Independent Geological Report on the Lithium Resource at the Madube Pan, Bitterwasser, Hardap Region, Namibia

Bitterwasser Lithium Exploration (Pty) Ltd

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Prepared by

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1. Executive Summary

1.1. Introduction

Creo Design (Pty) Ltd ("Creo") has been commissioned by Bitterwasser Lithium Exploration (Pty) Ltd ("BLM", "the Company", or "the Client") to produce a Mineral Resource Estimate ("MRE") of the Company's Madube Pan lithium project (herein also referred to as "the Project") in Central Southern Namibia. For this MRE Creo has followed guidelines compliant with the Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code, 2012 Edition ("JORC Code"). Creo has conducted three site visits prior to the drilling campaign and reviewed the procedures and processes employed by the Client for the drilling, sampling and assay work. The author of this report, Dr Johan Hattingh, is considered as Competent Person for the Mineral Resource Estimate as designated under the JORC Code.

The Report was prepared as a comprehensive Independent Technical Report to meet the listing requirements of the Issuer under the policies of the Australian Securities Exchange "ASX". This Report, inclusive of the Mineral Resource Estimate, is the current Independent Technical Report and Mineral Resource Estimate on the Project, prepared for the Issuer, Bitterwasser Lithium Exploration (Pty) Ltd. The Effective Date of this Independent Technical Report and the Mineral Resource Estimate is March 25, 2023.

1.2. Property Description, Location, Ownership and Legal Tenure

The Madube Pan Project forms part of the larger Bitterwasser Saltpan District and is subject of a maiden lithium resource definition exploration project. The Project has been the subject of several historic technical studies and an economic study. It is located in Central Southern Namibia, approximately 190 km south southeast of the capital Windhoek. The Bitterwasser Project comprises three exploration licenses (EPLs 5353, 5354, 5358) held by Bitterwasser Lithium Exploration (Pty) Ltd.

BLE is in the process of developing this predominantly lithium project situated in the western part of the Kalahari Desert with reasonable road access in an area that is characterised by wide expanses on Karoo geology substrate covered by red Kalahari sand dunes and well-developed saltpans. Work to date was mainly done on the neighbouring Eden Pan situated on the farm Eden, between the settlements of Kalkrand and Hoachanas, in the Hardap Region of central Namibia. After completing exploration work at the Eden Pan which led to the establishment of an Inferred Resource of 85.2 Mt @ 633 ppm Li attention shifted to the neighbouring Mabube Pan on the farm Madube some 9km north of the Eden pan. Madube Pan is covered by EPL 5354. The EPL is valid until June 2023 and permit BLE to undertake prospecting activities over this property.

BLE is a fully owned subsidiary of Arcadia Minerals Limited an Australia Stock Exchange (ASX) listed exploration and mine development company with tantalum, base metal and lithium assets in Namibia. BLE is a well-financed Namibian exploration and development company, strategically focused on near term lithium production.

1.3. Geology

The Bitterwasser saltpan complex was subjected to optimal geological and environmental conditions required for the development of significant lithium clay and brine deposits. Such requirements include, but are not limited to, a geographic placing within arid latitudinal belt, presence of Cenozoic-aged fault-bound terrestrial sedimentary basins, proximity to older felsic, carbonatitic and/or alkali volcanic sequences and the presence of regionally extensive brine aquifers.

The Bitterwasser saltpan complex is comprised of seven individual lithium-, potassium- and boron bearing clay substrate saltpans and 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 Brukkaros volcanic field, southwest of the Madube Pan. Elevated groundwater temperatures, as high as 39 °C, have been reported from water-supply boreholes in close vicinity to the saltpans suggesting a deep-seated geothermal heat source and mineralisation provenance.

The pans occur as large depressions in the arid western part of the Kalahari Basin, containing high amounts of montmorillonite group clays, in particular lithium bearing zinnwaldite. The high salinity silty clay soils occur as a number of alternating horizons. The thickness of the sedimentary packages which make up the Bitterwasser saltpan substrate ranges between 30 m to 100 m thick and are of sufficient size and porosity to accommodate substantial brine aquifers.

1.4. Exploration, Data Quantity and Quality

Drilling work done since October 2022 on the Madube Pan involved one phase of hand-auger drilling. The drilling programme involved the shallow drilling of 23 vertical holes across the strike of the central portion of the pan. The drillholes were spaced on a 500 x 500 m grid comprising 3 drill lines with 2 to 4 boreholes per line, with the total drilling depth of 213.6 m. The area covered by the grid is approximately 512 ha, representing the total area of the Madube pan in the area overlying the anomalous electrical-conductive body identified during the airborne electromagnetic conductivity survey.

The drilling produced a total of 195 auger-hole samples, with 181 samples taken for chemical/metallurgical analysis, while the remaining 14 samples were used for QA/QC purposes.

The samples were split into two sub-samples; one split was used for sodium peroxide fusion ICP-OES with an ICP-MS finish for analysis of Li (ppm) and K (%) and the remaining subsample for initial sequential leach (metallurgical) test work. No analysis for boron was done. The QA/QC samples were inserted on average every 20 samples within the sampling stream.

The lithium-clay mineralization intersected was found to be spatially continuous, trending moderately sub-parallel to the long axis of the Madube Pan. The clays increased in thickness and lithium content towards the central portions of the pan where Li grades of some 990 ppm were encountered, which is in-line with similar projects situated within known and productive lithium mines in other parts of the world where lithium is exploited economically at present. A clear Li increase trend from approximately 400 ppm Li at surface to >1 000 ppm Li at the end of the holes is evident from the sample analysis. Potassium follows a similar trend but with a sudden increase at about 8 metres below surface from 1,6% K to 2,6% K.

The quality of the data provided and used by Bitterwasser Lithium is considered to be consistent for the reporting of Mineral Resources in accordance with the JORC Code.

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 rich 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 clay and brine deposits are present. However, the lithium grade in the brines is yet to be confirmed through appropriate exploration techniques. Sufficient evidence exists to suggest the presence of a lithium bearing clay resource in the Bitterwasser saltpan complex. Evidence comes from geological and environmental indicators identified through Brines Mining (Pty) Ltd.'s exploration efforts to date.

1.5. Mineral Resource Estimate

Geology and mineralisation domain modelling of the Madube Pan data was conducted using Leapfrog Geo™ software. Here two main mineralised domains were interpreted (Upper and Middle Domains) and were modelled on various a lower cut-off grades ranging from 0 to 600 ppm Li. Bitterwasser Lithium decided to use a cut-off grade of 500 ppm Li for the MRE. The main mineralised domains are located within the previously broadly delineated mineralised Upper Clay and Middle Clay Units. Grade estimation was undertaken using ordinary Kriging and the estimation approach to be considered appropriate based on review of a number of factors, including the quantity and spacing of available data, the interpreted controls on mineralisation, and the style and geometry of mineralization.

Both simple and ordinary Kriging estimation methodologies were undertaken for the estimation of Li (ppm) and K% in the Upper and Middle domains. The search neighbourhood ranges were determined from the variography. Simple Kriging includes the global mean grade as a constituent of the Kriging equation and was used primarily in areas which are not well supported by data. The mean grade of the population was included as part of the estimate and for this exercise ordinary Kriging was used.

A Mineral Resource statement is given for the Bitterwasser Madube Pan that reports a combined Upper Unit and Middle Unit Inferred Mineral Resource of 13.7 Mt, with a mean grade of 553 ppm Li (based on a 500 ppm Li lower cut-off grade) for a total contained metal content of 40 375 tonnes of Lithium Carbonate Equivalent (LCE). The chosen cut-off grade reflects the lower limit of marginal material likely to be mined and stockpiled. No Indicated resources are stated.

1.6. Conclusions and Recommendations

Creo concludes that the understanding of the geological and grade continuity at the Madube Pan is understood with a moderate degree of confidence, and the quantity of data is sufficient to estimate and declare Mineral Resources in the Inferred category.

Creo believes that higher levels of confidence in the geology and grade distribution could be achieved by collecting closer-spaced drilling and through a better understanding of the chemical controls of the mineralisation. High resolution surveying of bore hole collars will assist in improving the confidence of resource volume figures.

Creo considers that the quality of the drilling, sampling, sample preparation and sample handling to be of a high standard. Sampling and sample processing were considered sufficient to delineate a Mineral Resource to the level of confidence required by JORC. This resulted in the entire Madube Pan area explored by Bitterwasser Lithium to be classified as an Inferred Mineral Resource.

Based on the information presented, Creo considers the data collection procedures applied during the sampling phase appropriate and the sample database suitable for the purpose of resource estimation.

Creo believes that the auger drilling done in the near surface units is currently adequate for delineating a sizeable open pit mine with an appreciable proportion of material in the Inferred category.

Auger drilling data and the 3D modelling undertaken indicates that mineralisation may extend the resource to depth. Infill and extensional diamond core drilling will improve the geological as well as the resource confidence in the areas currently identified as targets. Further to that, it is very likely that the present-day pans such as the Eden Pan, perceived to be confined by mobile dunes in a larger mobile dune field, are in fact part of one large pan in part obscured by dunes. Here a very good probability exists that the pans seen today are part of a larger pan with younger dunes migrating over and masking a larger pan feature.

In addition to the Madube Pan, six neighbouring pans still remain unexplored and should receive attention in future exploration phases.

Based on Creo's review of available exploration data and the MRE results, the following recommendations are made:

- For Bitterwasser Lithium to conduct a dedicated programme of diamond core drilling in order to confirm the geometry, stratigraphy, grade and controls on the mineralisation at depth, in the Lower Clays Unit.
- To investigate the potential of lateral continuation of the pan sediments below the dunes flanking the Madube Pan and the other six neighbouring pans.
- To accurately survey the Madube borehole collars and remodel the data with revised the high resolution bore hole collar survey results.

2. Introduction and Terms of Reference

2.1. Introduction

This report has been prepared as a technical review document recording the current status of exploration work at the Exclusive Prospecting Licence (EPL) 5354 in Namibia, and it therefore reflects exploration results to date and declares resources that were defined by results from the current exploration campaign.

The report was prepared at the request of the Board of Bitterwasser Lithium Exploration (Pty) Ltd (BLE) and in the execution of the mandate, a technical assessment has been prepared for BLE in compliance with and to the extent required by the JORC Code issued by the Australasian Institute for Mining and Metallurgy ("AusIMM"), under whose technical jurisdiction these mineral resources fall. The guidelines as set out in the JORC Code are considered by BLE to be a concise recognition of the best practice reporting methods for this type of mineral development and accord with the principles of open and transparent disclosure that are embodied in internationally accepted Codes for Corporate Governance.

This report describes the exploration results and mineral resource at the EPL 5354 and has been based upon exploration data provided by the geologists of BLE, which has been thoroughly due diligence by the author.

2.2. Competent Person, Site Visit and Data Validation

The Competent Person of this Technical Report states that he is a competent person for the areas as identified in the appropriate "Certificate of Competent Person" attached to this report. Johan Hattingh employed by Creo as a geologist with more than 30 years of experience, is the author responsible for the preparation of this report. Johan Hattingh is a Competent Person, as defined by the JORC Code. The Competent Person considers the JORC Code to be the appropriate standard for the Public Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code sets out minimum standards, recommendations, and guidelines for Public Reporting.

Johan Hattingh, in his capacity as Competent Person, conducted several site inspections visits since 2010 to the Bitterwasser Saltpan District area. During these visits, first-hand field surveys were performed. The technical information used in this CPR was provided by Bitterwasser Lithium and used in good faith by Creo. Where possible, Creo have satisfied itself that such information is both appropriate and valid to ensure JORC compliance in terms of the level of disclosure.

2.3. Declarations

Creo will receive a fee for the preparation of this report in accordance with normal professional consulting practice. This fee is not contingent on the outcome of the current transaction and Creo will receive no other benefit for the preparation of this report. Creo does not have any pecuniary or other interests that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the Exploration Results of Bitterwasser Lithium.

Creo does not have at the date of this report, and has not had in the past, any shareholding in, or other relationship with, Bitterwasser Lithium or the Material Properties. The Competent Person and Creo consider itself to be independent in terms of the JORC Code.

3. Corporate structure

3.1. Location

The Bitterwasser Project area is located east of Kalkrand in south central Namibia, some 190 km south of Windhoek. Exploration work done to date was on the farms between the settlements of Kalkrand and Hoachanas, in the Hardap Region of central Namibia (Figure 1).

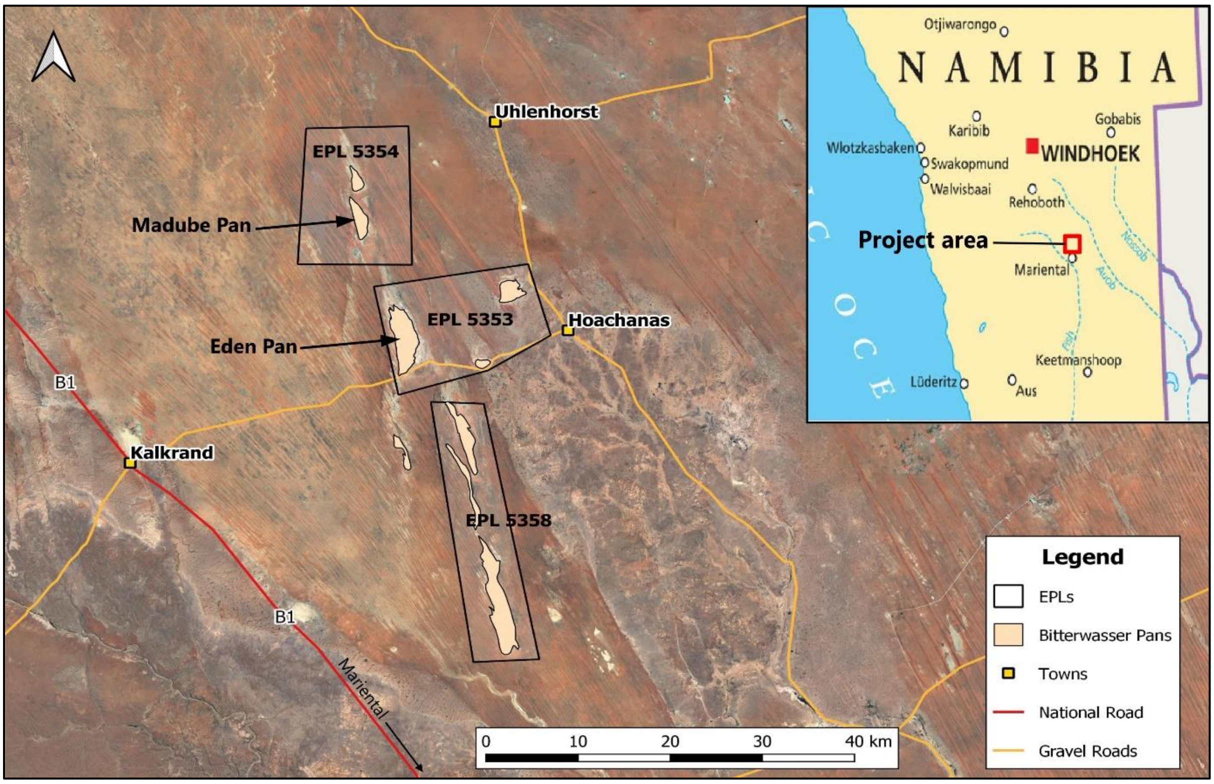


Figure 1: Location of the Bitterwasser Lithium Project area, associated EPLs and the Madube Pan.

The project area abuts the western edge of the greater Kalahari Desert. Exploration work done to date was on the farms Kentani 181 and Eden 183, covered by EPL 5353 on the Eden Pan

(Hattingh, 2022) followed by exploration in 2022 at the Madube Pan on the farm Madube 199, covered by EPL 5354.

3.2. Company Details

BLE is a Namibian company and sole owner of the Bitterwasser Project. The company is a fully owned subsidiary of Arcadia Minerals Limited an Australia Stock Exchange (ASX) listed exploration and mine development company with tantalum, base metal, and lithium assets in Namibia.

3.3. Mineral Tenure

Creo's Competent Person has reviewed the mineral tenure related to the Bitterwasser Lithium exploration areas at Bitterwasser and has independently verified the legal status and ownership of the Permits including underlying property and mining agreements.

The Bitterwasser Project comprise of three Exclusive Prospecting Licences, EPLs 5353, 5354, 5358 all held by BLE (Table 1).

Table 1: BLE current issued EPL information.

Licence:	Exclusive Prospecting Licence
Licence Number:	EPL 5353
Holder:	Bitterwasser Lithium Exploration (Pty) Ltd
Size:	20023.8697 hectares
Commodities:	Industrial Minerals
Farms:	Eden 183, Kentani 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

The current project covers a total area of 59 323.09 hectares. The three EPLs have all been renewed on 4 June 2021 for a further period of two years.

During September 2021, BLE obtained Environmental Clearance Certificates (ECC) from the Ministry of Environment, Forestry and Tourism for all three EPLs to conduct exploration.

3.4. Land Use Agreement

A land-use agreement, including access to the property for exploration has been obtained through the Ministry of Agriculture, Water and Forestry of Namibia giving access to the properties and water resources on the farms Kentani 181 and Eden 183 on EPL 5353 and also to the farm Madube 199 on EPL 5354.

3.5. General

The information mentioned in the above sections was sourced from scans and electronic files of official documents, which has been supplied by BLE. The author is not responsible for the accuracy of any mineral tenure or related data and does not make any claim or state any opinion as to the validity of the property disposition described herein.

For the preparation of this report, the author has relied on maps, documents, and electronic files generated by the BLE management and in-house experts and exploration teams, contributing consultants, and service providers working under their supervision. To the extent possible under the mandate of a JORC review, the data has been verified regarding the material facts relating to the prospectiveness of the property reviewed in this report.

4. Accessibility, Climate, Infrastructure and Physiography

4.1. Accessibility

Overall, the area is very accessible with good regional and local road network being present. Well maintained gravel roads give access from the B1 main road to the farm Madube 199 where the Madube Pan occurs. An airfield capable of handling small aircraft is located on the pan to the east of the Madube Pan

4.2. Topography

The Bitterwasser Saltpan District including the Madube Pan is located on a vast interior plateau to the east of the escarpment, with an elevation of some 1 200 m amsl. This plateau is continuous southwards towards the Orange River, on the border with the Republic of South Africa and north towards the Khomas Highlands near Windhoek.

More locally the area of the EPLs is characterised by extremely flat terrain covered in north-northwest orientated longitudinal red sand dunes where several pans developed in the inter dune areas.

4.3. Drainage

The Bitterwasser Project is located in the watershed area between the Auab - and Fish Rivers. Due to the low rainfall and flat topography drainage systems here are poorly developed giving rise to the development of large pans instead. The pans are perennial.

4.4. Climate, Vegetation and Wildlife

The prospecting area itself is present within a hot desert climatic area with very hot summers and extremely warm winters (with warm days and cold nights). The average annual precipitation is 194 mm. The average sunshine hours per day ranges between 9 - 10 hours, resulting in an annual average temperature of 18 - 19°C. Summer temperatures can however exceed 35°C.

Vegetation is sparse, typically grass cover, as well as camelthorn and sheppard trees in inter dune areas. Sparse xerophytic vegetation consisting mainly of occasional karoo-type shrubs and succulents also to be found in the inter dune areas.

The area includes numerous faunal species such as gemsbok, kudu, zebra and some small game, but none of these species are exclusive to the study area.

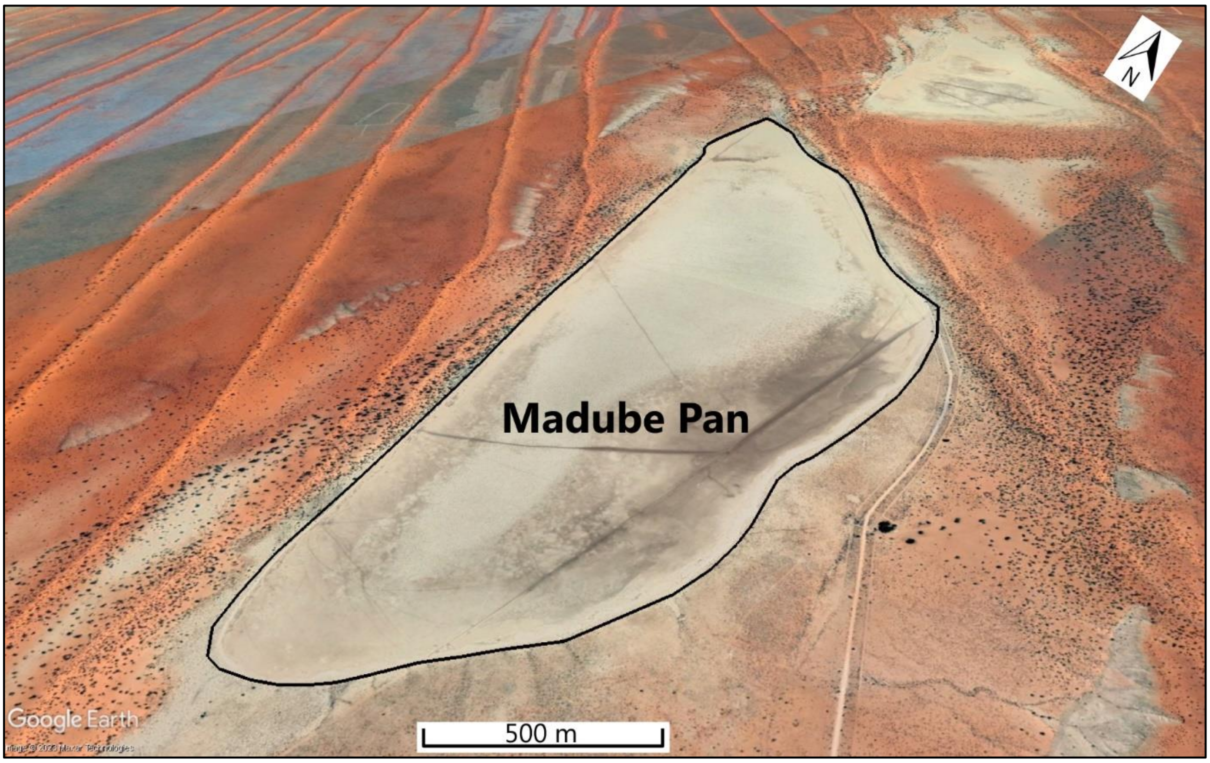


Figure 2: Madube Pan with the surrounding sand dunes.

5. Geological Setting

5.1. Regional Geology

The Madube Pan as part of the Bitterwasser Saltpan District was established in the western part of the Kalahari Basin where extensive systems of linear dunes occur. Here the dunes form part of a 100 to 200 km wide belt between the highlands of Namibia and the Orange River near Upington. The dunes consist of north-north-west to south-south-east trending parallel to subparallel ridges of 5 to 15 m high with a spacing of 200 to 400m, with their steeper slopes facing southwest (Deacon and Lancaster, 1988). The paleoclimatic significance recorded by these fixed dunes is of great importance for the understanding of the development of the pans in this area. Despite the much higher rainfall experienced in the Kalahari Basin today of up to 800mm per annum it is generally accepted that the dunes formed during arid conditions with annual precipitation below 150mm (Lancaster, 1981).

This part of the Kalahari Basin contains some of the largest concentrations of pans in Southern Africa enveloped by well-developed red-brown linear dunes. A striking resemblance amongst these pans exists with elements such as grey-brown fine-grained sand and silt lunette dunes along the southern margins of the pans and pan surface substrate comprising 2 to 3 m or more of calcareous and saline sandy clays which may cover areas two to three times that of the present-day pans (Deacon and Lancaster, 1988).

Two or more lunette ridges generally occur, older, outer, sandy ridges and a younger, inner grey ridge with a higher content of fines. This difference is interpreted as being the product of initial deflation of a Kalahari sand plain in the early stages of development, while the inner lunette was a product of scouring pan floor sediments during dry spells.

Dating of the periods of lunette formation showed the inner clay lunette dunes had ceased formation by 1 000 BP as indicated by radiocarbon dating and is therefore of Late Holocene age when warmer and drier climates prevailed. The inner grey-brown sandy lunettes may have formed during periods of high-water levels in the pans which occurred between 16 000 and 12 000 BP during the wet, humid Late Pleistocene period. The outer lunette formed coeval with the period of aeolian activity that also caused the development of the linear dunes between 20 000 and 16 000 BP during arid conditions (Deacon and Lancaster, 1988).

5.2. Basin Development

Based on the lithological and structural features shown on the Mariental 1:250 000 scale geological map and regional magnetic survey data from the Geological Survey of Namibia, a large sedimentary basin can be inferred. The relationship of this basin and the Bitterwasser saltpan district is evident. Basalts outcrop on edge of the basin, with the centre of the basin being filled in by Kalahari sand.

Regional magnetic data indicated that the basin is associated with, and likely formed by the occurrence of large-scale graben faults, towards the eastern and western edges of the basin. The Geological Survey of Namibia conducted a radiometric survey of potassium (a lithium path finder element) over the area of the basin. The data indicate a strong presence of potassium within the basin area, indicating the high possibility of subsequent lithium occurrences.

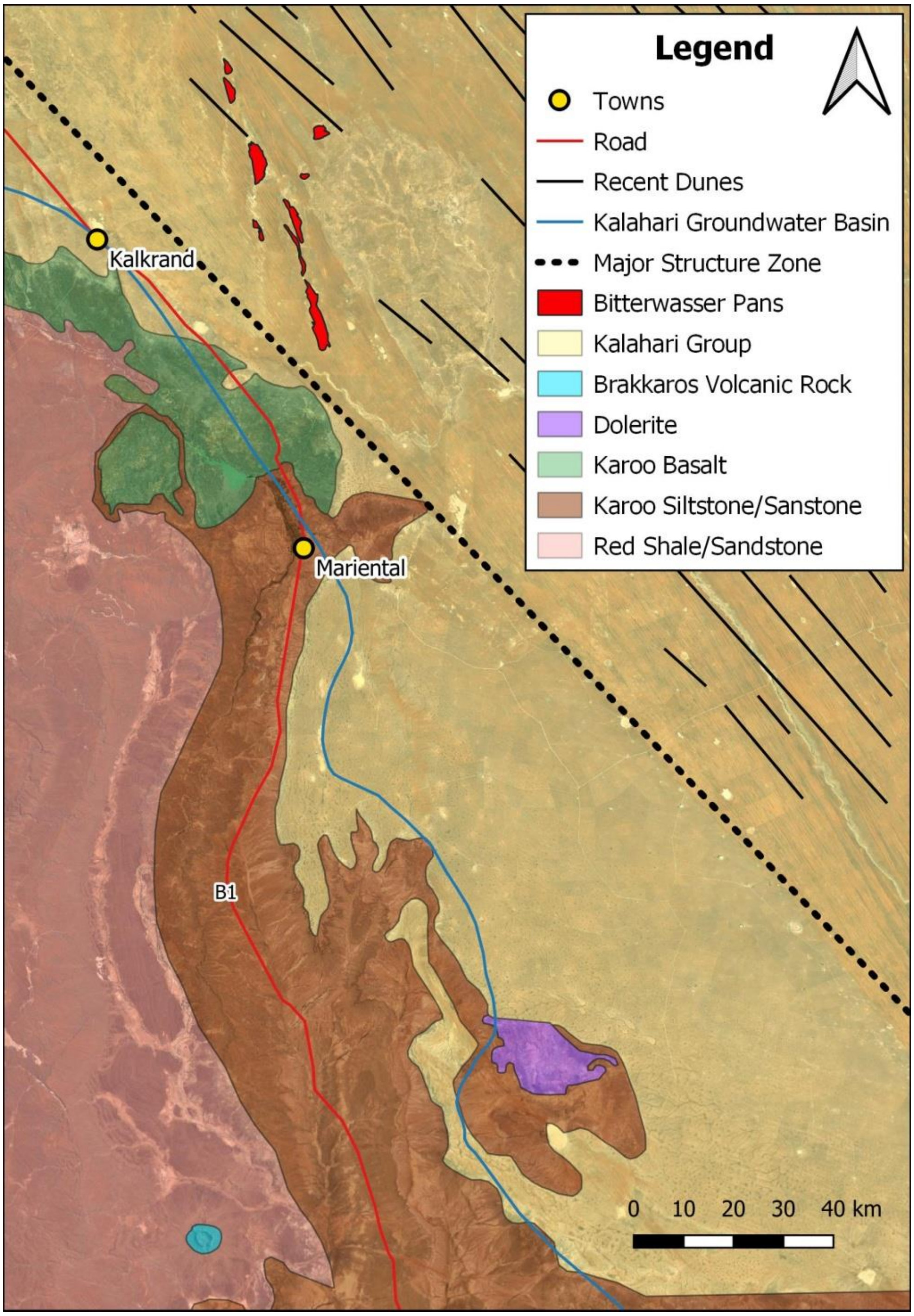


Figure 3. Regional geological overview of the Bitterwasser Pan Complex.

5.3. General stratigraphy of the Madube Pan

The Madube Pan, having a 512-ha surface area, forms part of the Cenozoic aged Kalahari Group (Botha, 2010) where it represents the northern most pan of the Bitterwasser Saltpan District of 7 pans totalling 6 939 ha. It comprises a lithium, potassium and boron enriched sulphate-, chlorite- and carbonate substrate. The pan sediments are dominated by clay, silty-clay and sandy-clay (Figure 3). These sediments occur within the unconsolidated red-coloured aeolian sands of the Recent Gordonia Formation (Botha, 2010), while conformably overlying the gravels and pebbly gravels of the Mokalanen Formation and the intra-formational duricrusts layers (mainly carbonates/calcretes) of the Obogorop Formation (Botha, 2010 and Partridge et al., 2005).

Exploration reports recording periodic prospecting of the Madube Pan proposes the occurrence of graded stratigraphic successions. Coarser sediment content (sand, grit and pebbly grit) occurs towards the basal succession, while silt and clay content increase with increasing stratigraphic elevation (Figure 5) (Botha & Hattingh, 2017; Van der Merwe, 2015). The coarse sediment increases towards the margins of the pan, while the finer sediments dominate the central section, thus suggesting persistent terrestrial sediment input during the progressive deepening and widening throughout the pan development processes of deflation and sedimentation (Deacon and Lancaster, 1988). The terrestrial sediment input within the pan sediments likely constitutes re-deposition of eroded Gordonia-, Mokalanen- and Obogorop Formation sediments within the pan itself.

On a regional scale the identification of the Kalkrand half-graben with its associated successions of three major flood basalt units separated by two stratigraphically important fluvio-lacustrine interlayers is of great significance as driver of lithium mineralisation in the region. Here, the Kalkrand half-graben preserves a record of the complex interplay between sedimentation, effusion of Karoo flood basalts and extensional tectonics that predated and accompanied the break-up of Gondwanaland (Stollhoven *et al.* 1998).

Generally, the pan can be divided into three stratigraphic units. Firstly, a lower, relatively lithium poor, partially consolidated and/or indurated, poorly sorted and graded unit; dominated by sand, grit and pebbly-grit calcrete units, with minor to moderate clay constituents the Lower Unit (LT). The second and third units are relatively lithium enriched, unconsolidated, well sorted and reasonably homogenous units; dominated by clay and silty-clay and named the Middle and Upper Units (Figure 5). These two units are mainly distinguished based on their oxidation state.

The contacts of the Lower Unit with the Middle and Upper Units are gradational and are stratigraphically relative uniform throughout the entire pan, while it also marks the onset of partial lithification within the pan. The Middle and Upper Units reaches the greatest stratigraphic thicknesses along the central axis of the pan (Figure 5; Van der Merwe, 2015).

5.4. Oxidation-reduction zonation

A well-developed redox (reduction-oxidation) boundary occurs throughout the pan which crosscuts the Upper, Middle and Lower Units. The redox boundary is recognized through a change in colour of the clays with increasing depth. Near surface oxidized clay exhibit white, brown, grey-brown or orange (sometimes mottled) colours, while the colour of the deeper reduced clays gradually changes from light olive green to dark olive green with increasing depth (Figure 3). The redox boundary also appears to represent the vadose zone. The vadose zone specifies the boundary between the soil-water zone where saline fluids are affected by capillary action, evaporation and oxidation and the phreatic zone where (likely denser) reduced saline fluids pooled towards the basal portions of the pan are unaffected by capillary action, evaporation and oxidation. The redox boundary and its association with the vadose zone may also indicate the presence of a shallow perched water table below surface.

The redox boundary subsequently divides the Upper oxidized Unit and the Middle-reduced Unit (Table 2).

Table 2: Oxidation state of the major sedimentary units.

Unit	Oxidation state
Upper sedimentary Unit (UPU)	Oxidized
Middle sedimentary Unit (MU)	Reduced
Lower sedimentary Unit (LT)	Reduced?

5.5. Mineralization Model

The Madube Pan is in terms of its geological and climatic setting comparable to the known economically significant Li and B bearing saltpans and associated brine deposits of Nevada, United States of America (e.g., Bradley et al., 2013; Le Roux, 2019) (Figure 3 & 4).

The prominent post-Cretaceous Brukkaros alkaline volcanic and sub-volcanic complex, which is typically fissure controlled carbonatites, andesites, meta-rhyolites, meta-sediments and basalts, underlie the Kalahari Group including the saltpan complex in the area and is the most likely source of the lithium (Le Roux, 2019). Hot brine springs with water temperatures exceeding 39°C have been reported in the immediate area of the Eden Pan (Hattingh, 2022). This suggests the presence of an active deep-seated connate/hydrothermal water circulation network which acts as a transport mechanism for lithium bearing brines into the overlying Gordonia Formation pan sediments (e.g., Bradley et al., 2013). High evaporation rates (>3200 mm/year) occurring in the area are favourable for brine formation and salt-concentration within the pan (Le Roux, 2019).

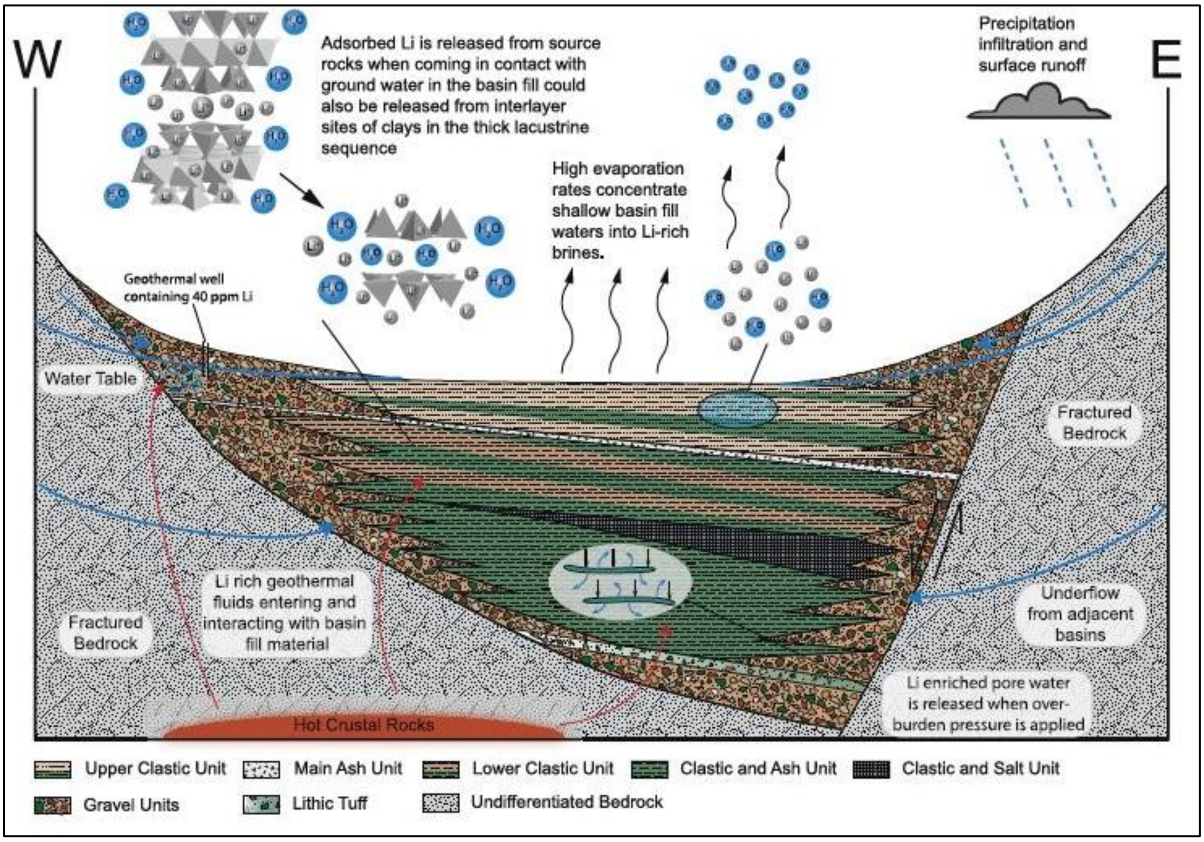


Figure 4. Schematic conceptual deposit model for lithium clay deposits. The figure indicates part of a closed-basin system, generalized stratigraphy consisting of interconnected sub-basins. Taken from Coffey et al., (2021). The sub-basin containing the salar is the lowest.

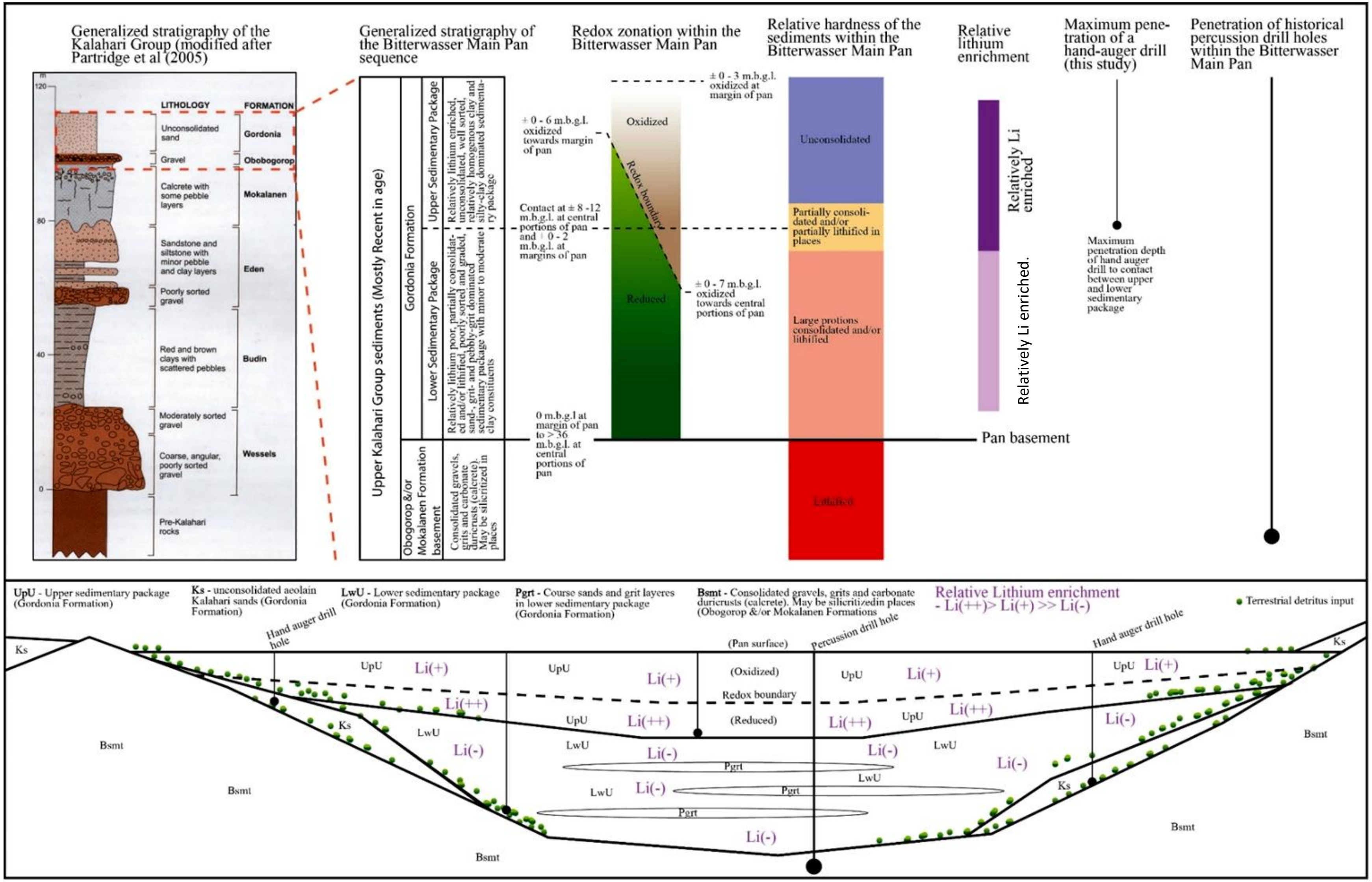


Figure 5. Generalized stratigraphy of the Madube Pan. (After Miller, 2008)

6. Historical Background

In a global context the most feasible lithium deposits are found in continental, geothermal and saltpan brines and clays. The brines are formed by the chemical weathering of lithium-bearing rocks by hydrothermal fluids, particularly in restricted basins, in areas of high evaporation. The brines are generally sourced from the porous strata beneath the surface of the basins. Some of the lithium may be sourced through the leaching of volcanic ash, clays, and rocks, however lithium is not readily leached from rock unless exposed to hot fluids in the region of 275- 600°C.

Lithium exploration in Southern Africa received virtually no attention in the past despite favourable conditions for lithium resource development that prevails. Against this background 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). Target selection was based on the Chilean model of Li-brines within saltpans. The first round of sampling focused on saltpans in two areas, namely central to southern Namibia and the Mier area of the Northern Cape, South Africa.

Regional geological reconnaissance that was conducted by Bitterwasser Lithium Exploration (Pty) Ltd was mostly to test contextual geological models. The two initially selected areas represent pan complexes (groups or clusters of pans), which is typical of salt pan occurrences worldwide. Water samples were also collected in the area referred to as the 'Sout Blok' located south of Aranos, Namibia.

The sampling of salt-pan clay sediments from several saltpan complexes throughout southern Namibia and north-western South Africa was subsequently done. Due to the encouraging lithium grades found in the brines and clays of Southern African pans right from the onset of the reconnaissance survey programme, it was decided to focus on the brines as potential lithium source. The lower development and production cost of lithium from brines give support to the focus on brines as source of lithium.

Subsequent to the initial positive findings from the southern central part of Namibia during the February to July 2010 sampling programme, it was decided to increase the exploration area to cover the entire south-eastern part of Namibia. The Bitterwasser salt-pan complex near Kalkrand was considered as highly prospective for hosting significant lithium clay- and brine deposits and was also comparable to prospects found within the much larger "Lithium Triangle" in South America and other similar lithium brine provinces such as in Nevada, USA.

Between 21 May and 20 June 2010, the remaining Aminuis and Koës / Keetmanshoop pan districts were surface grab sampled. Brines were also collected from two localities in these pan districts. Samples were submitted to independent laboratories for analysis and the results were assessed in a final report that was compiled by Botha & Hattingh in May 2017.

During this study a total area of some 450 km x 200 km was surveyed. In the area surveyed, some 130 samples were taken as water samples, shallow auger hole or pit samples. Over the Bitterwasser Saltpan District a total of 26 samples was taken of which 16 samples returned values in the range of 300 to 550 ppm Li and Boron values as high as 400 ppm. These results are compelling enough to justify continuation of the survey and a follow-up sampling programme is essential.

While lithium brine grades from 200 ppm upward are viable to mine in the current commodities climate, and lithium demand is on the increase, lithium pan soil grades of over 550 ppm could indicate decisively competitive underlying lithium brine grades (Lithium-demand-growth-to-remain-strong-to-2030-report, 2020). Therefore, a more detailed exploration plan including a drilling programme was found to be justifiable based on the very promising results obtained at several of the targets investigated during 2017. Particularly, the pans at Bitterwasser stood out as good targets. Here it was found that the pans, occurring as large depressions in the arid western part of the sub-continent, contained high amounts of montmorillonite group clays, in particular zinnwaldite that gave encouraging lithium values.

In addition to pan sampling, water quality sample data supplied by the government of Namibia was analysed. Unfortunately, the data does not contain information relating to lithium content. However, this data confirmed that several boreholes yielded high total dissolved solids, which indicates the presence of highly saline and/or brine-enriched groundwater that might be associated with significant lithium mineralisation. Also, the spatial distribution of these saline and/or brine enriched boreholes was found to be present within areas with confining structures, which indicates the potential for large, enclosed brine aquifers that could be of significance for the upgrading of brines through evaporation.

6.1. Surface sampling

Between February and March 2010, 24 soil samples were taken from the various lithological units from 8 sampling pits on 5 different pans in the Bitterwasser salt pan district. These sample locations fall within the Bitterwasser Lithium Exploration (Pty) Ltd EPLs. The number of pits per pan and their spacing was determined by the size of the pan. The P02 pits were spaced at 900 m and the P03 pits were spaced at 2500 m, with a maximum depth of 1.5 m. The number of horizons intersected, logged and sampled in each pit, varies between two and four.

Additionally, two groundwater samples were taken from wind pumps adjacent to the Bitterwasser pans. The water samples were taken directly in 500 ml plastic bottles from taps attached to the wind pumps.

6.2. Sample Analysis

The 21 soil samples and 2 water samples were sent for analysis at the University of Stellenbosch Central Analytical Facility between 20 April and 13 July 2010. All 23 samples were analysed for lithium and boron. This analysis was done by Inductive Coupled Plasma Mass Spectrometry (ICP).

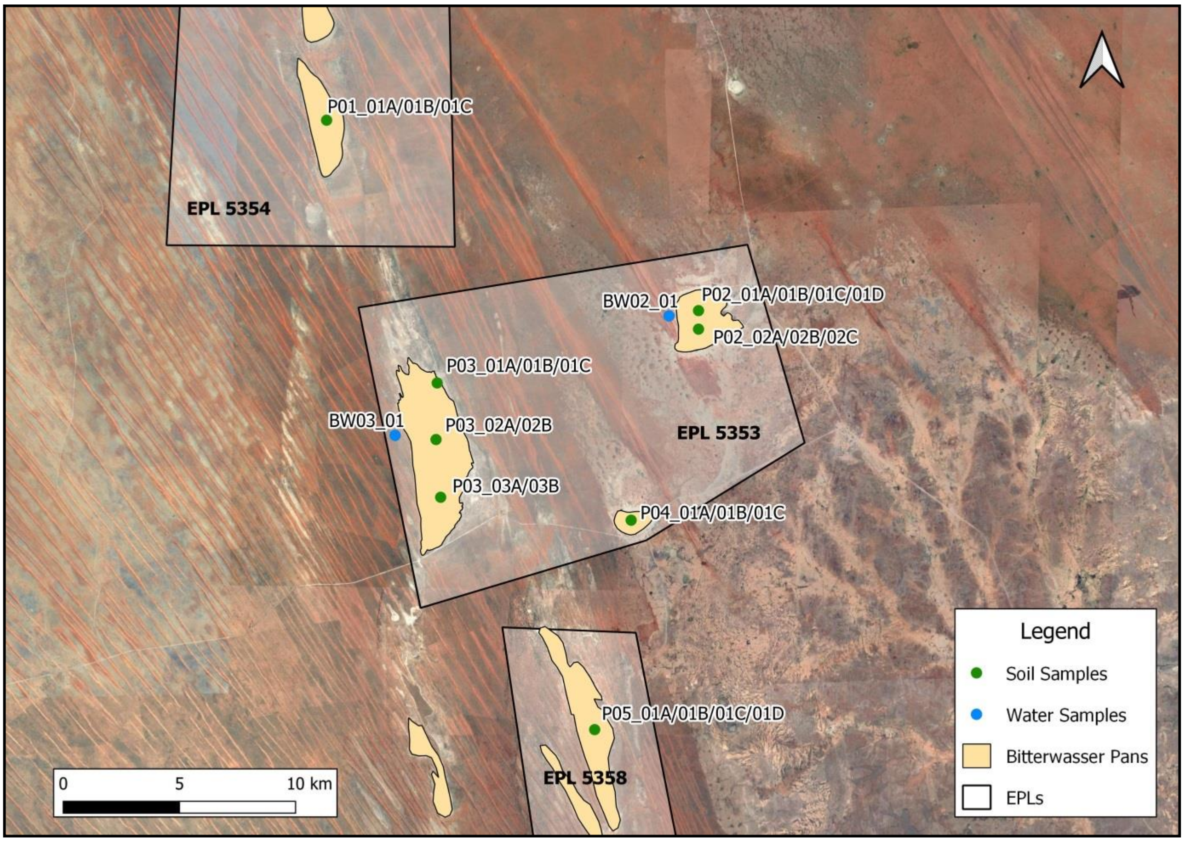


Figure 6: Location of the pit samples and the two water samples collection points in relation to the Bitterwasser Pans and the Bitterwasser Lithium Exploration (Pty) Ltd EPLs.

The six samples which yielded Li values above 300 ppm were selected and additionally analysed for the cations Ca, Mg, K and Na. The cation analysis was done by Atomic Absorption Spectroscopy (AAS). Sample preparation for Li, B and cation analysis was by acid digestion.

Table 3: Results for Li, B and cation analysis of reconnaissance samples collected.

Sample Identity					Results					
Sample ID#	District	Easting	Northing	Type	Li	B	Ca	Mg	K	Na
					ppm	ppm	ppm	ppm	ppm	ppm
BW02_01	Bitterwasser	803130	7356270	Water	nd	2.06	N/A	N/A	N/A	N/A
BW03_01	Bitterwasser	791340	7351120	Water	0.04	0.63	N/A	N/A	N/A	N/A
P01_01A	Bitterwasser	788390	7364710	Soil	100.33	69.79	N/A	N/A	N/A	N/A
P01_01B	Bitterwasser	788390	7364710	Soil	236.42	269.13	N/A	N/A	N/A	N/A
P01_01C	Bitterwasser	788390	7364710	Soil	**348.65**	**390.46**	**53100**	**69700**	**9900**	**40600**

P02_01B	Bitterwasser	804400	7356500	Soil	154.44	61.42	N/A	N/A	N/A	N/A
P02_01C	Bitterwasser	804400	7356500	Soil	122.75	126.25	N/A	N/A	N/A	N/A
P02_01D	Bitterwasser	804400	7356500	Soil	93.68	57.17	79600	49100	5700	3600
P02_02B	Bitterwasser	804400	7355700	Soil	118.78	242.1	N/A	N/A	N/A	N/A
P02_02C	Bitterwasser	804400	7355700	Soil	148.17	184.48	N/A	N/A	N/A	N/A
P03_01B	Bitterwasser	793150	7353380	Soil	226.7	127.31	N/A	N/A	N/A	N/A
P03_01C	Bitterwasser	793150	7353380	Soil	159.56	104.2	60000	37700	3200	13700
P03_02A	Bitterwasser	793100	7350940	Soil	168.48	46.76	N/A	N/A	N/A	N/A
P03_02B	Bitterwasser	793100	7350940	Soil	**557.42**	**268.03**	**72600**	**75300**	**6900**	**20600**
P03_03A	Bitterwasser	793300	7348450	Soil	227.57	80.66	N/A	N/A	N/A	N/A
P03_03B	Bitterwasser	793300	7348450	Soil	**555.24**	**188.36**	**88300**	**70800**	**6200**	**15700**
P04_01A	Bitterwasser	801500	7347460	Soil	50.45	45.36	N/A	N/A	N/A	N/A
P04_01B	Bitterwasser	801500	7347460	Soil	70.03	135.26	N/A	N/A	N/A	N/A
P04_01C	Bitterwasser	801500	7347460	Soil	82.36	57.39	94900	63700	6700	10500
P05_01A	Bitterwasser	799930	7338430	Soil	**346.14**	**46.77**	**80800**	**38900**	**2600**	**7100**
P05_01B	Bitterwasser	799930	7338430	Soil	**544.28**	**56.16**	**120400**	**51900**	**3000**	**7100**
P05_01C	Bitterwasser	799930	7338430	Soil	**482.99**	**44.19**	**145900**	**49800**	**3200**	**6300**
P05_01D	Bitterwasser	799930	7338430	Soil	294.93	29.49	N/A	N/A	N/A	N/A

It is assumed that industry best practices were used during sampling and by the laboratory to ensure sample representivity and acceptable assay data accuracy, however the QA/QC procedures used are not recorded in available documents.

7. Exploration and Data Collection

7.1. Introduction

A dedicated lithium exploration programme was launched at Madube Pan during the last quarter of 2022.

7.2. Hand auger drilling

A hand auger drilling programme was done and cover the entire Madube Pan, with the drillholes spaced perpendicular to the strike of the pan.

7.2.1. Hand auger drilling procedures

The drilling programme took place during October 2022, during which a total of 23 vertical holes (MDB01-24, hole MDB20 was never drilled) were drilled (Tabel 4). The drillholes were spaced using a 500 x 500 m grid comprising 3 drill lines with 2 to 3 boreholes per line (Figure 8), while the total drilling depth is 213.6 m. The area covered by the grid is approximately 512 ha, covering the total area of the pan (Figures 7 and 8). The indurated and/or partially indurated lower contact of the Middle Unit dictated the End of Hole (EOH) depths of the drillholes.

Depending on the hole position relative to the deep central axis and shallow margins of the pan, the depth of the holes ranged from 1.20 m.b.g.l – 19 m.b.g.l.

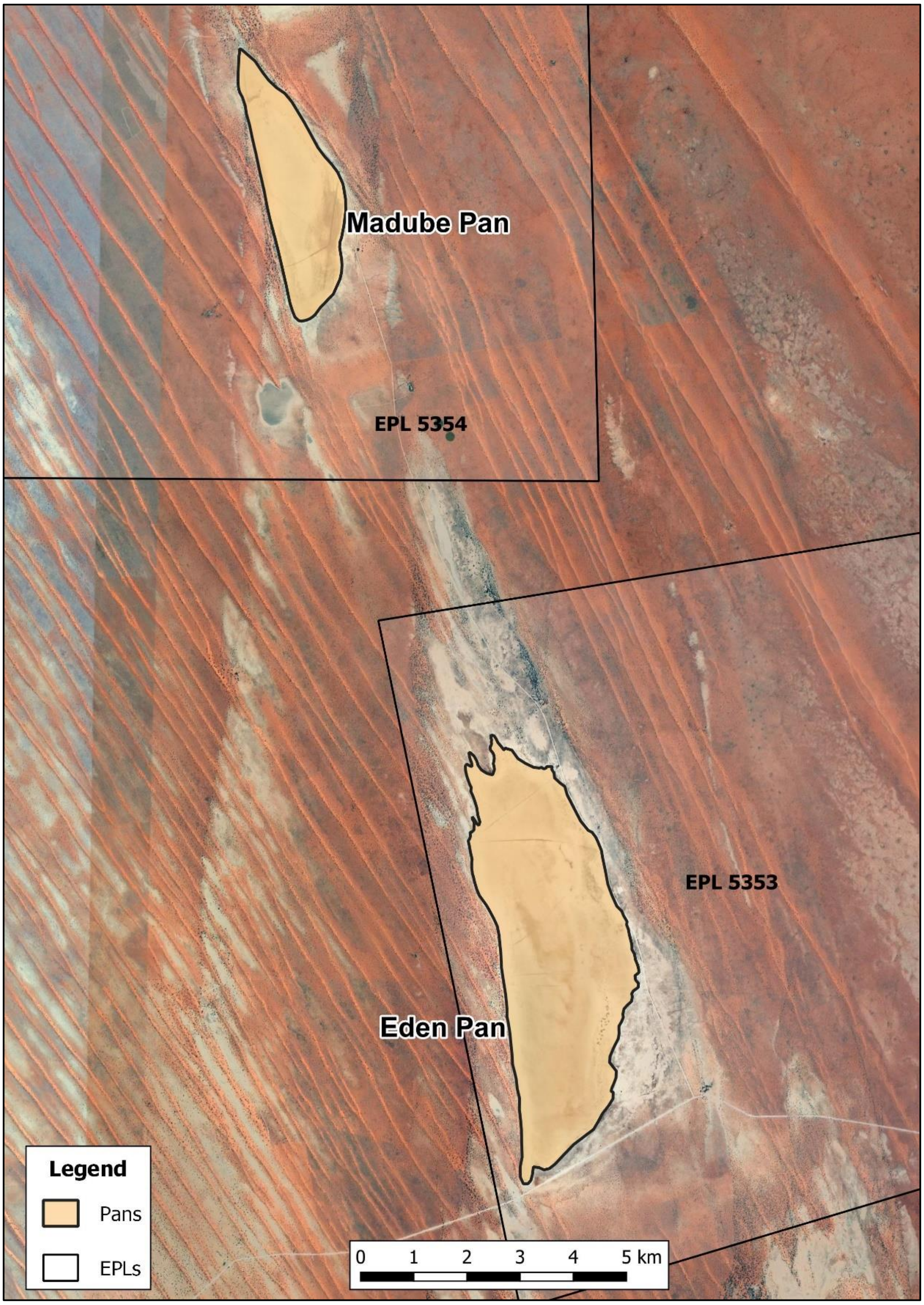


Figure 7: Madube Pan in relation to the Eden Pan where a 85 million ton lithium resource was established.

Sediment samples were collected using sample tube lengths of no more than 20 cm (e.g., 1.0 m consisted of 5 x 20 cm sample lengths), utilizing a 90 mm OD (outer diameter) x 250 mm long auger clay-bit. 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. A chip-tray sample representing every 20 cm was collected stored and logged. All drillholes remained relative intact due to salt encrustation, which formed instantaneously as the drillhole sidewalls are exposed to air. On completion of the drilling, the drillholes were cased and collared.

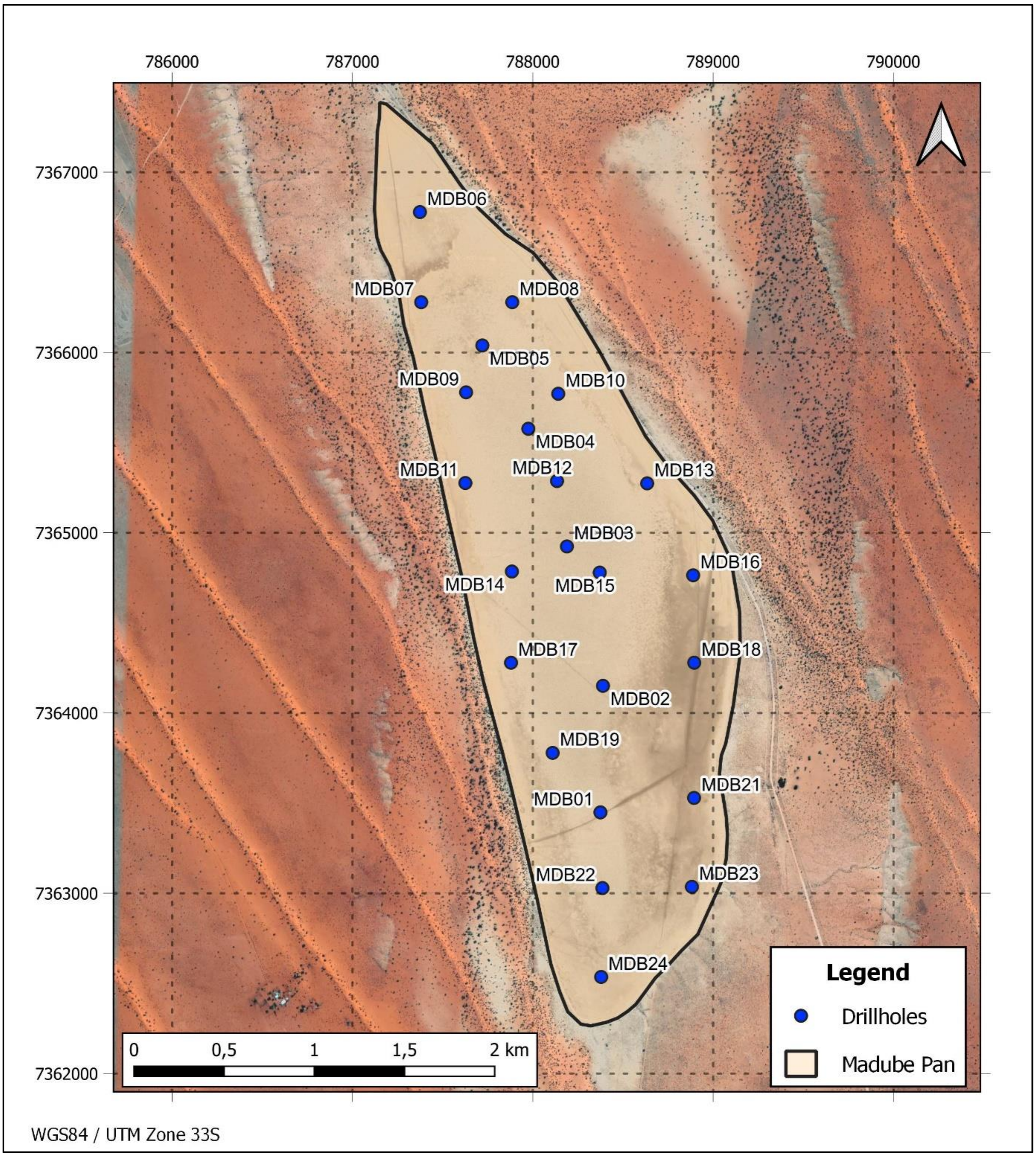


Figure 8: Drillhole positions and numbers of the auger drilling programme at the Madube Pan.

Table 4: List of all auger holes which were drilled as a part of the drilling programme.

Auger _ID	WGS84_ UTM33S_X	WGS84_ UTM33S_Y	Elevation	Azimuth	Inclination	Date From	Date To	EOH
MDB01	788375	7363449	1237	N/A	-90	10/10/2022	12/10/2022	15.00
MDB02	788389	7364151	1237	N/A	-90	5/10/2022	6/10/2022	12.00
MDB03	788189	7364924	1237	N/A	-90	12/10/2022	14/10/2022	17.80
MDB04	787975	7365577	1237	N/A	-90	14/10/2022	21/10/2022	16.00
MDB05	787720	7366039	1237	N/A	-90	21/10/2022	11/11/2022	10.20
MDB06	787374	7366779	1237	N/A	-90	11/11/2022	11/11/2022	3.00
MDB07	787381	7366279	1237	N/A	-90	12/11/2022	12/11/ 2022	4.80
MDB08	787886	7366279	1237	N/A	-90	12/11/ 2022	12/11/2022	3.00
MDB09	787630	7365779	1237	N/A	-90	12/11/ 2022	14/11/2022	12.40
MDB10	788141	7365771	1237	N/A	-90	12/11/2022	14/11/2022	14.60
MDB11	787626	7365276	1237	N/A	-90	15/11/2022	15/11/2022	5.40
MDB12	788134	7365287	1237	N/A	-90	15/11/2022	18/11/2022	19.00
MDB13	788634	7365274	1237	N/A	-90	15/11/2022	16/11/2022	7.60
MDB14	787884	7364785	1237	N/A	-90	17/11/2022	18/11/2022	19.00
MDB15	788371	7364779	1237	N/A	-90	18/11/2022	28/11/2022	14.40
MDB16	788889	7364764	1237	N/A	-90	18/11/2022	18/11/2022	1.20
MDB17	787879	7364279	1237	N/A	-90	18/11/2022	18/11/2022	5.40
MDB18	788895	7364279	1237	N/A	-90	28/11/2022	29/11/2022	1.40
MDB19	788110	7363779	1237	N/A	-90	28/11/2022	29/11/2022	16.20
MDB20	788634	7363756		N/A	-90	Cancelled		
MDB21	788894	7363529	1237	N/A	-90	29/11/2022	29/11/2022	1.20
MDB22	788386	7363029	1237	N/A	-90	29/11/2022	30/11/2022	3.8
MDB23	788882	7363036	1237	N/A	-90	30/11/2022	1/12/2022	7.00
MDB24	788379	7362536	1237	N/A	-90	30/11/2022	1/12/2022	3.20

7.2.2. Topographical control

The area and the collars haven't been surveyed; therefore, the collars were set out with a Garmin 64s handheld GPS. A (SRTM) V3 Global 1 arc second hillshade image was used to help with elevation.

7.2.3. Downhole surveying procedures

No downhole surveying was done as a result of the shallow drilling depths.

7.2.4. Sampling procedures

7.2.4.1. Auger-hole logging

Only the Upper and Middle Units, which is the primary target of the investigation, was drilled and logged in detail, while logging was principally based on the oxidation state of the pan sediments. Accordingly, the Upper Unit clay is oxidized and exhibits orange-brown colouration, while the Middle Unit clay is reduced and exhibit green colouration.

Both the Upper- and Middle Unit packages, have a gradational contact with the partially indurated Lower Unit in the central portions of the pan, while towards the margins the Upper Unit is also in contact with partially consolidated Kalahari sand (Ks) and/or indurated carbonate duricrust (BSMT; calcrete). The partially lithified clay, Ks and BSMT were jointly categorised as the basement to the prospective Upper- and Middle-Unit clays and therefore collectively logged as the Lower Unit (LT). Therefore, the logging makes use of the codes: Upper Unit, Middle Unit and Lower Unit (LT); in that order in any given auger drillhole on the pan (Table 5). See table 6 for a summary of the auger drillholes stratigraphic log.

Table 5: Logging codes and their descriptions

Code	Description
Upper Unit	Oxidised brown grey-white sandy clay unit
Middle Unit	Reduced plastic clay unit
Lower Unit (LT)	Partially lithified olive-green fine plastic clay

Table 6: Summarized stratigraphic log of all the auger drillholes.

Auger ID	DCSC To (m.b.g.l)	LBGSC To (m.b.g.l)	MSC To (m.b.g.l)	MGPC To (m.b.g.l)	GGPC To (m.b.g.l)	OGPC To (m.b.g.l)	Upper Unit thickness	Middle Unit thickness
MDB01	0.20	1.60	2.60	5.20	14.60	15.00	2.60	12.40
MDB02	0.20	1.40	2.80	8.60	11.80		2.80	9.00
MDB03	0.40	2.60	3.40	7.20	11.40	17.60	3.40	14.20
MDB04	0.40	2.20	4.00	6.00	15.00		4.00	11.00
MDB05	0.40	1.00	3.40	5.60	10.20		3.40	6.80
MDB06	1.20	3.00					3.00	
MDB07	1.20	3.40					3.40	
MDB08	1.40	3.00					3.00	
MDB09	0.40	2.40	3.80		12.40		3.80	8.60
MDB10	0.20	2.20	4.40	5.00	14.60		4.40	10.20
MDB11	0.20	1.20	1.60	3.40	4.80		1.60	3.20
MDB12	0.20	2.60	4.00	5.40	16.00	19.00	4.00	15.00
MDB13	0.40	1.20	7.60				7.60	
MDB14	0.20	2.20	3.00	8.00	9.40	19.00	3.00	16.00
MDB15	0.40	2.40	4.60	6	8	14.40	4.60	9.80
MDB16	0.40	1.00					1.00	
MDB17	0.40	1.00	2.20	4.80			2.20	2.60
MDB18	0.80	1.40					1.40	
MDB19	0.20	3.00	3.80	7.00	13.00	16.20	3.80	12.40

MDB21	0.40	1.20					1.20	
MDB22	0.40	3.00	3.80				3.80	
MDB23	0.40	1.80	2.80	7.00			2.80	4.20
MDB24	0.20	0.80		3.20			0.80	2.40

Figure 9. Field photos showing the different lithologies in the field.

7.2.4.2. Auger Drilling Sampling

A total of the 23 drillholes intersected lithologies which were sampled. From these holes a total of 195 samples were collected over the course of the drilling programme, with 181 samples taken for chemical/metallurgical analysis (Appendix I), while the other 14 samples were used for quality control and quality assurance (QA/QC) purposes.

Sample intervals are set at 1.00 m and shortened based on eventual depth of the hole. Sample intervals are recorded in the drill log and in sample books. QA/QC sample numbers are flagged at this point for later insertion. Plastic sample bags are numbered sequentially with the appropriate sample number. The geologist who logged the hole verifies the sample tag with the sample book. The sample bag is sealed with a cable tie, placed in another bag (i.e., double bagged) with a duplicate sample number, and a sample tag is inserted between the sample bags to mitigate the destruction of the sample tag. All the samples are stored in a secure facility until shipment. Sound chain of custody with a well-documented paper trail was in place during the sampling program.

For a specific auger-hole sample interval, each of the 181 samples were split into two sub-samples; one split was used for sodium peroxide fusion ICP-OES with an ICP-MS finish for analysis of Li (ppm), K (%), and Mg. No analysis for boron was done. The results for the analysis by sodium peroxide fusion ICP-OES with ICP-MS finish is shown in Appendix II.

7.2.4.2.1. Sodium peroxide fusion ICP-OES with an ICP-MS finish analysis

Approximately 100 g of material was split by dividing the 20 cm sample length in the core barrel along the vertical axis. This sample size was dependant on the extent of the composite sample for which it was required. It was attempted to composite the 20 cm sample lengths into larger samples representing intervals of around 2.6 m to 3.00 m for Upper Unit and 1.00 m for Middle Unit samples, making sure not to sample across lithological contacts where possible. All samples were bagged and tagged and shipped to the Scientific Services laboratory in Cape Town South Africa, for analysis.

7.2.4.3. Recovery

Core recovery was almost 100% due to the cohesive nature of the clay.

7.2.4.4. Sample quality

A composite sample were collected according to lithology units. Samples didn't cross over lithological boundaries. A representative sample were taken of each 20 cm run, taking in account the sample weight and size. i.e., one composite sample contain a weighted sample of each run.

8. Sample Preparation, Analysis and Security

Sample preparation and assaying of samples from the Madube Pan Project have all been performed at one independent laboratory.

- Scientific Services Laboratories, in Cape Town South Africa. Completed the assaying of the samples. Here sodium peroxide fusion ICP-OES with an ICP-MS finish major element analysis was performed.

8.1. Sample security

The samples were collected and placed in 50 kg bags. All the samples are stored in a secure facility until shipment. Sound chain of custody with a well-documented paper trail was in place during both sampling programs. The samples were shipped to Scientific Services in Cape Town South Africa where they took over custody of the samples. The B-samples are stored in a secure facility.

8.2. Field quality control measures

Bitterwasser Lithium routinely added certified reference material (CRM), blanks and duplicates during the sampling phase. A total of 14 QA/QC samples were inserted into the sampling stream and overall, the results are within acceptable accuracy and precision ranges as certified for those reference materials (Table 7). The QA/QC samples that Bitterwasser Lithium inserted consisted of African Minerals Standards (Pty) Ltd.'s (AMIS) certified reference materials AMIS0339 (standard) and AMIS0358 (standard) along with 7 blanks. The laboratory also added seven CRMs.

Table 7: List of QA/QC samples inserted into the sampling stream.

		Analyses			Standard		
Lab_List	**Lab code**	**Li (ppm)**	**K (%)**	**Mg (%)**	**Li _2SD**	**Li_Medium**	**Li_2SD**
6823	**AMIS0088**	**24**	**1.75**	**2.27**	15.60	20.30	25.00
6848	**AMIS0088**	**10**	**1.67**	**2.24**	15.60	20.30	25.00
6721	**AMIS0088**	**22**	**1.71**	**2.05**	15.60	20.30	25.00
6823	**AMIS0339**	**23406**	**1.21**	**0.17**	21700	22700	23700
6848	**AMIS0339**	**21830**	**1.21**	**0.24**	21700	22700	23700
6721	**AMIS0339**	**22470**	**1.19**	**0.05**	21700	22700	23700
6807	**AMIS0339**	**21684**	**1.20**	**0.21**	21700	22700	23700
6807	**AMIS0355**	**6890**	**1.22**	**0.82**	6432	7268	8104
6823	**AMIS0358**	**214**	**0.46**	**8.38**	167.6	202	236.4
6848	**AMIS0358**	**183**	**0.48**	**8.31**	167.6	202	236.4
6807	**AMIS0358**	**227**	**0.43**	**7.32**	167.6	202	236.4
6823	**GTA-02**	**1530**	**2.28**	**0.03**	1651	1715	1779
6848	**GTA-02**	**1648**	**2.49**	**0.02**	1651	1715	1779

6807	**GTA-02**	**1741**	**2.33**	**0.02**	1651	1715	1779

8.3. Laboratory sample preparation methodology

On receipt at Scientific Services, the samples were logged in the tracking system and a bar code label was attached to each sample. The sample weight was recorded where after it was dried in an oven at 105°C for about 6 hours. Thereafter the sample is finely crushed in a Boyd crusher to 80 % passing a 2 mm screen. The < 2 mm sample was then split by a Rotary Splitter and the reject is kept in storage. A split of the sample was taken and milled to better than 80 % passing a 75-micron screen. The milled sample is then weighed to acquire the correct mass for digestion. The remaining sample is stored.

A minimum homogeneous sample of 0.10 g is digested with at least two mineral acids that include HNO_3 and HF with a total volume of 11 ml. The sample and acid are placed in suitably Teflon microwave vessels. The vessel is sealed and heated in the microwave system. The temperature profile is specified to permit specific reactions at approximately 200ºC. A Boric neutralisation step is employed after the digestion process. After cooling, the vessel contents are allowed to settle and then decanted, diluted to volume, and analysed on ICP-OES.

8.4. Laboratory quality control and quality assurance measures

At Scientific Services, upon receiving, the samples are verified and checked for any discrepancies between the received samples and the sample list provided by the client. All equipment, including crushers and pulverisers is cleaned prior to introducing new samples into them. Equipment is cleaned using silica blank and compressed air. QC testing is done on every 40th sample to check the accuracy and efficiency of the crushing, splitting and milling equipment. Quality control checks of blanks and reference materials are run together with the samples.

The laboratory used seven CRMs of their own during analyses. The CRMs they used is AMIS0088, AMIS0355 and GTA-02.

8.5. Umpire laboratory assay results

No umpire samples were taken during the sampling.

9. Data Processing

A total of 181 samples have been analysed by Scientific Services South Africa laboratories using sodium peroxide fusion ICP-OES with an ICP-MS finish. All auger-hole results were normalized to a weighted average for both Upper Unit and Middle Unit lithologies as intersected and logged within each respective auger drillhole. Only Li, K and Mg were investigated in any detail, as these elements are considered essential for the viability of the project.

9.1. Trends and correlations

The lithium grade within the drillholes shows a consistent increase from the borehole collar to the end of the hole with the highest values at the base of the Middle Unit at its interface with the underlying sandy clay unit called the Lower Unit (Figure 10). Lithium grade values in the Lower Unit appears to decrease compared to the Middle Unit, possibly due to the precipitation of unconsolidated lithium free calcrete matrix or as consolidated nodules that tend to have a diluting effect on lithium grade.

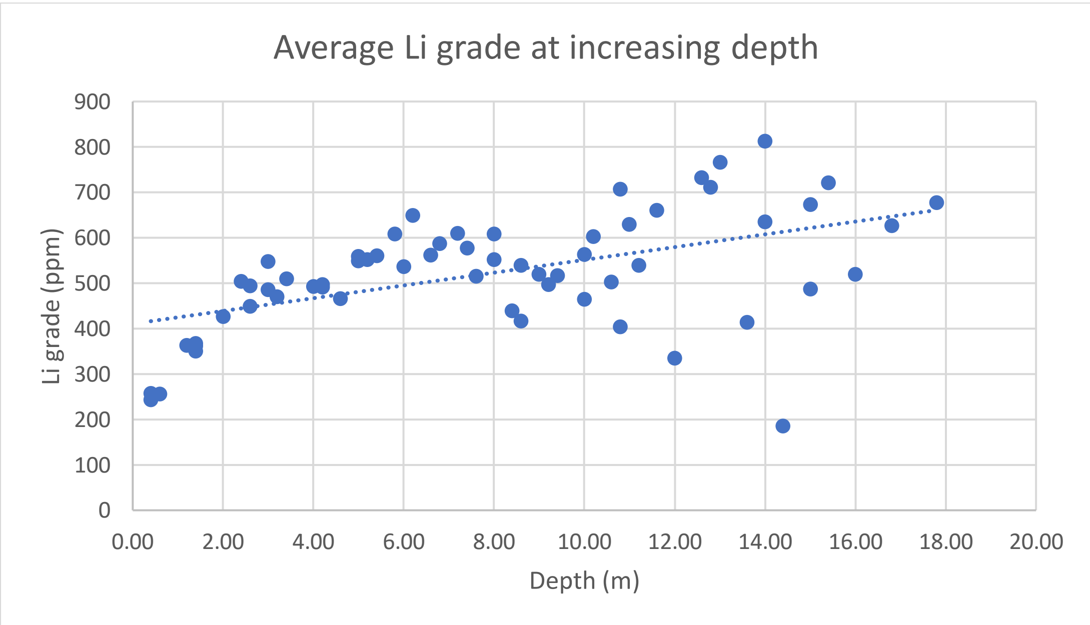


Figure 10: Scatter plots showing grade-frequency % distribution of lithium with increasing depth.

From the results of drill sample analysis, it is evident that grade trend followed by potassium is similar to that of lithium where potassium grade maintains a relatively constant grade of 2 % K from surface to just below 9 m below surface, where after a sudden increase to an average of 2.8% K are seen beyond 9.5 m below surface to the end of the hole (Figure 11).

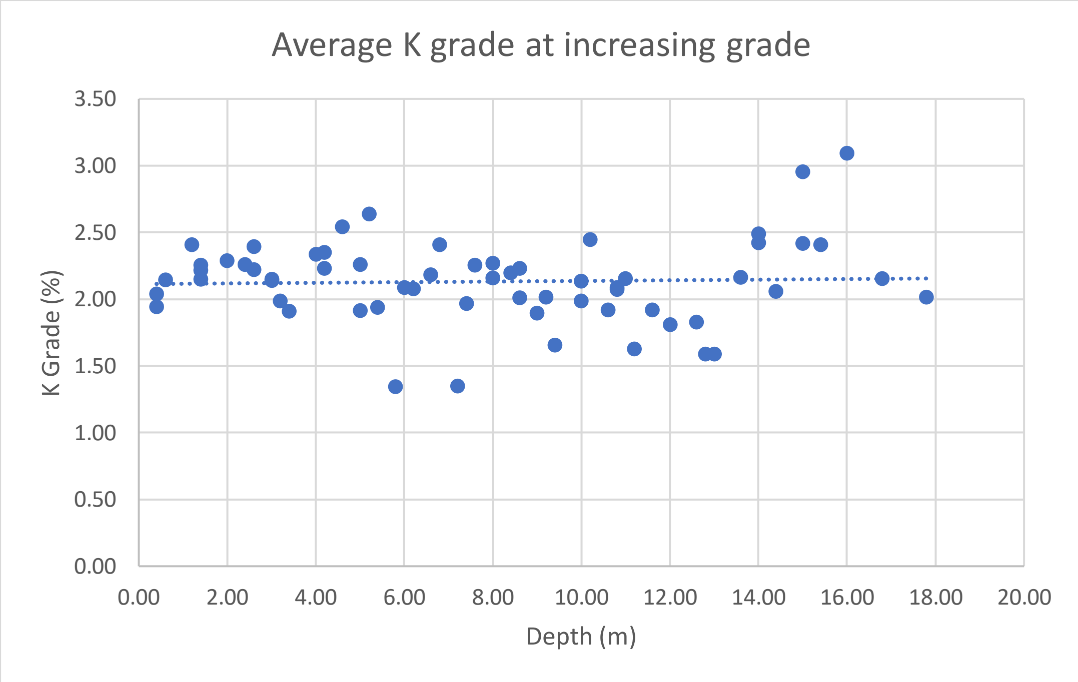


Figure 11: Scatter plots showing grade-frequency % distribution of potassium with increasing depth.

A clear geochemical trend distinction exists between the Upper and Middle Units within the Madube Pan, with the Middle Unit being relatively more enriched in Li and K. When considering the highest Li grades intersected, a spatial correlation between the central axis of the pan and the Clay Units thickness can be seen, with higher grades being associated with thicker Clay Unit intersections and with proximity to the central axis of the pan.

9.2. Density determinations

No density determinations were done at the Madube Pan. The densities used in the resource estimate is that of the neighbouring Eden Pan, which has an identical geological model and lithologies. The densities determined during phase 2 drilling at the Eden Pan were used.

During Phase 2, a total of 38 clay samples were collected for density determinations, of which 15 samples were from the Upper Unit and 23 samples were from the Middle Unit. The density measurements of the Middle Unit range between 1.673 – 1.929 g/cm^3, with an average of 1.820 g/cm^3, and the density of Upper Unit ranges between 1.850 – 2.321 g/cm^3, with an average of 2.003 g/cm^3. These clay density measurements were considered accurate and truly representative of the Eden Pan clays.

9.3. Mineralogical and metallurgical test work

Leaching optimisation tests performed on the pan clays using (i) sulphuric acid and (ii) oxalic acid as lixiviants were performed. Based on the outcomes of the leaching screening tests, oxalic acid and citric acid were selected as potentially suitable organic acids for further test work.

However, during the baseline precipitation tests, citrate-based pregnant leach solutions (PLS) became extremely viscous after evaporation and difficult to handle; consequently, citric acid was excluded in the leaching optimisation tests.

It was found that in smectites, lithium can be present in two different locations: (i) in the structural octahedral site as a substitution for Mg^{2+} (structural lithium), and (ii) as an exchangeable cation in the interlayer space (exchangeable lithium). Due to the presence of montmorillonite and absence of hectorite detected in preliminary characterisation tests, it is assumed that the majority of lithium is present as exchangeable lithium.

The effect of oven-drying on lithium extraction during the subsequent leaching stage was also assessed. Samples of slurry were either (i) oven-dried at 80°C for 24 hours followed by pulverisation prior to leaching or (ii) leached 'as received'. Leaching tests were conducted at 8% solids, 1.5 M sulphuric acid and a temperature of 60°C for three hours. Leaching optimisation tests were performed in a jacketed glass reaction vessel, shown in Figure 2.1, with a maximum working volume of 1.5 L.

Leaching tests show the percentage lithium dissolution and lithium concentration in solution, respectively, for tests performed according to the full factorial design. This indicate that by increasing the solids content in the leach solution from 8% solids to 12% solids, generally decreases the leaching efficiencies, but increases the concentration of lithium in solution. For sulphuric acid leaching, maximum lithium recoveries of ≥ 99% can be achieved after six hours, at 8% solids and an acid concentration of 2 M at temperatures of both 25°C and 60°C. Lithium concentrations of > 120 mg/L can be achieved after two hours, at 12% solids, for the test performed at 1.5 M and 60°C, and for both tests performed at 2 M. For the test performed at 8% solids, 1.5 M sulphuric acid and a temperature of 60°C, achieved 84% and 70% lithium dissolution after two and six hours, respectively. This is significantly lower than the 97% – 98% lithium dissolution achieved after three hours at the same conditions but using a smaller working volume of 100 mL compared to approximately 1 L. For the test performed using a working volume of 1 L, a maximum of 91% lithium dissolution was achieved after one hour; thereafter, lithium started precipitating out of solution. It is not clear why precipitation happened in the larger reactor, but not in the smaller reactor. Repeat tests will be performed to confirm these results. For oxalic acid leaching, a maximum lithium recovery of 82% can be achieved after six hours, at 8% solids, 2 M and 40°C. Lithium concentrations of ≥ 100 mg/L can be achieved after two hours, at 12% solids, 1.5 M and 60°C.

A distinct advantage of oxalic acid leaching is the decreased co-dissolution of magnesium, compared to sulphuric acid leaching. For any given set of conditions, the pH of the oxalic acid solution is higher than that of the sulphuric acid solution, since oxalic acid is a weaker acid than sulphuric acid. As expected, for both sulphuric acid and oxalic acid, pH decreases with increasing acid concentration. For tests performed at a particular acid type, an increase in solids content increases the final pH of the leach solution. This is likely due to an increase in acid consumption as a result of a greater number of metals dissolving. At a pH of 1.25, equal amounts of $H_2C_2O_4$ and $HC_2O_4^-$ are present. The pH after six hours of leaching with oxalic acid range between 0.51 and 1.23. Consequently, during leaching, $H_2C_2O_4$ is expected to be the predominant oxalic acid species in solution, with increasing amounts of $HC_2O_4^-$ present with increasing pH. Metals reacting with oxalic acid can form either simple oxalate compounds, oxalate complexes, or both. While all oxalate complexes are soluble in water, simple oxalate compounds can be either soluble or insoluble. In the presence of excess oxalate, simple oxalate compounds (including those that are insoluble) can form soluble oxalate complexes. The alkali metals (lithium, potassium, sodium) are reported to form only water-soluble oxalate compounds. Aluminium, calcium and magnesium all form insoluble oxalate compounds, but can form soluble metal-oxalate complexes in the presence of excess oxalate.

The sulphuric acid leaching tests established that lithium concentrations of > 120 mg/L can be achieved after two hours at 12% solids for the test performed at 1.5 M and 60°C, and for both tests (25°C, 60°C) performed at 2 M. At these conditions, lithium recoveries of ≥ 83% can be achieved. For the oxalic acid leaching tests, lithium concentrations of ≥ 100 mg/L can be achieved after two hours, at 12% solids, 1.5 M and 60°C. At these conditions, a lithium recovery of 63% can be achieved, with a further increase to 68% when increasing the leaching duration from two to six hours. Based on the concentration of metals in solution identified at the abovementioned conditions, synthetic PLS will be prepared by dissolving metal sulphates / oxalates in water. Thereafter, evaporation will be used to increase the concentration of lithium in solution. The concentrated PLS after evaporation will be used for precipitation tests. Important parameters that will be considered during precipitation tests include the temperature, pH and molar ratio of Li^+: Na_2CO_3.

10. Data Verification

Verification of the drillhole collar positions, drillhole survey data and checks of lithological logging of the drillhole intersections was undertaken by Bitterwasser Lithium and confirmed by Creo.

Reviews of the drilling, sampling, QA/QC databases were undertaken both by Bitterwasser Lithium and Creo. The Mineral Resource estimation was based on the available exploration drillhole database which was generated by Bitterwasser Lithium and validated by Creo prior to commencing the 2023 resource estimation study. Data included samples from hand auger drilling and were used in the modelling process. A total of 23 drillholes and 122 composite samples were used for the resource estimation. Checks made to the database prior to modelling included:

- No overlapping intervals.
- Downhole surveys at 0 m depth.
- Consistency of depths between different data Tables.
- Checks for any gaps in the data.

The application of the surface drillhole data is adequate for the geostatistical estimation processes employed in the mineral resource estimation. The data is spatially well represented and of an adequate support level for estimating deposits of this nature. The procedures and codes of practice employed by Bitterwasser Lithium personnel regarding geological logging, sample preparation and analytical procedures conform to industry standards and are therefore adequate for use in geological modelling and geostatistical estimation.

11. Bitterwasser Lithium Exploration (Pty) Ltd's Mineral Resource Statement

11.1. Introduction

This section describes the methods used to derive and classify the Mineral Resource estimates for the Madube Pan of the Bitterwasser Lithium. Expetra (www.expetra.co.za) was responsible for resource modelling and calculation of Bitterwasser Lithium Exploration's Mineral Resource figures.

11.2. Audit procedures

Creo has independently verified the underlying sampling and assay data as well as the resource modelling and where possible also the resource calculations. Creo considers that given the extensive sampling programme, geological investigations, independent check assaying and independent audits, the estimates reflect an appropriate level of confidence.

11.3. Mineral resource estimation methodology

The method used for the estimation of the mineral resources here applied to the entire drilling area as part of the resource definition programme at the Madube Pan.

For the Bitterwasser Lithium EPL area or any portion thereof to be considered a Mineral Resource it must be an occurrence of lithium of economic interest in such form, quality and quantity that there are reasonable and realistic prospects of lithium extraction for the lithium market. Here, location, quantity, grade, continuity and other geological characteristics of this mineral resource should be known, estimated from specific geological evidence and knowledge.

Lithium mineralisation in pan clay settings does not demonstrate an inherent high variability in the distribution of economic extractable lithium. However, sampling this type of deposit requires a large number of samples. Standard drilling techniques are able to provide sufficient sample volumes and, therefore, the required data to enable estimation of tonnages and grades. Conventional drilling as currently employed provides sufficient information to determine the volume of the mineralisation zones, and its relationship to geological features. Therefore, for a deposit to be considered a Mineral Resource it is highly dependent on the availability of the results of appropriate spatial distribution and number of samples.

Because of the uniform nature of the lithium mineralisation zone and of the grade within it, most of the data for evaluating resource blocks is derived from data presented by adjacent auger holes. The continuity of grade values within the mineralised horizons is based primarily on sample analysis results. Mineral Resource blocks have been defined based on this information. The lithium deposit geometry has been modelled on the pan geometry.

The mineral resource estimates were compiled by Expetra (2023) in compliance with the definitions and guidelines for the reporting of exploration information, mineral resources and mineral reserves in Australia, "Australian Joint Ore Reserves Committee - JORC Code 2012".

The drillhole data was composited within Leapfrog Geo® (Version 2022.1.1) on a 213.6 m composite length. A total of 122 composites were used in the statistical analysis and resource estimation. Creo is satisfied that the Mineral Resource estimation globally reflects the deposit based on the available data. Suitably experienced and qualified geologists, surveyors and other mineral resource practitioners employed by Bitterwasser Lithium were responsible for the capture of the drillhole information and compilation of geological information.

11.4. Assumptions, parameters and estimation methodology

Grade estimation was undertaken using Ordinary Kriging and the estimation approach was considered appropriate based on review of a number of factors, including the quantity and spacing of available data, the interpreted controls on mineralisation, and the style and geometry of mineralisation (Expetra, 2023). In places higher grade zones occur within a lower grade background and the individual mineralisation boundaries of these high-grade zones can be difficult to define. Indicator Kriging was therefore chosen to delineate the areas with continuous grades and was used later as a start model to adequately define the mineralisation.

Based on grade information and geological logging and observations, Upper Unit, Middle Unit and Lower Units, mineralised domain boundaries have been interpreted and formulated into wireframes to permit the resource estimation for the Madube Pan. The interpretation and wireframe models were developed using Leapfrog Geo® geological modelling software package. Expetra (2023) determined that a 50 m x 50 m x 10 m block size provided the best results for delineating the mineralised zones using the Indicator Kriging methodology and a 5 m x 5 m x variable block size provided the best results for geo-statistical estimation and hence the estimation was conducted on a 10 m x 10 m x 10 m (X, Y & Z respectively) block model size.

11.5. Geological and mineralisation domains

For the purpose of the mineral resource estimation, two main mineralised domains were interpreted (Upper and Middle Domains) and were modelled on a bottom cut-off grade of 0 ppm Li. The main mineralised domains are located within the previously broadly delineated mineralised zones, whereas the secondary mineralised domains are located outside these main mineralised zones. The main domains are shown in Figure 12.

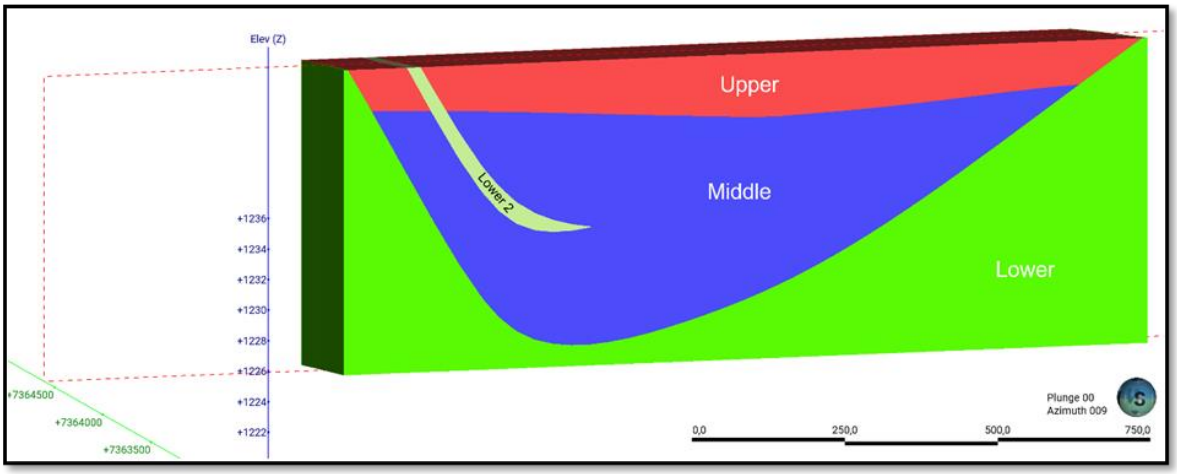


Figure 12: A cross-section indicating the different stratigraphic zones. Only the Upper and Middle units were used as domains for estimation (Expetra, 2023).

To delineate the mineralisation inside the previously defined wireframes, Indicator Kriging was implemented using a lithium cut-off grade of 0 ppm Li.

11.6. Statistical analysis of the raw data

Classical statistics of each of the individual Units was undertaken in order to establish the extent of the homogeneity within the unit, the global mean and outlier analysis.

11.6.1. Input data

Borehole logs from twenty-three auger boreholes were prepared by Bitterwasser Lithium. All boreholes were drilled vertically, and their aggregate depth was approximately 213.6 m in total. The average depth of the boreholes is 9.6 m. The holes were drilled predominantly on a regular grid spacing of 500 m x 500 m, that extends across the entire pan (Figure 13). Lithology logs, with major and minor lithology units, as well as assay results for Li (ppm) and K (%) were compiled by Bitterwasser Lithium. Due to the nature of the drilling and the deposit, no structural measurements or orientations of lithological contacts were provided. Topographical survey data was recorded using a hand-held GPS. The collar elevations were set to a constant elevation of 1 237 m above mean sea level. The data was placed in a compatible format for modelling in Leapfrog Geo® modelling software as described in section 11.7.

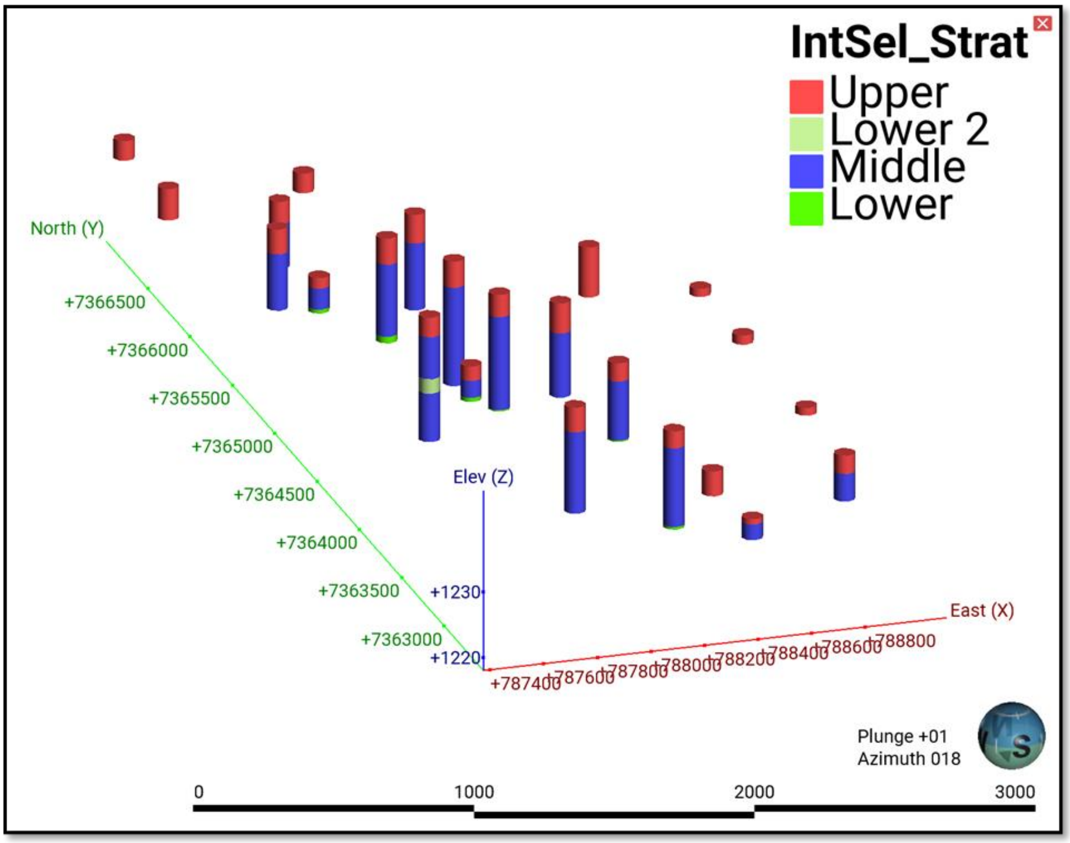


Figure 13: New Stratigraphy interval selection for modelling. Vertical exaggeration = 25 (Expetra, 2023).

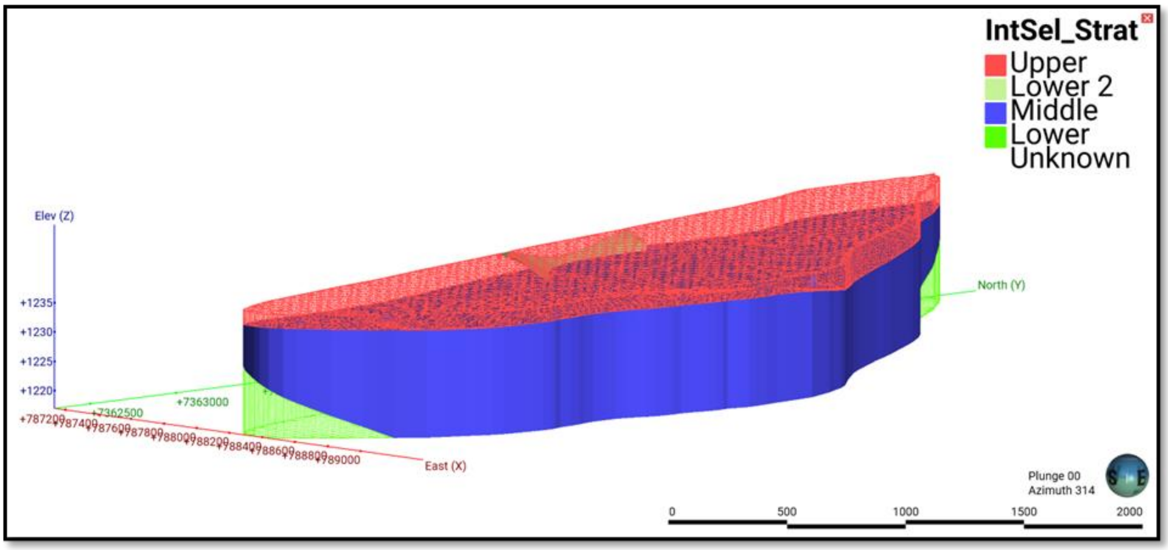


Figure 14: Unrealistic extrapolation of the Middle Unit due to a lack of intersects of the Middle-Lower stratigraphic contact. (Expetra, 2023).

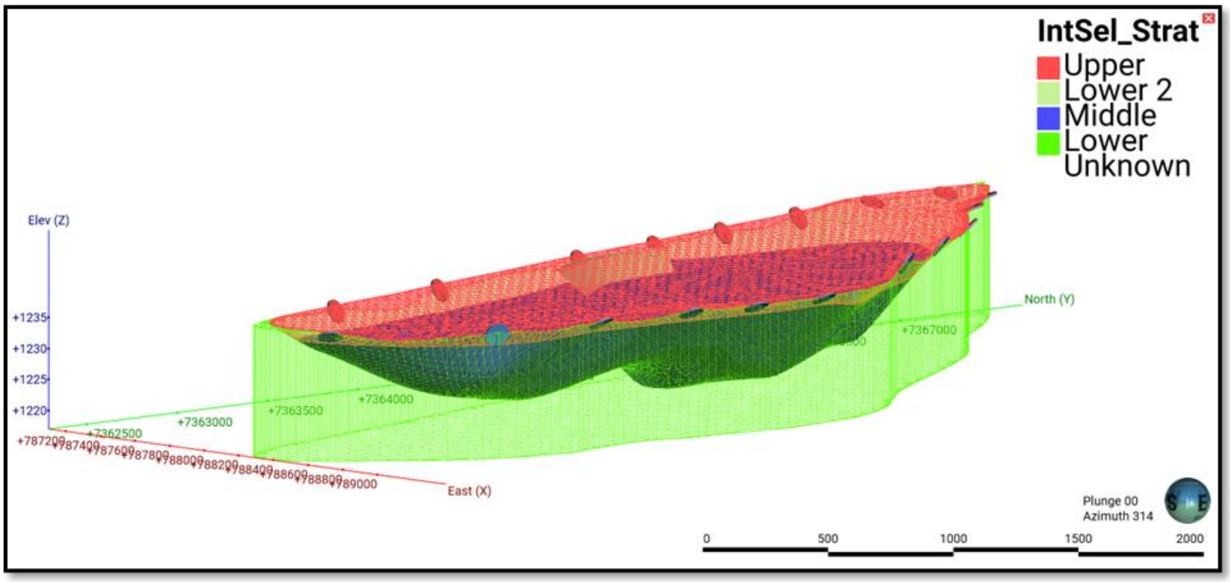


Figure 15: An improved Middle-Lower contact surface for the geological model was created by editing the surface with structural disks in Leapfrog Geo. Refer to text for more detail. (Expetra, 2023).

Interval errors and warnings in the geological data were flagged by Leapfrog Geo®. Boreholes were also visually inspected by the geologist to ensure that a "clean" database was used for modelling.

11.7. Geological modelling

11.7.1. General

A model boundary was created from a GIS outline of the Madube Pan, surveyed and supplied by Bitterwasser Lithium. Universal Transverse Mercator ('UTM') Zone 33 South, with WGS84 as datum was used as the coordinate system for all spatial data.

Implicit geological models were created in Leapfrog Geo® (Version 2022.1.1). Implicit modelling, based on a method of global interpolation using radial basis functions, provides a viable alternative to the traditional explicit modelling. Two geological models were constructed, one from the minor lithology units, and the other from the major lithology units (referred to as 'Stratigraphy' in this report) that was logged. Below follows a brief description of how these models were constructed.

11.7.2. Lithology model

An interval selection was made of the lithology units (Figure 16) that were logged to create the first geological model. All the continuous strata were modelled as 'deposits' in Leapfrog Geo. In borehole number MDB14, a low grade (Li ppm) interval was intersected from 9.4 m to 11.6 m depth. In the original logs, this interval was indicated as Mottled Transitional Brown Plastic Clay ('MSC') and 'Middle' Unit for the lithology and Main Unit logs, respectively. This is believed to be an interbedded unit within the main Middle Unit and is likely a discontinuous lens, as none of the nearby boreholes intersected the same unit. Infill drilling is suggested to better delineate these inferred lenses.

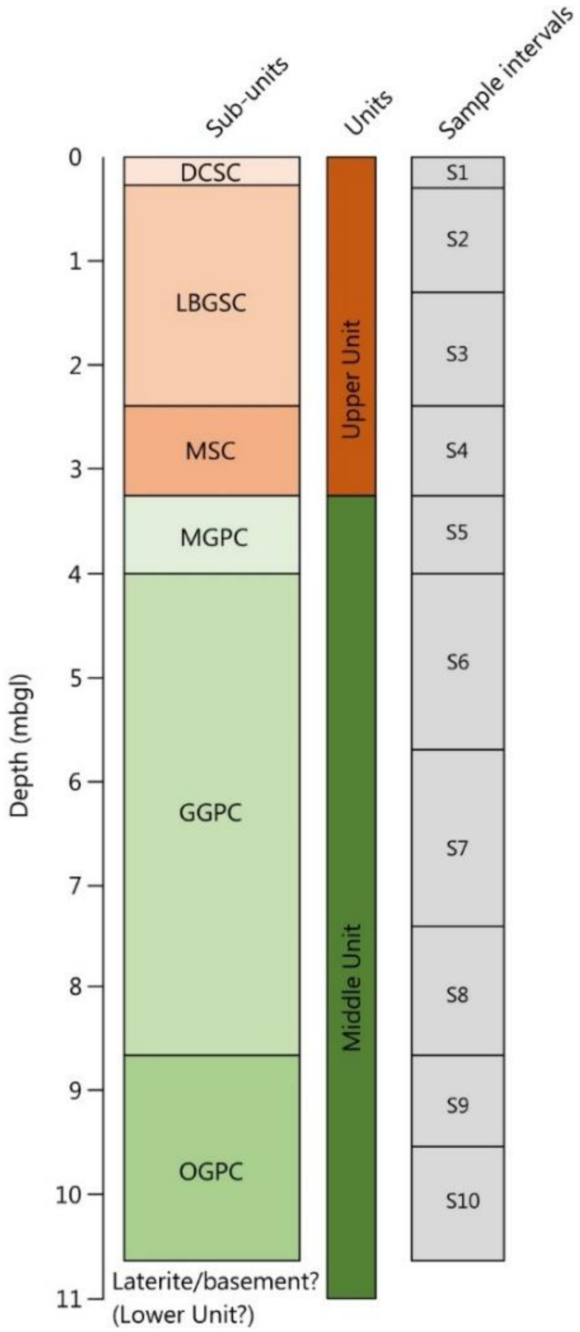
The low-grade interval mentioned above was modelled as a separate lens within the Middle Unit. The vein tool in Leapfrog Geo was used to model this lens. A "structural trend" reference surface that follows the orientation of the Middle-Lower units contact was defined along the "best fit" between the hanging wall and footwall surfaces for the construction of the lens. Since the exact extent of the lens is unknown, it was set to pinch out where it wasn't intersected by drilling.

11.7.3. Stratigraphic model

A second model was constructed from the major lithological units, which is referred to as the Stratigraphy Model here. For the Stratigraphy Model, the main volumes that were created are the Upper Unit, Middle Unit and Lower Unit as indicated in the borehole logs as shown in the generalised stratigraphy (Figure 16). The low-grade interval in borehole MDB14 was named "Lower 2" and was also modelled as a lens within the Middle Unit in this model, following the same methodology as described above. Whether this interval is indeed a" Lower" unit or not is uncertain, but it does form a distinct unit within the broader Middle Unit and was therefore modelled separately.

Only a few boreholes intersected the contact between the Middle and Lower units. This led to an unrealistic extrapolation of the Middle Unit, as an open-ended volume that supposedly extends beyond the boundaries of the pan (Figure 14). Due to the nature by which pans form, it was clear that this was a modelling artefact, and not a true representation of the geometry of the underlying units. To mitigate this problem, structural discs were added along the boundary of the pan as part of the construction of the Middle-Lower contact. The trend of the pan's boundary in specific locations was used to control the strike of the structural disks, whereas boreholes that did intersect the Lower Unit were used to guide the dip of the disks. This modification resulted in a more realistic saucer-like inward dip for the Middle-Lower contact, along the shape of the pan's outer boundary (Figure 15). Since the Middle-Lower contact is used as the basal boundary for the resource estimate, it is highly recommended that some deeper holes are drilled to confirm the depth of this contact across more parts of the pan.

Generalized stratigraphic and sample log



- **Upper Unit: Brownish grey-white sandy-clay unit**
  - Sub-unit 1: Dried & crumbly grey-white (DCSC)
  - Sub-unit 2: light grey-brown sandy clay (LBGSC)
  - Sub-unit 3: Transitional light grey-brown and mottled sandy clay (MSC)
- **Middle Unit: Plastic clay unit (fine clay)**
  - Sub-unit 1: Light grey-green fine plastic clay (GGPC)
  - Sub-unit 2: Olive-green fine plastic clay (OGPC)
  - Sub-unit 3(?): Partialy lithified olive-green fine plastic clay (LT)

Figure 16: General stratigraphy of the Madube Pan.

11.7.4. Numeric model

A multi-domained radial basis function interpolant was created as a first check of the distribution of lithium values in the Middle and Upper units of the Stratigraphic Model (Figure 17). A blended structural trend of the Middle- and Upper-units' contact surfaces was used for the interpolation.

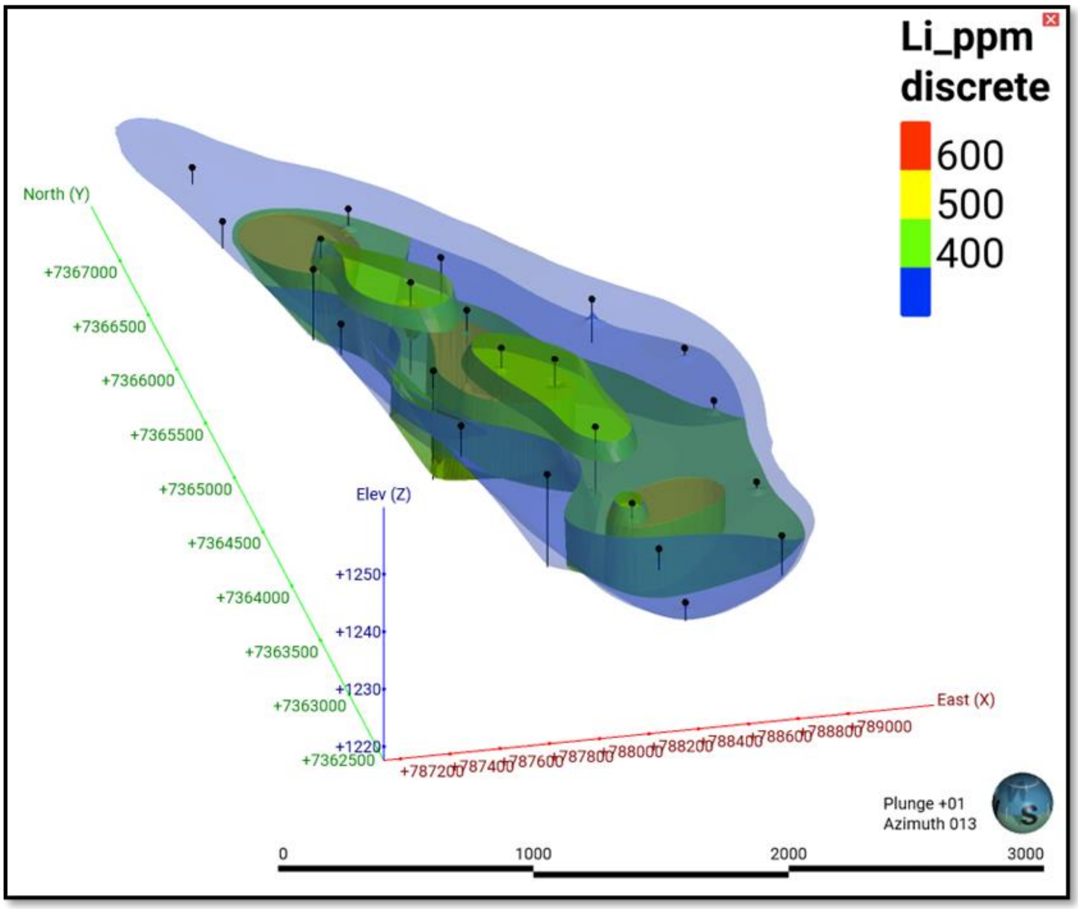
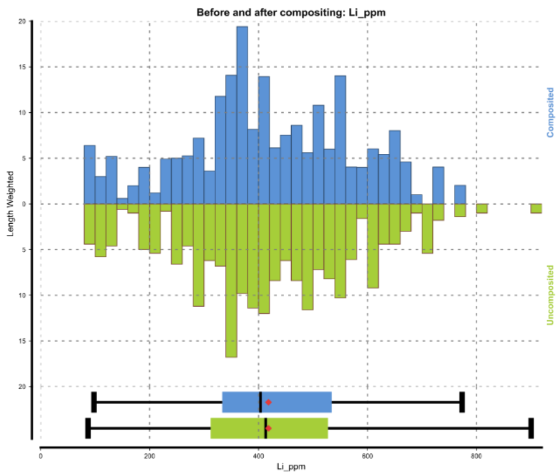


Figure 17: A radial basis function interpolant indicating discrete Li grade shells in the Madube Pan. (Expetra, 2023).

11.7.5. Compositing

Compositing of interval assay values was conducted prior to estimation to ensure that the input data is of constant support (i.e., the sample lengths are distributed equally according to grade). Compositing decreases the variability of samples and homogenises it to an appropriate data scale, which results in more robust geostatistical analysis, including variography (Deutsch & Rossi, 2014). The average sample length was 1.1 m. A length of 2 m was chosen for the compositing (Figure 18).



	Composited	Uncomposited
Count	122	181
Length	213.6	213.6
Mean	418.21	418.21
SD	156.18	162.61
CV	0.37	0.39
Variance	24392.32	26442.72
Minimum	97.75	86.95
Q1	333.23	311.94
Q2	403.44	413.17
Q3	534.15	527.47
Maximum	773.64	900.28

Figure 18: A histogram comparing the distribution of Li grade before and after compositing. (Expetra, 2023).

11.7.6. Domaining

Geostatistical domaining was investigated for units modelled in the Lithology Model, as well as the Stratigraphy model. The Middle and Upper units of the Stratigraphic Model were used for resource estimation during this phase (Figure 12). Sub-domaining was investigated, since statistical stationarity of these larger domains seems questionable (Figure 19 & 20).

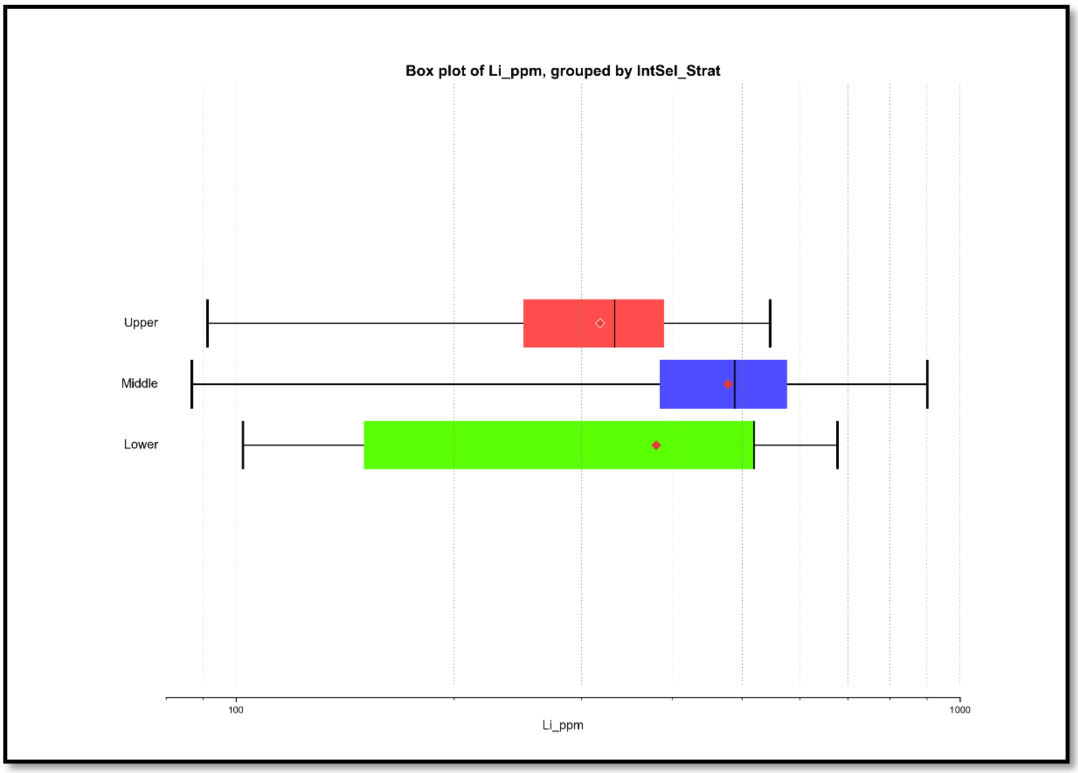


Figure 19: A box plot of the lithium values for each of the stratigraphic units. (Expetra, 2023).

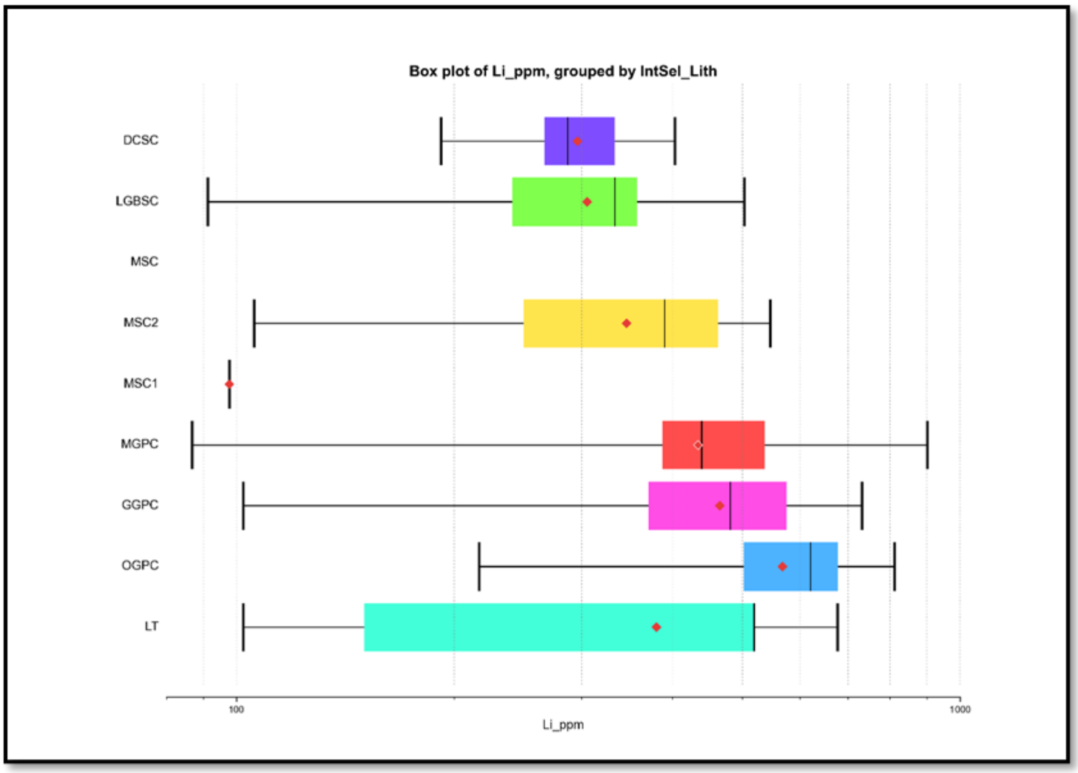


Figure 20: A box plot of the lithium values for each of the lithology units. (Expetra, 2023).

11.7.7. Variography and estimation

11.7.7.1. Variogram models

Downhole variograms were constructed to permit the determination of the nugget value, as well as the vertical or across deposit search range for the kriging estimation. In general, it was established that the average vertical range for the domains and grade was 8 samples per octant. Point experimental variograms were generated and modelled for each domain to assess the spatial variability for K (%) and Li (ppm) within the Upper and Middle domains, respectively. The parameters of the modelled variograms for the Madube Pan are summarised in Table 8 and 9.

The domain analysis performed and the stationarity of the two domains that were selected was shown to be sub-optimal. The reliability of the variograms varied to some degree. However, realistic spatial variability was demonstrated and used to assist with determining the appropriate range of influence with regards to the spatial correlation of the grade components (Figure 21).

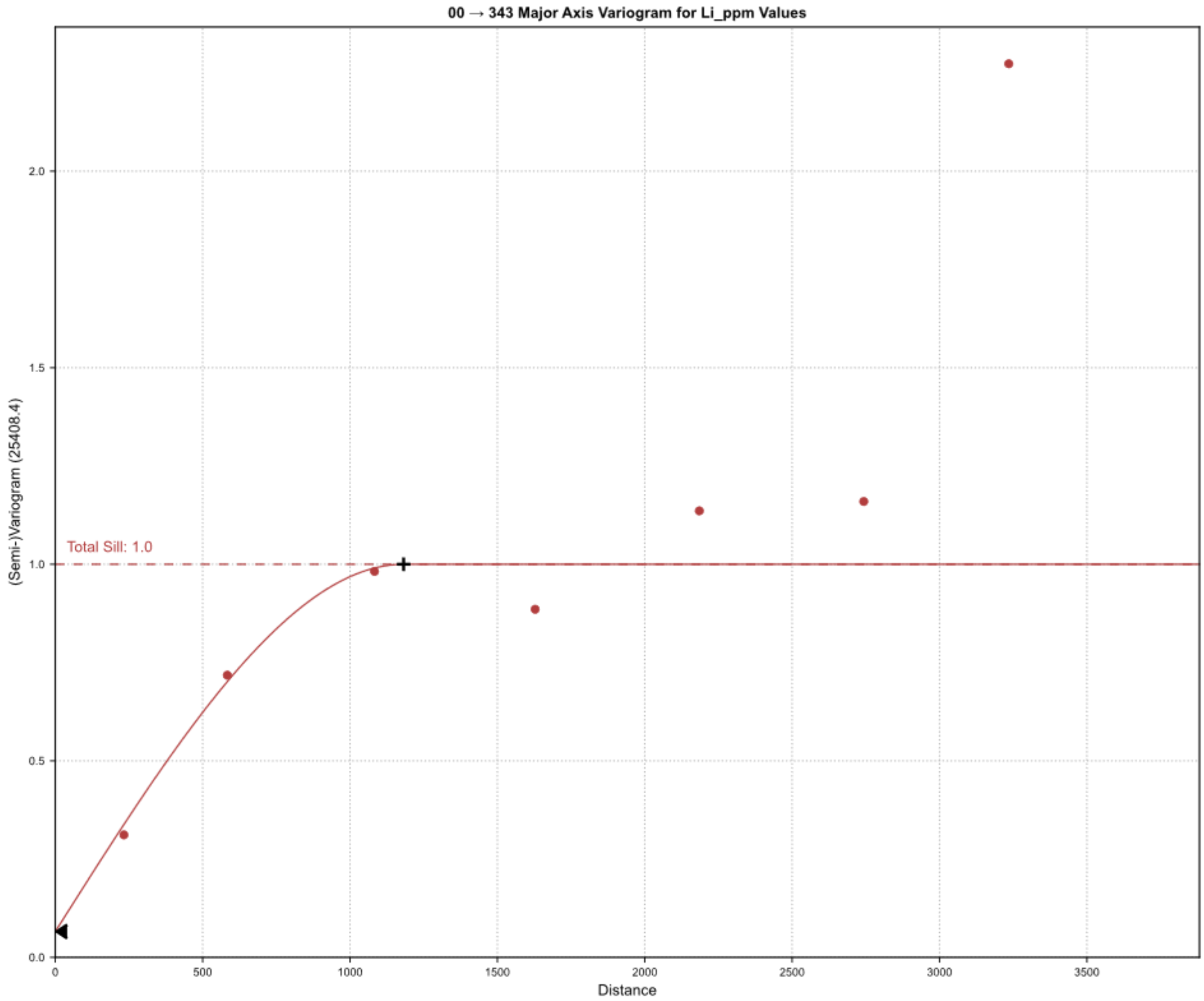


Figure 21: Major direction variogram for Li (ppm) in the Middle stratigraphic unit. (Expetra, 2023).

11.7.7.2. Estimation

Both simple and ordinary kriging estimation methodologies were undertaken for the estimation of Li (ppm) and K (%) in the Upper and Middle domains. The search neighbourhood ranges were determined from the variography. Simple kriging includes the global mean grade as a constituent of the kriging equation and was used primarily in areas which are not well informed by data. The mean grade of the population was included as part of the estimate and for this exercise ordinary kriging was used.

The global means for each domain were determined through the analysis of the statistics of various regularised data set dimensions. Expetra de-clustered the data and reviewed the means and average variances of each de-clustered data set in order to determine the most representative global mean for each domain as summarised in Tables 8 and 9. The de-clustered block size used for the de-clustering was 50 m x 50 m x 10 m.

Table 8: UPPER DOMAIN: The following are the kriging parameters for Li (ppm).

Variogram: Major (343˚), Semi-major (253˚), Minor (90˚)	
Nugget	0.041
Sph1	0.959
Block size (parent cell)	50 x 50 x 10
Sub-blocking count	5 x 5 x variable
Discretisation	10 x 10 x 10
Octant search:	
Minimum 2, maximum 16 samples total	
Maximum 8 samples per octant; maximum 7 empty sectors	
Search 1000 x 1000 x 50 first pass	
Search 3000 x 3000 x 50 second pass	
Search 5000 x 5000 x 50 third pass	

Table 9: MIDDLE DOMAIN: The following are the kriging parameters for Li (ppm).

Variogram: Major (343˚), Semi-major (253˚), Minor (90˚)	
Nugget	0.066
Sph1	0.934
Block size (parent cell)	50 x 50 x 10
Sub-blocking count	5 x 5 x variable
Discretisation	10 x 10 x 10
Octant search:	
Minimum 2, maximum 16 samples total	
Maximum 8 samples per octant; maximum 7 empty sectors	
Search 1000 x 1000 x 50 first pass	
Search 2000 x 2000 x 50 second pass	
Search 5000 x 4000 x 50 third pass	

11.7.8. Resource classification criteria

The Mineral Resource classification is a function of the confidence of the data from drilling, sampling, and analytical programmes and their contribution to the geological understanding and geostatistical relationships. The grade estimates have been classified as Inferred in accordance with JORC, 2012 guidelines based on the confidence levels of the key criteria that were considered during the resource estimation. The key criteria included both confidence in the quality of the data and geostatistical considerations. Other factors that were considered include the geological continuity of the various layers in the pan/basin, as well as their control on Li grade distribution. The confidence criteria for drilling, sampling and geological data are shown in Table 10.

Table 10: Confidence Levels for Key Input Data.

DATA SOURCES	COMMENTS	CONFIDENCE LEVEL
Drilling Techniques	Auger drilling - Industry standard approach	High
Logging	Standard nomenclature and apparent high quality	High
Drill Sample Recovery	Recovery adequate	High
Sub-sampling Techniques and Sample Preparation	Industry standard	High
Quality of Assay Data	Quality control conclusions outlined in Section 8. Some issues have been identified. Recent improvements have been noted.	Moderate
Verification of Sampling and Assaying	Dedicated sample duplicates to reproduce sample results.	High
Location of Sampling Points, Data Density and Distribution	Survey of all collars. Core mineralisation defined on an appropriate drill spacing with a small area drilled at 20mE x 20mN. Other areas more broadly spaced reflecting a lower confidence	Moderate to High
Database Integrity	Minor errors identified and rectified	High
Geological Interpretation	The broad mineralisation constraints are subject to some degree of uncertainty concerning localised mineralisation trends. Closer spaced drilling is required to resolve this issue	Moderate
Dry Bulk Density	DBD measurements taken from the adjacent Eden Pan.	Moderate

The geostatistical criteria used in the Mineral Resource classification are summarised in Table 11.

Table 11: Mineral Resource Classification Criteria.

CLASSIFICATION CRITERIA	INFERRED
Number of samples used	Inferred: 1 drill hole within search range
Distance to sample (variogram range)	Inferred: further than variogram range and within geological expected limits.
Lower confidence limit (blocks	Inferred: more than 40% (less than 60% confidence).
Kriging efficiency	Inferred: less than 10%.
Deviation from lower 90% confidence limit (data distribution within Resource area considered for classification)	Inferred: more than 20%.

11.7.9. Block model

A sub-blocked model was constructed, onto which the relevant stratigraphic units and grade estimations were evaluated/back flagged. X and Y dimensions of the parent blocks were set to 50 m, with a vertical height of 10 m. Parent blocks were divided into five sub-blocks, along the X and Y axes. Variable height sub-blocking was enabled along the Z-axis to better cover the thinner parts of the mining units (Table 12). The contacts of the Stratigraphic Model's units were used as triggers for sub-blocking.

Table 12: Block model parameters.

Parameter	Value
Dip	0.0 degrees (rotate around the X axis down from the horizontal plane)
Plunge	0.0 degrees (rotate around the X axis down from the horizontal plane)
Azimuth	0.0 degrees (then rotate clockwise around the Z axis when looking down)
Parent block size	50 x 50 x 10 (XYZ)
Size in parent blocks	57 x 115 x 3 = 19 665
Minimum parent centroid	786749.91, 7361960.8, 1213
Maximum parent centroid	789549.91, 7367660.8, 1233

Wireframe models were constructed to delineate the Inferred Resources for each domain. Expetra used the existing mineral resource category boundaries as a template to determine the new resource category areas. The resultant mineral resource classification model is presented in Figure 22, and the associated grade distribution is shown in Figure 23.

Creo is of the opinion that there is sufficient confidence in the estimate of the Inferred Resource areas to allow the appropriate application of technical parameters.

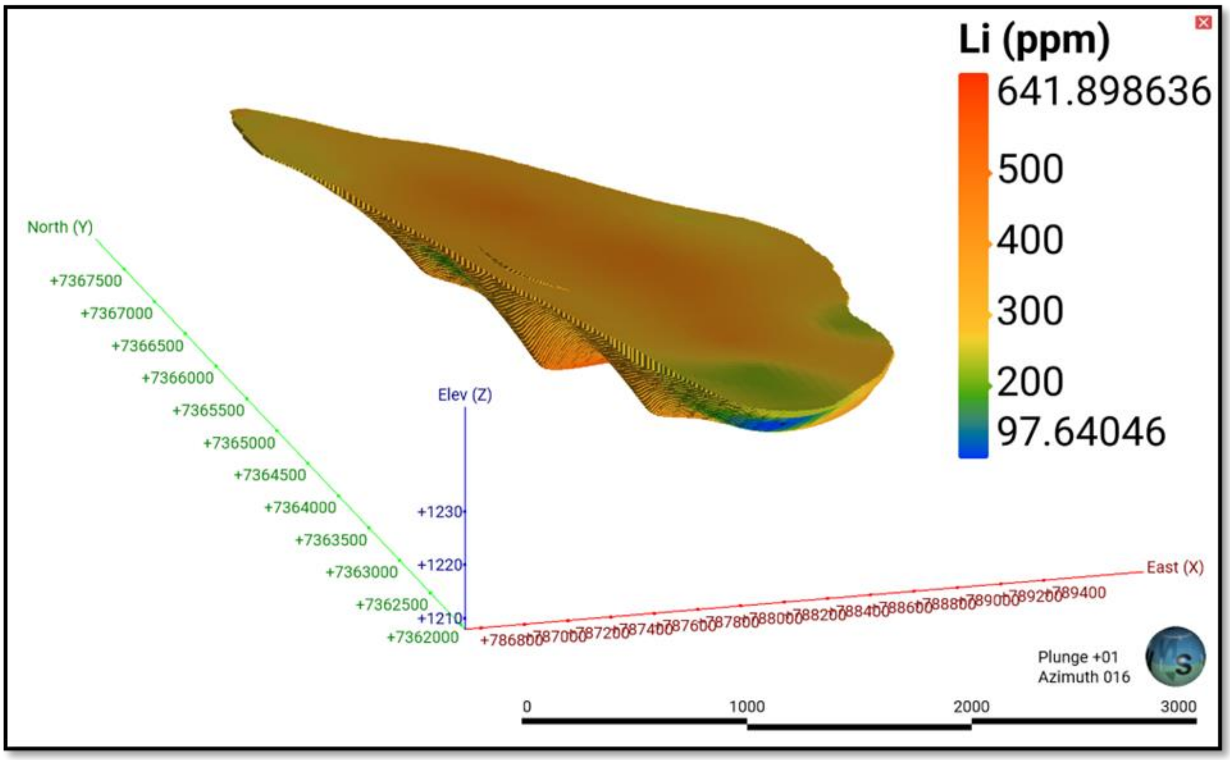


Figure 22: A few of the Li (ppm) estimation evaluated onto the block model. (Expetra, 2023).

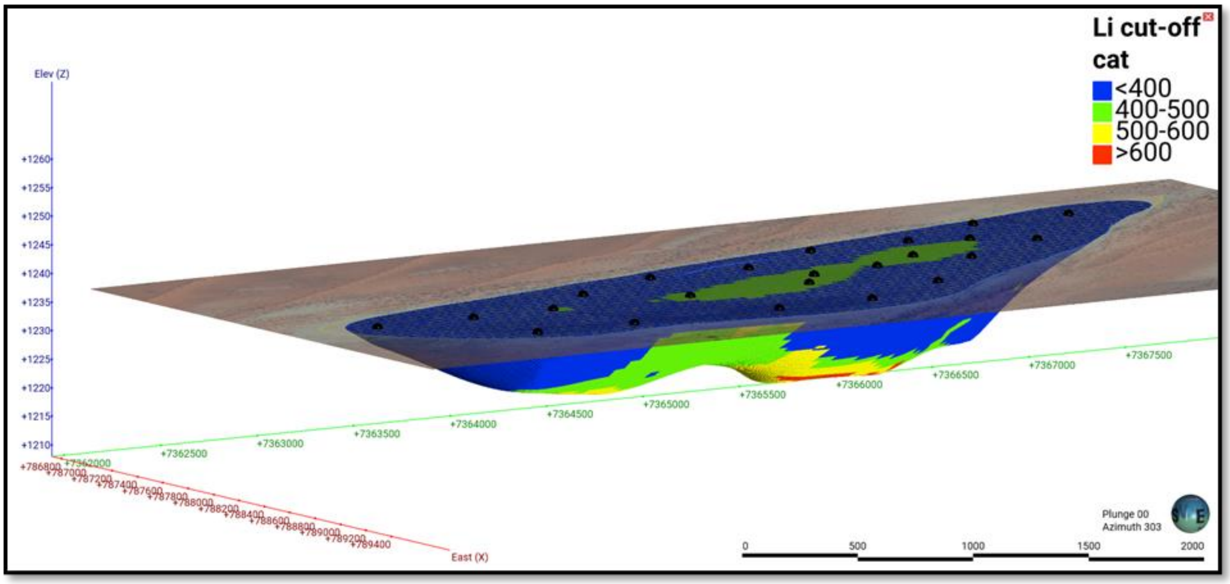


Figure 23: A screenshot of Li (ppm) grade ranges evaluated onto the block model. (Expetra, 2023).

11.7.10. Previous mineral resource reconciliation

No previous mineral resource estimate was done for the Madube Pan.

11.7.11. Mineral resource estimate

The Mineral Resource estimate was based on two groups of resources, namely the Upper, and Middel Units which refers all the material inside the wire frames, and the Secondary Unit which refers to the economic mineralisation material outside the wire frames. A summary of the estimated JORC compliant Mineral Resources for the Bitterwasser Project at various cut-off grades is provided in Tables 13 to 16. The estimate includes all the main mineralised geological domains.

Average densities indicated in the Tables below were supplied by Bitterwasser Lithium, based on 23 and 15 specific gravity measurements in the nearby Eden Pan for the Middle and Upper units, respectively. Areas that fall within the following lithium grade ranges (< 400 ppm; 400 - 500 ppm; 500 - 600 ppm; > 600 ppm) were evaluated onto the block model (Figure 23). No geological or mining losses were applied.

Inferred Mineral Resources have a significant degree of uncertainty as to whether they can be mined economically, and it cannot be assumed that all or any part of the Inferred Resource will be upgraded to a higher confidence category. In compliance with JORC it is noted that Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. However, Mineral Reserves that do have demonstrated economic viability have been recorded.

Table 13: Resource report (no cut-off) for the Madube Pan.

Stratigraphic Unit	**Volume** (m^3)	**Density** (g/cm^3)	**Tonnes**	***Average Value***		***Material Content***	
				Li (ppm)	**K%**	**Li (t)**	**K (t)**
Upper	13 538 786	2.00	27 118 188	339.48	2.07	9 206	561 430
Middle	27 532 386	1.82	50 108 942	433.16	1.97	21 705	989 049
Total	**41 071 172**	**1.88**	**77 227 130**	**400.27**	**2.01**	**30 911**	**1 550 479**

Differences may occur in totals due to rounding.

Table 14: Resource report (cut-off Li (ppm) ≥ 400) for the Madube Pan.

Stratigraphic Unit	**Volume** (m^3)	**Density** (g/cm^3)	**Tonnes**	***Average Value***		***Material Content***	
				Li (ppm)	**K%**	**Li (t)**	**K (t)**
Upper	2 130 630	2.00	4 267 653	415.67	2.09	1 774	89 179
Middle	17 955 595	1.82	32 679 183	495.03	1.98	16 177	647 802
Total	**20 086 225**	**1.84**	**36 946 836**	**485.87**	**1.99**	**17 951**	**736 981**

Differences may occur in totals due to rounding.

Table 15: Resource report (cut-off Li (ppm) ≥ 500) for the Madube Pan.

Stratigraphic Unit	**Volume** (m^3)	**Density** (g/cm^3)	**Tonnes**	***Average Value***		***Material Content***	
				Li (ppm)	**K%**	**Li (t)**	**K (t)**
Upper	0	0.00	0	—	—	0	0
Middle	7 536 478	1.82	13 716 390	553.00	2.00	7 585	273 843
Total	**7 536 478**	**1.82**	**13 716 390**	**553.00**	**2.00**	**7 585**	**273 843**

Differences may occur in totals due to rounding.

Table 16: Resource report (cut-off Li (ppm) ≥ 600) for the Madube Pan.

Stratigraphic Unit	Volume (m^3)	Density (g/cm^3)	Tonnes	Average Value		Material Content	
				Li (ppm)	K%	Li (t)	K (t)
Upper	0	0.00	0	—	—	0	0
Middle	1 012 072	1.82	1 841 970	611.25	2.00	1 126	36 816
Total	**1 012 072**	**1.82**	**1 841 970**	**611.25**	**2.00**	**1 126**	**36 816**

Differences may occur in totals due to rounding.

11.7.12. Mineral resource statement

The audited Mineral Resource and Mineral Reserve statement for Bitterwasser Lithium's Bitterwasser Project at Madube Pan was issued on 25 April 2023.

The Mineral Resource statement for Bitterwasser Lithium as at 25 April 2023 is presented in Table 17. The statement in Table 17 details the total estimated resource for the drilled portion (approximately 100%) of the Madube Pan at various lithium cut-off grades.

This statement is valid until supplementary drilling has been done. No adjustment of the Resource Statement to take account of mining depletion is foreseen before the EPL is converted to a mining licence.

Table 17: Mineral Resource Estimate for the Bitterwasser Project Madube Pan at Various Cut-off Grades, 25 April 2023.

CATEGORY	UNIT	TONNAGE ton	GRADE Li ppm	CONTAINED Li ton
Cut-off Grade of 0 ppm Li				
Indicated	Upper	-	-	-
	Middle	-	-	-
	Total Indicated	-	-	-
Inferred	Upper	27 118 188	339.48	9 206
	Middle	50 108 942	433.16	21 705
	Total Inferred	77 227 130	400.27	30 911
Cut-off Grade of 400 ppm Li				
Indicated	Upper	-	-	-
	Middle	-	-	-
	Total Indicated	-	-	-
Inferred	Upper	4 267 653	415.67	1 774
	Middle	32 679 183	495.03	16 177
	Total Inferred	36 946 836	485.87	17 951
Cut-off Grade of 500 ppm Li				
Indicated	Upper	-	-	-
	Middle	-	-	-
	Total Indicated	-	-	-
Inferred	Upper	-	-	-
	Middle	13 716 390	553.00	7 585
	Total Inferred	13 716 390	553.00	7 585
Cut-off Grade of 600 ppm Li				
Indicated	Upper	-	-	-
	Middle	-	-	-
	Total Indicated	-	-	-
Inferred	Upper	-	-	-
	Middle	1 841 970	611.25	1 126
	Total Inferred	1 841 970	611.25	1 126

The Mineral Resource has been classified as an Inferred Mineral Resource following the guidelines and procedures for classifying the reported Mineral Resources were undertaken within the context of JORC (2012).

The classification is based upon an assessment of geological understanding of the deposit, geological and mineralisation continuity, drill hole spacing, quality control results, search and estimation parameters, and an analysis of available bulk density data.

The criteria reviewed for classification was as:

- Level of understanding of mineralisation controls.
- Ability to demonstrate geological continuity and understanding of geological setting.
- Assessment of data quality.
- Review of QA/QC procedures applied.
- Review of the drill hole spacing, and estimation quality of statistics applied.

The drill spacing is sufficient to allow the geology and mineralisation zones to be modelled into coherent wireframes for each domain. Reasonable consistency is evident in the orientations, thickness and grades of the Inferred Mineral Resources.

The Bitterwasser Madube Pan estimate compiled by Expetra (2023) has been classified and reported as an Inferred Mineral Resource under the guidelines and procedures for classifying the reported Mineral Resources proposed by JORC (2012).

Creo is of the opinion that realistic prospects for the economic extraction of lithium exists at the Bitterwasser Madube Pan deposit.

The Mineral Resource Statement has been presented as at 25 April 2023 (Table 18).

Table 18: JORC Compliant Mineral Resource Estimate for the Bitterwasser Project at 500 ppm Li cut-off grade – 25 April 2023.

Inferred Mineral Resource		
Tonnage (ton)	**Grade (ppm Li)**	**Contained Lithium (ton)**
13 716 390	**553.00**	**7 585**

12. Creo Comments

The inclusive approach adopted in the estimation of mineral resource here is a consequence of the ability to predict even over long distances the extent and grade of the deposit due to the uncomplicated lithological composition and mineralisation style and the correct interpretations thereof. It can be accepted that despite the simplicity of the mineralised horizons and the estimation techniques applied, the estimation methodology used succeeded in presenting a reliable estimate of the resource volume and grade for the Madube Pan.

Creo considers there is good potential for the delineation of further Mineral Resources and Mineral Reserves following on-going exploration and development. The Bitterwasser Lithium economic model includes an annual revolving drilling budget to investigate the extensions to known lithium deposits outside of the currently defined Mineral Resource base.

Creo considers that the quantity and quality of the drilling, sampling, sample preparation and sample handling is sufficient to delineate the Mineral Resources to the level of confidence implied by the classification used in the audited Mineral Reserve statement as presented above.

13. Conclusions and Recommendations

Creo concludes that the interpretation of the geological and grade continuity at the Madube Pan is understood with a reasonable degree of confidence. Based on the information presented, Creo considers the data collection procedures applied during the sampling phase appropriate and the sample database suitable for the purpose of resource estimation.

Creo considers the quality of the drilling, sampling, sample preparation and sample handling to be of a high standard. Sampling and sample processing were considered sufficient to delineate a Mineral Resource to the level of confidence required by JORC. This resulted in the entire Madube Pan area explored by Bitterwasser Lithium to be classified as an Inferred Mineral Resource.

Creo belief that higher levels of confidence in the geology and grade distribution could be achieved by closer-spaced drilling and through a better understanding of the chemical controls of the mineralisation. High resolution surveying of bore hole collars will assist in improving the confidence of resource volume figures.

Creo believes that the auger drilling done in the Upper and Middle Units is currently sufficient for delineating a sizeable open pit mine with an appreciable proportion of material in the Inferred category.

Auger drilling data and the 3D modelling undertaken indicates that mineralisation may open ended in depth. Extensional diamond core drilling will improve the geological as well as the resource confidence in the areas currently delineated mineral resource. Further to that, it is very likely that the present-day pans such as the Madube Pan, perceived to be confined by dunes in a larger dune field, are in fact part of one large pan in part obscured by mobile dunes in transit over the pan. Here a very good probability exists that the pans seen today are part of a larger pan with younger dunes migrating over and masking a larger pan feature. To clarify this issue the remaining thirteen neighbouring unexplored pans should receive attention in future exploration phases. To date only the lithium bearing clay has been considered as a potential resource target with no work done on the brine potential at this prospect yet. Similarly, the potassium and boron potential at the Madube Pan remains yet unassessed.

Bitterwasser Lithium is to execute further exploration work in order to potentially delineate the saline and/or brine aquifer system (represented by the electrically conducive anomaly underlying the mineralized Li-clay sequences) in the Madube Pan. Bitterwasser Lithium is also to prove the existence of significant Li grades within this saline and/or brine aquifer. This exploration programme could be conducted in three phases.

Phase 1 would seek to confirm that lithium is associated with some, or all of the aquifers known to occur at depth within the Bitterwasser saltpan complex. Several domestic water-supply boreholes in the Bitterwasser saltpan complex are to be analysed for this purpose. If Phase 1 is successful, the area with the highest potential would be selected for further airborne electromagnetic- and magnetic-surveying in order to identify favourable structurally hosted sub-basins and or Li enriched saline and/or brine aquifers which may be hosted. Exploration drill targets would be selected from these results and a limited number of drillholes (4 to 6) would be drilled with the aim of intersecting Li bearing clays and/or brines. If intersections from this drilling are found to be economically significant further exploration would be conducted to add to the existing resource volume.

Bitterwasser Lithium plans to advance the project by commencing with the prospecting and test work listed below as a next phase of exploration:

1. A high-resolution topographic survey of the Madube Pan surface to increase the MRE confidence level. This will include the generation of a digital terrain model from the surveyed data which will enhance the accuracy of the geological model and the resource estimate.

2. Drilling of 4 diamond core holes at the Madube Pan to support and enhance the classification and MRE of additional resources.

3. Initiate a drilling campaign on the remaining 13 neighbouring pans at Bitterwasser (2 - 3 holes in the centre of each pan) and if good lithium grades are encountered in a particular pan the pan will be drilled out on an appropriate grid.

4. Bulk testing using mineral processing cyclones to determine if the clay fraction could be separated from the sand/silt fraction as a possible method to increase the lithium grade prior to leaching.

5. Investigate the best recovery process flow to recover lithium as lithium carbonate.

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Competent Person's Consent

Pursuant to the requirements of Listing Rules and
Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

Report name

Independent Geological Report on the Lithium Resource at the Madube Pan, Bitterwasser, Hardap Region, Namibia

Released by Bitterwasser Lithium Exploration (Pty) Ltd

On the Lithium Resources at the Madube Pan, Bitterwasser, Hardap Region, Namibia on which the Report is based, for the period ended 25 April 2023.

25 April 2023

Statement

I, Johan Hattingh

confirm that I am the Competent Person for the Report and that:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code 2012 Edition, having twenty-two years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am registered with the South African Council for Natural Scientific Professions.
- I have reviewed the Report to which this Consent Statement applies.

I am a full-time employee of Creo Design (Pty) Ltd and have been engaged by Bitterwasser Lithium Exploration (Pty) Ltd to prepare the documentation for on the Lithium Resources at the Madube Pan, Bitterwasser, Hardap Region, Namibia on which the Report is based, for the period ended 25 April 2023.

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Exploration Targets, Exploration Results, Mineral Resources.

Consent

I consent to the release of the Report and this Consent Statement by the directors of:

Bitterwasser Lithium Exploration (Pty) Ltd

	25 April 2023
Signature of Competent Person	Date:
South African Council for Natural Scientific Professions	#400112/93
Professional Membership:	Membership Number:
	Riaan Zeeman
Signature of Witness:	Print Witness Name and Residence:
	Robertson

Appendix I

List of all samples collected during the auger drilling programme.

Hole ID	Sample ID	From (m)	To (m)	Width (m)	Sample Weight (kg)
MDB01	Y0001	0.00	0.40	0.40	1.25
MDB01	Y0002	0.40	1.20	0.80	2.20
MDB01	Y0003	1.20	2.00	0.80	2.28
MDB01	Y0004	2.00	3.00	1.00	2.10
MDB01	Y0005	3.00	4.20	1.20	2.98
MDB01	Y0006	4.20	5.40	1.20	2.48
MDB01	Y0007	5.40	6.20	0.80	2.48
MDB01	Y0008	6.20	6.80	0.60	2.36
MDB01	Y0009	6.80	8.00	1.20	3.54
MDB01	Y0010	8.00	8.40	0.40	1.03
MDB01	Y0011	8.40	10.00	1.60	2.58
MDB01	Y0012	10.00	10.60	0.60	2.20
MDB01	Y0013	10.60	11.20	0.60	1.52
MDB01	Y0014	11.20	12.80	1.60	3.49
MDB01	Y0015	12.80	14.00	1.20	2.74
MDB01	Y0016	14.00	15.00	1.00	2.16
MDB02	Y0017	0.00	0.60	0.60	1.75
MDB02	Y0018	0.60	1.40	0.80	2.68
MDB02	Y0019	1.40	2.60	1.20	2.98
MDB02	Y0021	2.60	3.20	0.60	2.52
MDB02	Y0022	3.20	4.60	1.40	3.54
MDB02	Y0023	4.60	5.20	0.60	1.21
MDB02	Y0024	5.20	6.00	0.80	1.61
MDB02	Y0025	6.00	6.60	0.60	1.02
MDB02	Y0026	6.60	7.60	1.00	2.30
MDB02	Y0027	7.60	8.60	1.00	2.70
MDB02	Y0028	8.60	9.20	0.60	1.43
MDB02	Y0029	9.20	10.00	0.80	1.77
MDB02	Y0030	10.00	10.80	0.80	2.14
MDB02	Y0031	10.80	12.00	1.20	2.60
MDB03	Y0032	0.00	0.40	0.40	1.29
MDB03	Y0033	0.40	1.40	1.00	3.02
MDB03	Y0034	1.40	2.60	1.20	2.79
MDB03	Y0035	2.60	3.40	0.80	2.17
MDB03	Y0036	3.40	4.20	0.80	2.69
MDB03	Y0037	4.20	5.00	0.80	1.55
MDB03	Y0038	5.00	5.80	0.80	1.84
MDB03	Y0039	5.80	7.20	1.40	2.90
MDB03	Y0041	7.20	8.00	0.80	2.04
MDB03	Y0042	8.00	9.00	1.00	2.47
MDB03	Y0043	9.00	10.20	1.20	3.18

MDB03	Y0044	10.20	11.00	0.80	2.48
MDB03	Y0045	11.00	11.60	0.60	1.88
MDB03	Y0046	11.60	13.00	1.40	2.40
MDB03	Y0047	13.00	14.00	1.00	2.23
MDB03	Y0048	14.00	15.40	1.40	3.36
MDB03	Y0049	15.40	16.80	1.40	2.80
MDB03	Y0050	16.80	17.80	1.00	2.49
MDB04	Y0051	0.40	1.40	1.00	2.47
MDB04	Y0052	1.40	2.40	1.00	2.21
MDB04	Y0053	2.40	3.00	0.60	1.37
MDB04	Y0054	3.00	4.00	1.00	2.10
MDB04	Y0055	4.00	5.00	1.00	2.10
MDB04	Y0056	6.00	7.40	1.40	2.25
MDB04	Y0057	7.40	8.60	1.20	2.68
MDB04	Y0058	8.60	9.40	0.80	1.63
MDB04	Y0059	9.40	10.80	1.40	3.00
MDB04	Y0061	10.80	12.60	1.80	3.39
MDB04	Y0062	12.60	13.60	1.00	3.28
MDB04	Y0063	13.60	14.40	0.80	2.17
MDB04	Y0064	14.40	15.00	0.60	1.19
MDB04	Y0065	15.00	16.00	1.00	2.43
MDB05	Y0066	0.00	0.40	0.40	1.48
MDB05	Y0067	0.40	1.00	0.60	2.23
MDB05	Y0068	1.00	2.40	1.40	3.73
MDB05	Y0069	2.40	3.40	1.00	2.11
MDB05	Y0070	3.40	4.40	1.00	2.27
MDB05	Y0071	4.40	5.60	1.20	2.41
MDB05	Y0072	5.60	7.00	1.40	2.53
MDB05	Y0073	7.00	8.00	1.00	4.00
MDB05	Y0074	8.00	9.00	1.00	3.41
MDB05	Y0075	9.00	10.20	1.20	2.46
MDB06	Y0076	0.00	1.20	1.20	4.11
MDB06	Y0077	1.20	3.00	1.80	4.37
MDB07	Y0078	0.00	1.20	1.20	3.58
MDB07	Y0079	1.20	3.40	2.20	4.87
MDB07	Y0081	3.40	4.80	1.40	4.10
MDB08	Y0082	0.00	3.00	3.00	5.16
MDB09	Y0083	0.00	2.40	2.40	5.06
MDB09	Y0084	2.40	3.80	1.40	4.79
MDB09	Y0085	3.80	4.60	0.80	2.61
MDB09	Y0086	4.60	6.00	1.40	2.80
MDB09	Y0087	6.00	7.00	1.00	2.86
MDB09	Y0088	7.00	8.00	1.00	3.26
MDB09	Y0089	8.00	9.00	1.00	2.67
MDB09	Y0090	9.00	10.00	1.00	2.75
MDB09	Y0091	10.00	11.00	1.00	3.25

MDB09	Y0092	11.00	12.40	1.40	3.93
MDB10	Y0093	0.00	3.00	3.00	5.61
MDB10	Y0094	3.00	4.40	1.40	3.33
MDB10	Y0095	4.40	6.00	1.60	3.53
MDB10	Y0096	6.00	7.00	1.00	3.05
MDB10	Y0097	7.00	8.00	1.00	3.71
MDB10	Y0098	8.00	9.00	1.00	2.82
MDB10	Y0099	9.00	10.00	1.00	3.07
MDB10	Y0101	10.00	11.00	1.00	2.88
MDB10	Y0102	11.00	12.00	1.00	3.41
MDB10	Y0103	12.00	13.20	1.20	3.00
MDB10	Y0108	13.00	13.80	0.80	4.56
MDB10	Y0109	13.80	14.60	0.80	4.44
MDB11	Y0104	0.00	1.60	1.60	3.29
MDB11	Y0105	1.60	3.00	1.40	4.90
MDB11	Y0106	3.00	4.00	1.00	2.59
MDB11	Y0107	4.00	5.40	1.40	2.99
MDB12	Y0110	0.00	2.60	2.60	3.76
MDB12	Y0111	2.60	4.00	1.40	3.68
MDB12	Y0112	4.00	5.40	1.40	3.44
MDB12	Y0113	5.40	7.00	1.60	4.71
MDB12	Y0114	7.00	8.00	1.00	3.61
MDB12	Y0115	8.00	9.00	1.00	3.02
MDB12	Y0116	9.00	10.00	1.00	2.63
MDB12	Y0117	10.00	11.00	1.00	3.61
MDB12	Y0118	11.00	12.00	1.00	3.22
MDB12	Y0119	12.00	13.00	1.00	3.40
MDB12	Y0121	13.00	14.00	1.00	2.46
MDB12	Y0122	14.00	15.00	1.00	2.77
MDB12	Y0123	15.00	16.00	1.00	2.95
MDB12	Y0124	16.00	17.00	1.00	3.75
MDB12	Y0125	17.00	18.00	1.00	2.88
MDB12	Y0126	18.00	19.00	1.00	3.34
MDB13	Y0127	0.00	1.00	1.00	2.47
MDB13	Y0128	2.00	4.00	2.00	4.73
MDB13	Y0129	4.00	6.60	2.60	6.14
MDB13	Y0130	6.60	7.60	1.00	2.05
MDB14	Y0131	0.00	3.00	3.00	5.66
MDB14	Y0132	3.00	4.00	1.00	2.16
MDB14	Y0133	4.00	5.00	1.00	2.40
MDB14	Y0134	5.00	6.00	1.00	1.95
MDB14	Y0135	6.00	8.00	2.00	4.28
MDB14	Y0136	8.00	9.40	1.40	2.99
MDB14	Y0137	9.40	11.60	2.20	4.72
MDB14	Y0138	11.60	13.00	1.40	2.84
MDB14	Y0139	13.00	14.00	1.00	1.77

MDB14	Y0141	14.00	16.00	2.00	2.91
MDB14	Y0142	16.00	17.00	1.00	4.47
MDB14	Y0143	17.00	18.00	1.00	2.52
MDB14	Y0144	18.00	19.00	1.00	2.20
MDB15	Y0145	0.00	2.40	2.40	5.02
MDB15	Y0146	2.40	4.60	2.20	3.97
MDB15	Y0147	4.60	6.00	1.40	3.94
MDB15	Y0148	6.00	7.00	1.00	2.25
MDB15	Y0149	7.00	8.00	1.00	2.60
MDB15	Y0150	8.00	9.00	1.00	2.31
MDB15	Y0151	9.00	10.00	1.00	2.74
MDB15	Y0152	10.00	11.00	1.00	2.55
MDB15	Y0153	11.00	12.00	1.00	1.94
MDB15	Y0154	12.00	13.00	1.00	2.73
MDB15	Y0155	13.00	14.00	1.00	2.64
MDB15	Y0156	14.00	14.40	0.40	0.94
MDB16	Y0157	0.00	1.20	1.20	2.43
MDB17	Y0158	0.00	0.22	0.22	5.15
MDB17	Y0159	2.20	4.80	2.60	6.83
MDB17	Y0161	4.80	5.40	0.60	1.86
MDB18	Y0162	0.00	1.40	1.40	2.05
MDB19	Y0164	0.00	3.00	3.00	4.41
MDB19	Y0165	3.00	3.80	0.80	2.98
MDB19	Y0166	3.80	5.00	1.20	2.57
MDB19	Y0167	5.00	6.00	1.00	2.96
MDB19	Y0168	6.00	7.00	1.00	2.65
MDB19	Y0169	7.00	8.00	1.00	2.51
MDB19	Y0170	8.00	9.00	1.00	2.30
MDB19	Y0171	9.00	10.00	1.00	2.44
MDB19	Y0172	10.00	11.00	1.00	2.39
MDB19	Y0173	11.00	12.00	1.00	2.30
MDB19	Y0174	12.00	13.00	1.00	2.64
MDB19	Y0186	14.00	15.00	1.00	2.52
MDB19	Y0187	15.00	16.20	1.20	3.27
MDB21	Y0163	0.00	1.20	1.20	4.01
MDB22	Y0175	13.00	14.00	1.00	2.45
MDB22	Y0176	0.00	2.00	2.00	6.24
MDB22	Y0177	2.00	3.00	1.00	4.04
MDB22	Y0178	3.00	3.80	0.80	3.60
MDB23	Y0179	0.00	1.80	1.80	4.35
MDB23	Y0181	1.80	2.40	0.60	2.86
MDB23	Y0182	2.40	3.00	0.60	2.98
MDB23	Y0183	4.00	5.00	1.00	3.71
MDB23	Y0184	5.00	6.00	1.00	3.35
MDB23	Y0185	6.00	7.00	1.00	3.69
MDB24	Y0188	0.00	0.80	0.80	3.31

MDB24	Y0189	0.80	2.00	1.20	5.94
MDB24	Y0190	2.00	3.20	1.20	6.10

Appendix II

Assays results of all samples collected during the auger drilling programme.

Hole ID	Sample ID	Sample Weight (kg)	Li (ppm)	K (%)	Mg (%)
MDB01	Y0001	1.25	243	2.04	6.82
MDB01	Y0002	2.2	362	2.41	9.31
MDB01	Y0003	2.28	426	2.29	10.25
MDB01	Y0004	2.1	486	2.15	10.02
MDB01	Y0005	2.98	496	2.35	9.82
MDB01	Y0006	2.48	560	1.94	9.76
MDB01	Y0007	2.48	649	2.08	11.13
MDB01	Y0008	2.36	586	2.41	10.12
MDB01	Y0009	3.54	551	2.16	10.06
MDB01	Y0010	1.03	439	2.20	8.70
MDB01	Y0011	2.58	563	2.13	11.53
MDB01	Y0012	2.2	502	1.92	10.37
MDB01	Y0013	1.52	539	1.63	10.02
MDB01	Y0014	3.49	710	1.59	12.18
MDB01	Y0015	2.74	635	2.42	9.35
MDB01	Y0016	2.16	672	2.42	9.63
MDB02	Y0017	1.75	255	2.14	7.17
MDB02	Y0018	2.68	350	2.25	9.37
MDB02	Y0019	2.98	494	2.39	10.56
MDB02	Y0021	2.52	470	1.99	10.20
MDB02	Y0022	3.54	465	2.54	10.26
MDB02	Y0023	1.21	552	2.64	10.40
MDB02	Y0024	1.61	537	2.08	10.11
MDB02	Y0025	1.02	561	2.18	10.51
MDB02	Y0026	2.3	515	2.26	10.52
MDB02	Y0027	2.7	416	2.23	8.13
MDB02	Y0028	1.43	496	2.01	9.99
MDB02	Y0029	1.77	464	1.99	10.27
MDB02	Y0030	2.14	404	2.07	8.51
MDB02	Y0031	2.6	334	1.81	7.97
MDB03	Y0032	1.29	257	1.94	5.14
MDB03	Y0033	3.02	367	2.22	7.09
MDB03	Y0034	2.79	448	2.22	7.79
MDB03	Y0035	2.17	510	1.91	8.09
MDB03	Y0036	2.69	490	2.23	7.34
MDB03	Y0037	1.55	559	1.92	7.77
MDB03	Y0038	1.84	608	1.35	8.35
MDB03	Y0039	2.9	610	1.35	9.04
MDB03	Y0041	2.04	608	2.27	8.95
MDB03	Y0042	2.47	519	1.90	8.07
MDB03	Y0043	3.18	603	2.45	8.74

MDB03	Y0044	2.48	629	2.16	7.72
MDB03	Y0045	1.88	659	1.92	7.92
MDB03	Y0046	2.4	766	1.59	9.07
MDB03	Y0047	2.23	812	2.49	8.67
MDB03	Y0048	3.36	720	2.41	7.82
MDB03	Y0049	2.8	626	2.16	7.34
MDB03	Y0050	2.49	677	2.01	8.00
MDB04	Y0051	2.47	361	2.15	7.23
MDB04	Y0052	2.21	504	2.26	8.48
MDB04	Y0053	1.37	547	2.14	8.85
MDB04	Y0054	2.1	493	2.34	8.39
MDB04	Y0055	2.1	548	2.26	8.70
MDB04	Y0056	2.25	577	1.97	8.64
MDB04	Y0057	2.68	539	2.01	8.37
MDB04	Y0058	1.63	516	1.66	9.67
MDB04	Y0059	3	707	2.09	9.79
MDB04	Y0061	3.39	732	1.83	10.12
MDB04	Y0062	3.28	413	2.16	6.05
MDB04	Y0063	2.17	184	2.06	2.28
MDB04	Y0064	1.19	486	2.95	6.52
MDB04	Y0065	2.43	519	3.10	7.56
MDB05	Y0066	1.48	243	2.12	6.32
MDB05	Y0067	2.23	348	2.21	8.41
MDB05	Y0068	3.73	429	2.26	9.00
MDB05	Y0069	2.11	456	2.14	9.53
MDB05	Y0070	2.27	900	4.26	18.53
MDB05	Y0071	2.41	444	2.18	9.83
MDB05	Y0072	2.53	442	2.24	9.54
MDB05	Y0073	4	425	1.83	10.48
MDB05	Y0074	3.41	488	2.12	10.95
MDB05	Y0075	2.46	492	1.69	11.67
MDB06	Y0076	4.11	282	1.89	7.51
MDB06	Y0077	4.37	241	2.28	7.10
MDB07	Y0078	3.58	287	1.79	7.12
MDB07	Y0079	4.87	205	2.10	7.67
MDB07	Y0081	4.1	113	2.52	4.25
MDB08	Y0082	5.16	333	2.04	7.22
MDB09	Y0083	5.06	355	2.14	7.78
MDB09	Y0084	4.79	414	2.00	9.03
MDB09	Y0085	2.61	432	2.13	8.82
MDB09	Y0086	2.8	355	1.62	9.33
MDB09	Y0087	2.86	378	1.84	9.97
MDB09	Y0088	3.26	375	1.69	9.73
MDB09	Y0089	2.67	411	1.65	10.75
MDB09	Y0090	2.75	418	1.85	10.25
MDB09	Y0091	3.25	481	1.71	10.03

MDB09	Y0092	3.93	284	1.80	6.52
MDB10	Y0093	5.61	355	2.25	8.05
MDB10	Y0094	3.33	390	2.21	7.93
MDB10	Y0095	3.53	344	1.95	9.06
MDB10	Y0096	3.05	312	1.82	8.27
MDB10	Y0097	3.71	371	1.88	9.84
MDB10	Y0098	2.82	394	2.17	10.16
MDB10	Y0099	3.07	363	1.94	8.37
MDB10	Y0101	2.88	385	2.08	9.10
MDB10	Y0102	3.41	371	1.95	9.02
MDB10	Y0103	3	310	1.62	8.98
MDB10	Y0108	4.56	201	0.85	3.65
MDB10	Y0109	4.44	189	2.59	3.63
MDB11	Y0104	3.29	330	2.07	7.56
MDB11	Y0105	4.9	195	1.88	6.81
MDB11	Y0106	2.59	162	1.92	6.48
MDB11	Y0107	2.99	102	1.82	5.41
MDB12	Y0110	3.76	357	2.05	7.34
MDB12	Y0111	3.68	443	1.97	8.05
MDB12	Y0112	3.44	468	2.14	8.09
MDB12	Y0113	4.71	525	1.19	9.77
MDB12	Y0114	3.61	575	1.79	10.34
MDB12	Y0115	3.02	489	1.80	9.36
MDB12	Y0116	2.63	555	1.70	10.09
MDB12	Y0117	3.61	615	2.20	9.53
MDB12	Y0118	3.22	643	2.02	9.85
MDB12	Y0119	3.4	613	2.27	8.65
MDB12	Y0121	2.46	617	1.77	10.06
MDB12	Y0122	2.77	586	2.82	8.90
MDB12	Y0123	2.95	608	2.47	8.43
MDB12	Y0124	3.75	654	2.66	8.86
MDB12	Y0125	2.88	669	1.78	10.40
MDB12	Y0126	3.34	686	1.56	11.37
MDB13	Y0127	2.47	250	1.74	7.63
MDB13	Y0128	4.73	132	1.56	7.43
MDB13	Y0129	6.14	126	1.47	7.23
MDB13	Y0130	2.05	110	1.22	8.40
MDB14	Y0131	5.66	352	2.12	7.17
MDB14	Y0132	2.16	481	2.22	9.07
MDB14	Y0133	2.4	425	2.18	8.06
MDB14	Y0134	1.95	425	2.26	8.15
MDB14	Y0135	4.28	439	2.05	8.33
MDB14	Y0136	2.99	266	1.50	6.15
MDB14	Y0137	4.72	98	1.96	1.48
MDB14	Y0138	2.84	410	2.16	8.11
MDB14	Y0139	1.77	464	1.70	9.99

MDB14	Y0141	2.91	521	1.92	10.29
MDB14	Y0142	4.47	527	1.89	9.87
MDB14	Y0143	2.52	556	1.80	10.09
MDB14	Y0144	2.2	650	1.61	10.99
MDB15	Y0145	5.02	403	2.23	7.40
MDB15	Y0146	3.97	463	2.17	8.01
MDB15	Y0147	3.94	541	1.44	8.68
MDB15	Y0148	2.25	573	1.38	9.22
MDB15	Y0149	2.6	527	1.99	9.28
MDB15	Y0150	2.31	469	1.63	9.13
MDB15	Y0151	2.74	557	2.11	9.25
MDB15	Y0152	2.55	609	2.08	8.47
MDB15	Y0153	1.94	621	1.91	8.56
MDB15	Y0154	2.73	704	1.78	9.08
MDB15	Y0155	2.64	502	2.55	6.06
MDB15	Y0156	0.94	341	2.14	3.96
MDB16	Y0157	2.43	266	1.93	6.17
MDB17	Y0158	5.15	301	1.75	6.90
MDB17	Y0159	6.83	286	1.65	8.05
MDB17	Y0161	1.86	150	1.72	7.68
MDB18	Y0162	2.05	320	1.96	6.90
MDB19	Y0164	4.41	291	1.90	6.66
MDB19	Y0165	2.98	391	1.91	7.84
MDB19	Y0166	2.57	388	2.00	7.86
MDB19	Y0167	2.96	418	1.73	8.01
MDB19	Y0168	2.65	374	1.67	7.97
MDB19	Y0169	2.51	393	1.91	8.22
MDB19	Y0170	2.3	418	1.91	8.70
MDB19	Y0171	2.44	399	1.84	8.30
MDB19	Y0172	2.39	382	1.65	9.30
MDB19	Y0173	2.3	360	1.55	10.06
MDB19	Y0174	2.64	276	1.52	7.42
MDB19	Y0186	2.52	264	1.96	7.54
MDB19	Y0187	3.27	216	1.78	7.10
MDB21	Y0163	4.01	207	2.23	5.57
MDB22	Y0175	2.45	247	1.67	6.98
MDB22	Y0176	6.24	192	2.08	5.75
MDB22	Y0177	4.04	91	2.46	5.18
MDB22	Y0178	3.6	106	2.33	4.76
MDB23	Y0179	4.35	293	1.96	6.62
MDB23	Y0181	2.86	318	1.84	6.08
MDB23	Y0182	2.98	377	1.95	7.41
MDB23	Y0183	3.71	395	1.98	8.48
MDB23	Y0184	3.35	388	1.93	8.77
MDB23	Y0185	3.69	336	1.81	7.94
MDB24	Y0188	3.31	224	2.06	5.35

MDB24	Y0189	5.94	110	2.05	5.19
MDB24	Y0190	6.1	87	1.98	4.38

Appendix III

JORC Table

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 probles. 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. • Drilling and sampling took place from October to December 2022. • All drill holes are vertical. • A total of 195 samples were taken from the core of the drilling campaign, of these 181 where for chemical/metallurgical analysis and 14 for QAQC purposes. • Samples ranged from 0.94 kg to 6.83 kg. • 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. • 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.
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).*	• Twenty-three (23) vertical hand-auger drillholes were drilled perpendicular to the long axis of the Madube Pan. • The holes were drilled on a 500 m x 500 m grid and have a total core length of 213.60 m. • A 250 mm long auger clay-bit with a 90 mm outer diameter was used. • The depth of the holes ranged from 1.20 m to 19.00 m.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *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 was 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 core recovered 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.
Logging	• *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 Mineral Resource estimation, mining studies and metallurgical studies. • The total length of the mineralized clay logged is 213.60 m and the percentage is 100%. • The soil samples of Botha & Hattingh, (2017) have been logged according to industry standards.
Sub-sampling techniques and sample preparation	• *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 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.*	• Each of the 181 samples was split into two. One split was for chemical analysis and the other split were stored. • The Upper Unit was composite sampled at an interval of 2.6 to 3.0 m while the Middle Unit was sampled at an average interval of 1.00 m. • A composite sample were collected according to lithology units. Samples didn't cross over lithological boundaries. A representative sample were taken of each 20 cm run, taking in account the sample weight and size. i.e., one composite sample contain a weighted sample of each run. • 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.
Quality of assay data and laboratory tests	• *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*	• The samples were analysed at Scientific Services laboratory, Cape Town South Africa. • Sodium peroxide fusion ICP-OES with an ICP-MS finish for analysis of Li (ppm), K (%) and Mg (%) was done. • The QAQC samples consisted of 7 African Minerals Standards (Pty) Ltd's (AMIS) certified reference materials of which AMIS0339 and

Criteria	JORC Code explanation	Commentary
	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.*	(standard), AMIS0358 (standard),were used along with 7 blanks. • 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 and 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 were used by the laboratories to ensure sample representivity and acceptable Bitterwasser Lithium assay data accuracy, however the specific QAQC procedures used are not recorded in available documents
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 drill hole it was located in. 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 down-hole 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 are 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.

Criteria	JORC Code explanation	Commentary
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 Upper Unit was composite sampled at an interval of 2.6 to 3.0 m while the Middle Unit was sampled at an average interval of 1.00 m • 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. • 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. • 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.

Criteria	JORC Code explanation	Commentary
		• Measures taken by Botha & Hattingh, (2017) to ensure sample security have not been recorded in available documents.
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. • Environmental Clearance Certificates was obtained by Bitterwasser Lithium for all three EPLs. • 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 Madube 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

Criteria	JORC Code explanation	Commentary
		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.
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 7.2 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 lower cut-off grade of 500 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 1.20 m to 19.00 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.
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 Madube Pan, while also conducting exploration on some of the other pans in the region. • See section 13 for detailed recommended and planned further exploration activities.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC 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.

Criteria	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 512 ha. • The depth bellow surface of the upper limit of the is 0 m and the lower limit range from 1.20 m to 19.00 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 variable 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 behind modelling of selective mining units.* • *Any assumptions about correlation between variable.* • *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 process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• 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 drillhole data was composited within Leapfrog Geo® (Version 2022.1.1) on a 213.6 m composite length. • Grade estimation was undertaken using Ordinary Kriging and the estimation approach was considered appropriate based on review of a number of factors, including the quantity and spacing of available data, the interpreted controls on mineralization, and the style and geometry of mineralization. • Indicator Kriging was chosen to delineate the areas with continuous grades and was used later as a start model to adequately define the mineralization. • Based on grade information and geological logging and observations, Upper Unit, Middle Unit and Lower Units, mineralized domain boundaries have been interpreted and formulated into wireframes to permit the resource estimation. • The interpretation and wireframe models were developed using Leapfrog Geo® geological modelling software package. • A 50 m x 50 m x 10 m block size provided the best results for delineating the mineralized zones using the Indicator Kriging methodology and a 5 m x 5 m x variable block size provided the best results for geo-statistical estimation and hence the estimation was conducted on a 10 m x 10 m x 10 m (X, Y & Z respectively) block

Criteria	JORC Code explanation	Commentary
		model size. • The resource was estimated at a lower cut-off grade of 500 ppm Li.
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 lower cut-off grade of 500 ppm Li has been applied during estimations.
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 should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No assumptions have been 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*	• Bulk density determinations have been undertaken over all the lithologies and oxidation states except the Lower Unit (LT) on the neighboring Eden Pan during two phases.

Criteria	JORC Code explanation	Commentary
	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.*	• The densities determined during phase 2 were used in the Madube Pan resource estimate. • The phase 2 density measurements of the Middle Unit range between 1.673 – 1.929 g/cm^3, with an average of 1.820 g/cm^3, and the density of Upper Unit ranges between 1.850 – 2.321 g/cm^3, with an average of 2.003 g/cm^3. These clay density measurements were considered accurate and truly representative of the Eden Pan clays. • The density values determined during the Phase II measurements were used by Bitterwasser Lithium in subsequent resource estimation work.
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 Madube 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 as well as the resource modelling and where possible also the resource calculations. 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 accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure 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*	• 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 audited Mineral Resource estimate given in this report.

Criteria	JORC Code explanation	Commentary
	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.*	