.4	1.2	548.5	Lower clay	548.5	2.21	18.2	<30	451	1.23	10.3	1.56	221



										Wt	Al	Si	As	Li	Fe	Mg	К	Mn
Auger_ID	WGS84_Lat /Long_X	WGS84_Lat /Long_Y	WGS84_UTM 33S_X	WGS84_UTM 33S_Y	From (m)	To (m)	Thickness (m)	Sample Weight (g)	Major Unit	g	%	%	ppm	ppm	%	%	%	ppm
BMB05	17.8830523	-23.92121	793500.3039	7351500.659	4.4	5.8	1.4	474	Lower clay	474	1.94	15.5	80	411	1.08	10.3	1.4	190
BMB06	17.8831502	-23.925716	793500.0801	7351001.143	0	0.2	0.2	450.5	Upper clay	450.5	2.96	23.7	62	422	1.61	7.19	1.48	307
BMB06	17.8831502	-23.925716	793500.0801	7351001.143	0.2	1.2	1	574.5	Upper clay	574.5	2.6	20.1	64	566	1.42	8.53	1.38	274
BMB06	17.8831502	-23.925716	793500.0801	7351001.143	1.2	2.4	1.2	544.5	Upper clay	544.5	2.49	21.7	83	533	1.38	9.04	1.67	260
BMB06	17.8831502	-23.925716	793500.0801	7351001.143	2.4	3.6	1.2	707	Lower clay	707	2.54	21.9	42	564	1.48	8.7	1.94	276
BMB06	17.8831502	-23.925716	793500.0801	7351001.143	3.6	4.8	1.2	552	Lower clay	552	2.61	19.2	<30	677	1.59	10.4	2.07	299
BMB06	17.8831502	-23.925716	793500.0801	7351001.143	4.8	6.2	1.4	699	Lower clay	699	2.34	17.9	<30	695	1.36	10.8	1.72	248
BMB07	17.8732352	-23.921394	792499.9288	7351500.659	0	0.2	0.2	267.5	Upper clay	267.5	3.2	23.6	60	478	1.72	7.6	1.59	418
BMB07	17.8732352	-23.921394	792499.9288	7351500.659	0.2	2	1.8	584.5	Upper clay	584.5			92	712	1.55	9.7	1.75	313
BMB07	17.8732352	-23.921394	792499.9288	7351500.659	2	3.2	1.2	585	Upper clay	585	2.42	20.7	138	602	1.4	9.64	1.7	283
BMB07	17.8732352	-23.921394	792499.9288	7351500.659	3.2	4	0.8	488	Upper clay	488	2.49	19.9	119	642	1.46	10.1	1.71	288
BMB07	17.8732352	-23.921394	792499.9288	7351500.659	4	7	3	829.5	Lower clay	829.5	2.35	17.8	96	797	1.37	11.2	1.64	276
BMB07	17.8732352	-23.921394	792499.9288	7351500.659	7	9	2	593	Lower clay	593	2	17.3	47	1020	1.27	11.7	1.54	231
BMB08	17.8733383	-23.9259	792500.2645	7351001.143	0	0.2	0.2	42	Upper clay	233	3.29	24.2	50	556	1.77	8.83	1.66	337
BMB08	17.8733383	-23.9259	792500.2645	7351001.143	0.2	1.8	1.6	677.5	Upper clay	677.5	2.68	20.8	<30	730	1.54	10.2	1.72	313
BMB08	17.8733383	-23.9259	792500.2645	7351001.143	1.8	2.6	0.8	527	Upper clay	527	2.38	21	65	622	1.37	9.78	1.63	271
BMB08	17.8733383	-23.9259	792500.2645	7351001.143	2.6	3.6	1	633	Upper clay	633	2.5	20.8	84	709	1.49	10	1.87	300
BMB08	17.8733383	-23.9259	792500.2645	7351001.143	3.6	5.4	1.8	708	Lower clay	708	2.37	19.6	114	700	1.37	10.4	1.78	259
BMB08	17.8733383	-23.9259	792500.2645	7351001.143	5.4	7.6	2.2	674.5	Lower clay	674.5	1.92	16.3	89	1030	1.22	12.3	1.5	223



											Wt	AI	Si	As	Li	Fe	Mg	К	Mn
Ц	Auger_ID	WGS84_Lat /Long_X	WGS84_Lat /Long_Y	WGS84_UTM 33S_X	WGS84_UTM 33S_Y	From (m)	To (m)	Thickness (m)	Sample Weight (g)	Major Unit	g	%	%	ppm	ppm	%	%	%	ppm
	BMB09	17.8734409	-23.930432	792500.4883	7350498.829	0	0.2	0.2	239	Upper clay	239	3.38	>25	103	488	1.86	7.48	1.72	353
	BMB09	17.8734409	-23.930432	792500.4883	7350498.829	0.2	0.6	0.4	461.5	Upper clay	461.5	3.46	24.2	47	528	1.81	8.22	1.7	359
	BMB09	17.8734409	-23.930432	792500.4883	7350498.829	0.6	1	0.4	573	Upper clay	573	2.97	21.6	76	675	1.58	9.52	1.56	301
	BMB09	17.8734409	-23.930432	792500.4883	7350498.829	1	2	1	508.5	Lower clay	508.5	2.49	22.7	54	653	1.42	10.2	1.66	281
	BMB09	17.8734409	-23.930432	792500.4883	7350498.829	2	4.8	2.8	643.5	Lower clay	643.5	2.65	24.3	79	574	1.3	8.88	1.84	250
	BMB09	17.8734409	-23.930432	792500.4883	7350498.829	4.8	7.6	2.8	610	Lower clay	610	2.1	18.9	<30	855	1.25	12.8	1.55	214
	BMB10	17.8683284	-23.921491	791999.9008	7351500.053	0.2	2	1.8	513.5	Upper clay	513.5	2.5	19.7	124	678	1.4	9.75	1.37	276
	BMB11	17.8684316	-23.926001	792000.264	7351000.161	0.2	0.6	0.4	524.5	Upper clay	524.5	2.95	20.9	58	440	1.74	8.51	1.83	301
	BMB12	17.8879568	-23.921125	794000.0751	7351499.932	0.2	1.4	1.2	119	Upper clay	119	2.3	19	103	343	1.31	8.03	1.23	217
- [BMB13	17.8880572	-23.925635	794000.0751	7350999.919	0.2	0.6	0.4	258	Upper clay	258	2.38	23.1	76	279	1.23	6.49	1.15	217
	BMB13	17.8880572	-23.925635	794000.0751	7350999.919	0.6	1.6	1	399.5	Upper clay	399.5	2.42	20.2	76	284	1.32	7.85	1.21	227
	BMB14	17.8881612	-23.930145	794000.4383	7350500.027	0.2	2	1.8	399.5	Upper clay	399.5	2.24	20.8	69	425	1.18	9.03	1.09	242
	BMB14	17.8881612	-23.930145	794000.4383	7350500.027	2	4	2	918	Lower clay	918	2.37	19.9	144	502	1.31	10.4	1.53	249

Notes:

- All coordinates are in UTM Zone 335 (WGS 84).
- All holes are vertical (-90 dip).
- Intervals used in modelling may differ from significant intersections previously quoted to aid continuity
- Results should be read in conjunction with the data provided in Annexure 3.



JORC 2012 TABLES⁶

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	JORC Code explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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 problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Sampling was undertaken using industry standard practices and consist of hand-auger drilling by Bitterwasser Lithium Exploration (Pty) Ltd. during 2019. All drill holes are vertical 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. Samples ranged from 1012 g to 42 g. An additional 15 density samples were collected. 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. All drill hole and sample locations are mapped in WGS84 UTM zone 33S During 2010 sampling was undertaken using industry standard practices and consisted of surface sampling by Botha & Hattingh,(2017). 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.

⁶ Independent Geological Report on the Lithium Resource at the Bitterwasser Pan, Hardap Region, Namibia, Dr. Johan Hattingh, Nov. 2021



JORC Code explanation	Commentary
• 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).	 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. 16 vertical hand-auger drillholes were drilled perpendicular to the long ax of the main Bitterwasser pan. The holes were drilled on a 500 m x 500 m grid and have a total core lengt of 93.10 m.
	A 250 mm long auger clay-bit with a 90 mm outer diameter was used.The depth of the holes ranged from 0.8 m to 12.20 m.
 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Core recovery in the mineralised pegmatite was almost 100% due to the cohesive nature of the clay. Core loss was recorded as part of the operational procedures where the core loss was calculated from the difference between actual length of correcovered and penetration depth measured as the total length of the drill string after subtracting the stick-up length. Measures taken to maximise sample recovery and ensure representative nature of the samples is not recorded in available documents. No apparent bias was noted between sample recovery and grade.
 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 All drill holes were fully logged and are qualitative. The core has been logged to a level of detail to support appropriate Miner Resource estimation, mining studies and metallurgical studies. The total length of the mineralized clay logged is 85.80 m and the percentage is 92%. The soil samples of Botha & Hattingh, (2017) have been logged according industry standards.
 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample 	 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. The Upper clay was composite sampled at an interval of 0.90 m and 478
	 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). Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.



Criteria	JORC Code explanation	Commentary
	 preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 g/composite sample (45 % of total sample material collected), while the Lower Clay Unit was sampled at an average interval of 1.45 m and 643 g/composite sample. No information is available on sub-sampling techniques and sample preparation of Botha & Hattingh,(2017), because such procedures are not documented in available documents. It is assumed that sampling was undertaken using industry standard practices.
assay data and	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	 The samples were analysed at SGS laboratory in Randfontein, South Africa 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. Sequential leach (metallurgical) test work (Acid leach). 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. The Botha & 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 The samples were analysed of lithium, boron and the cations Ca, Mg, K an Na. Lithium and boron analysis was conducted using ICP analysis, while the cations were analysed using AAS. Only samples which yielded Li values above 300 ppm were included in the cation analysis. Sample preparation for Li, B and cation analysis was by acid digestion. It is assumed that industry best practices was used by the laboratories to



Criteria	JORC Code explanation	Commentary
		ensure sample representivity and acceptable assay data accuracy, howeve the specific QAQC procedures used are not recorded in available documents
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All samples and data were verified by the project geologist. 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. 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. All hard copy data-capturing was completed at the sampling locality. All sample material was stored at a secure storage site. The original assay data has not been adjusted. 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. No twin holes were drilled.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 The locations of all the samples were recorded. The sample locations is GPS captured using WGS84 UTM zone 33S. The quality and accuracy of the GPS and its measurements is not known, because it is not stated in available documents.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 The drill holes are spaced on a 500 m x 500 m grid. 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 The Upper clay was composite sampled at an interval of 0.90 m and 478 g/composite sample (45 % of total sample material collected), while the



Criteria	JORC Code explanation	Commentary
		 Lower Clay Unit was sampled at an average interval of 1.45 m and 643 g/composite sample For the Botha & Hattingh,(2017)samples, the P02 pits were spaced at 900 m and the P03 pits were spaced at 2500 m.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	 The holes were all drilled vertical and perpendicular to the sediment horizons and all the sediment horizons were sampled equally and representative. The lithium is not visible; therefore, no bias could take place when selecting the sample position. The orientation of the Botha & Hattingh,(2017) sample pits is vertical and sampling occurred perpendicular to the soil horizons and all the soil horizons were sampled equally and representative. The orientation of the sampling is unbiased. 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.	 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. An export permit was obtained from the Namibian Mining Department to transport the samples across the border. Measures taken by Botha & Hattingh, (2017) to ensure sample security have not been recorded in available documents.



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



Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 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. 	 The Bitterwasser Project area is east of Kalkrand in south central Namibia, some 190 km south of Windhoek in the Hardap Region. The Bitterwasser Lithium Project comprise of three exclusive exploration licences, EPLs 5353, 5354 and 5358, all held by Bitterwasser Lithium Exploration (Pty) Ltd. The project covers a total area of 59 323.09 hectares. A land-use agreement, including access to the property for exploration has been obtained through the Ministry of Agriculture, Water and Forestry of Namibia.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 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 & Hattingh, 2017).
Geology	Deposit type, geological setting and style of mineralisation.	 The Main Bitterwasser Pan forms part of the Cenozoic aged Kalahari Group and comprises a lithium, potassium and boron enriched sulphate-, chlorite- and carbonate- saltpan. Post-Cretaceous Brukkaros alkaline volcanics and sub-volcanics in the area and are potential source rocks for the lithium. 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. High evaporation rates (>3200 mm/year) occurring in the area are favourable for brine formation and salt-concentration.



	JORC Code explanation	Commentary
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	 Drill results have been described in section 7.3 of this report. All relevant data is included in the report.
Data aggregation methods	 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 A cut-off grade of 680 ppm Li was used. The estimated volumes and grades are based on this cut-off grade.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	 The drill holes were all drilled vertical, with the clay units being horizontal. The mineralized clay thickness intercepted range from 1 m to 9 m.



Criteria	JORC Code explanation	Commentary
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 main report.
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.	 This report has been prepared to present the prospectivity of the project and results of historical and recent exploration activities. All the available reconnaissance work results have been reported.
Other substantive exploration data	• 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.	 The Namibian Government conducted a regional magnetic survey in the area. The Namibian Government conducted a radiometric survey of potassium in the area. An electromagnetic (EM) survey was done by the groundwater consultancy Geoss during October 2019.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 The next exploration phase should focus on the further exploration of the Main Bitterwasser pan, while also conducting exploration on some of the other pans in the region. See section 10 for detailed recommended and planned further exploration activities.
Section 3 Estin	nation and Reporting of Mineral Resources	
	JORC Code explanation	Commentary

Criteria	Joke code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 Creo has independently verified the underlying sampling and assay data. Creo 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.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	• Johan Hattingh the competent person conducted several site inspections visits since 2010 to the Bitterwasser area. During these visits, first hand field surveys were performed.



	JORC Code explanation	Commentary
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Creo considers that the quantity and quality of the, sampling, sample preparation and handling is sufficient to declare the Mineral Resource to the level of confidence implied by the classification used in the report. The inclusive approach adopted in the declaration of mineral resources and mineral reserves is a consequence of the ability to predict even over long distances the extent and grade of the deposit due to the simple lithological composition and mineralisation style and the correct interpretations thereof.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	 The resource has a total area of 2 820 000 m². The depth bellow surface of the upper limit of the resource range from 0.2 m to 4.8 m and the lower limit range from 6.2 m to 12 m.
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. 	 The drilling data was used to generate a block model of the drilled portion of the pan sediment from which volume estimations were done. The lithium deposit geometry has been modelled on the pan geometry and the lateral extension of blocks to a distance of 100 m beyond the perimeter auger holes, using the fence diagrams The outcome of this analysis was verified by modelling the data using GEMCOM Surpac® 3D modelling software. This is used as a tool for visualising grade continuity and is an aid for mine planning. The resource was estimated at a cut-off grade of 680 ppm Li.



Criteria	JORC Code explanation	Commentary
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Moisture was not considered during tonnage estimation.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	A cut-off grade of 680 ppm Li has been applied during esti
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 No assumptions have been made.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	No assumptions have been made.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts	No assumptions have been made.
		Page 29



	JORC Code explanation	Commentary
	should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Bitterwasser Lithium Exploration (Pty) Ltd collected 15 samples to determine the specific gravity (SG) of the clay units. No bulk density has been measured because the SG is considered appropriate as an input into the ore body model. It was found that the 15 samples have an average SG of 1.143 g/cm³. A low average density was calculated at 1.6 g/cm³ and was the density used as an assumed density value for the Bitterwasser Main Pan.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The Bitterwasser Lithium Exploration (Pty) Ltd exploration area in the Bitterwasser Main Pan is classified as an Inferred Mineral Resource. Where blocks bounded by sampling on at least one side, or where the down dip continuation of a block has been demonstrated by auger-hole intersections. Inferred Resource blocks are limited to the drilled area where more data sets are available and are normally the blocks with the highest density of samples. Here geological interpretation suggests that continued mineralisation is likely even where no drilling information is available. These blocks are open ended in depth. Wide spaced auger sample data is available as the only data source. The results reflect the Competent Person's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• Creo has independently verified the underlying sampling and assay data. Creo considers that given the general sampling programme, geological investigations, independent check assaying and, in certain instances, independent audits, the estimates reflect an appropriate level of confidence
Discussion of relative	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure	• Creo considers that the quantity and quality of the, sampling, sample preparation and handling is sufficient to declare the Mineral Resource to



Criteria	JORC Code explanation	Commentary		
accuracy/ confidence	 deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	the level of confidence implied by the classification used in the audited Mineral Resource and Ore Reserve statement given in this report.		



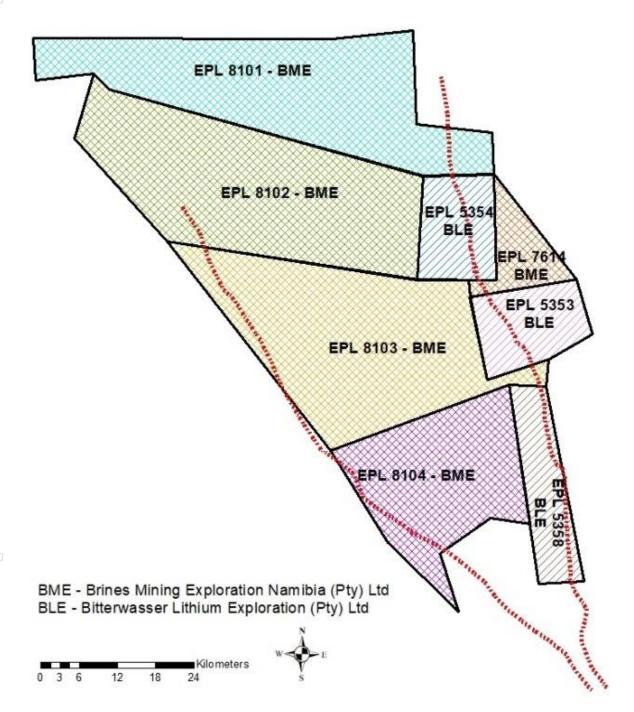
TABLE OF EPL'S THAT ARE THE SUBJECT OF THE ACQUISITION AGREEMENT

Licence:	Exclusive Prospecting Licence
Licence Number:	EPL 5353
Holder:	Bitterwasser Lithium Exploration (Pty) Ltd
Size:	20023.8697 hectares
Commodities:	Industrial Minerals
Farms:	Eden 183, Kantani 181, Bitterwasser 116, Panama
	182, Reussenland 561, Meerkat 190
Licence:	Exclusive Prospecting Licence
Licence Number:	EPL 5354
Holder:	Bitterwasser Lithium Exploration (Pty) Ltd
Size:	19341.5271 hectares
Commodities:	Industrial Minerals
Farms:	Kentani 181, Ponjola 152, Madube 199, Mbela
	200, Stryfontein 925, Reussenland 561,
Licence:	Exclusive Prospecting Licence
Licence Number:	EPL 5358
Holder:	Bitterwasser Lithium Exploration (Pty) Ltd
Size:	19957.6922 hectares
Commodities:	Industrial Minerals
Farms:	Meerkat 190, Panama 182, Sekretarispan 191, Onze
	Rust 192, Twilight 113, Bagatelle 684, Happyland 292

Table 4: Bitterwasser Lithium Exploration (Pty) Ltd current issued EPL information.

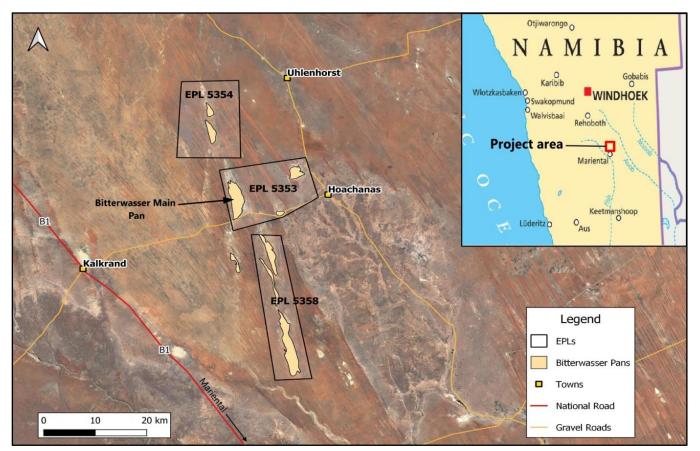


MAP SHOWING BLE LICENCES IN RELATIONSHIP TO BME LICENCES





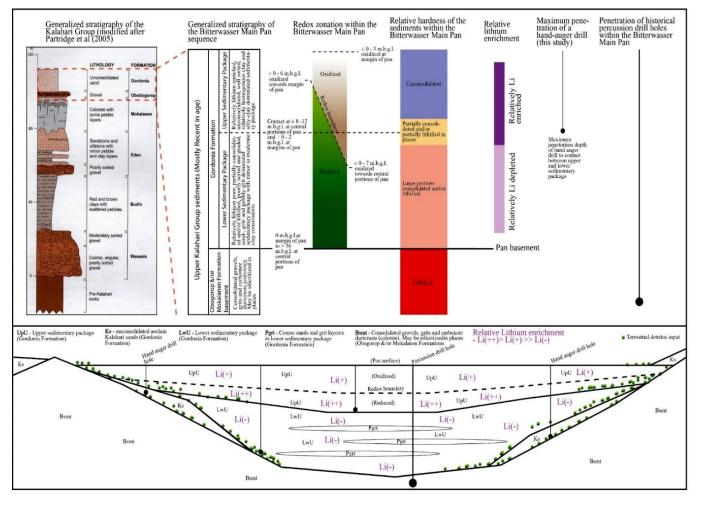
LOCATION MAP OF THE SEVEN PANS WITHIN THE BITTERWASSER PAN DISTRICT⁷



⁷ Independent Geological Report on the Lithium Resource at the Bitterwasser Pan, Hardap Region, Namibia, Dr. Johan Hattingh, Nov. 2021



GENERALIZED STARTIGRAPHY OF THE BITTERWASSER MAIN PAN⁸



⁸ Independent Geological Report on the Lithium Resource at the Bitterwasser Pan, Hardap Region, Namibia, Dr. Johan Hattingh, Nov. 2021



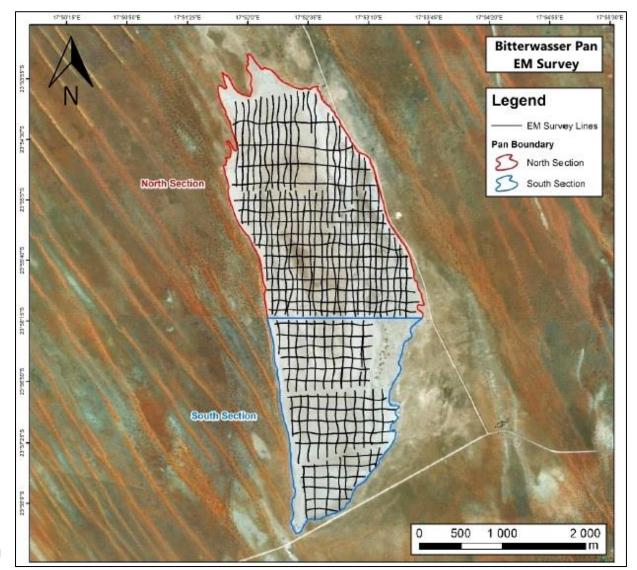
WEIGHTED AVG. GRADES CALCULATION FOR EACH HOLE AND CLAY UNITS⁹

AUGER_ID	LITH_CODE	WEIGHTED AVERAGE LI GRADE (PPM)	WEIGHTED AVERAGE K GRADE (%)	FROM (M.B.G.L)	TO (M.B.G.L)	THICKNESS (M)
BMB01	Upper clay	666.00	1.65	0.00	4.00	4.00
BMB010	Upper clay	678.00	1.37	0.20	2.00	1.80
BMB011	Upper clay	440.00	1.83	0.20	0.60	0.40
BMB012	Upper clay	343.00	1.23	0.20	1.40	1.20
BMB013	Upper clay	283.00	1.19	0.20	1.60	1.40
BMB014	Upper clay	425.00	1.09	0.20	2.00	1.40
BMB02	Upper clay	641.00	1.70	0.00	3.20	3.20
BMB03	Upper clay	672.00	1.67	0.00	3.00	3.00
BMB04	Upper clay	623.00	1.68	0.00	4.20	4.20
BMB05	Upper clay	479.00	1.76	0.00	3.20	3.20
BMB06	Upper clay	538.00	1.53	0.00	2.40	2.40
BMB07	Upper clay	653.00	1.72	0.00	4.00	4.00
BMB08	Upper clay	698.00	1.74	0.20	3.60	3.40
BMB09	Upper clay	579.00	1.65	0.00	1.00	1.00
BMB01	Lower clay	812.00	2.00	4.00	11.00	7.00
BMB014	Lower clay	502.00	1.53	2.00	4.00	1.40
BMB02	Lower clay	963.00	1.86	3.20	10.60	7.40
BMB03	Lower clay	941.00	1.97	3.00	12.00	9.00
BMB04	Lower clay	901.00	1.81	4.20	7.40	3.20
BMB05	Lower clay	429.00	1.47	3.20	5.80	2.60
BMB06	Lower clay	648.00	1.90	2.40	6.20	3.80
BMB07	Lower clay	886.00	1.60	4.00	9.00	5.00
BMB08	Lower clay	882.00	1.63	3.60	7.60	4.00
BMB09	Lower clay Average	705.00	1.69	1.00	7.60	6.60
	Upper clay	551.29	1.56			
	Average Lower clay	766.90	1.75			

⁹ Independent Geological Report on the Lithium Resource at the Bitterwasser Pan, Hardap Region, Namibia, Dr. Johan Hattingh, Nov. 2021



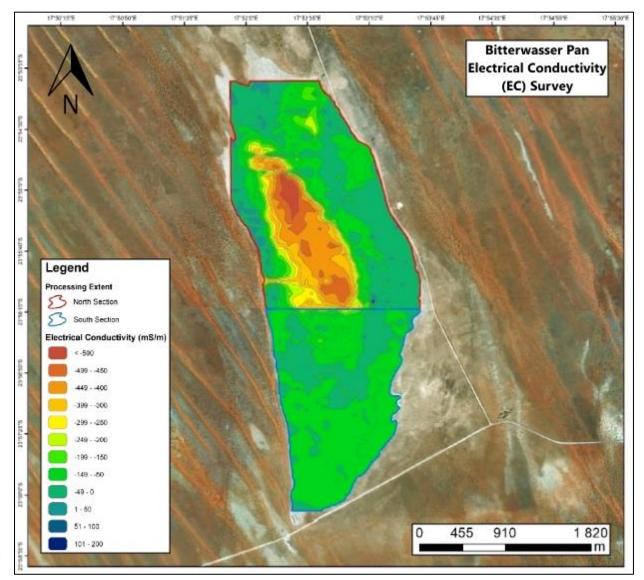
GRID SPACING SHOWING GROUND ELECTRICAL CONDUCTIVITY SURVEY¹⁰



¹⁰ Independent Geological Report on the Lithium Resource at the Bitterwasser Pan, Hardap Region, Namibia, Dr. Johan Hattingh, Nov. 2021



CONDUCTIVITY MAP SHOWING RESULTS OF BOTH 40 M AND 20 M COIL SEPARATION¹¹



¹¹ Independent Geological Report on the Lithium Resource at the Bitterwasser Pan, Hardap Region, Namibia, Dr. Johan Hattingh, Nov. 2021