

19 May 2016

## **GB Energy Signs Option to Acquire Large-Scale Lithium Clay Project**

### **Highlights:**

- **120 day option signed for the right to acquire, by farm-in, 70% of the large-scale Bitterwasser lithium clay project in Namibia**
- **Lithium clays are an exciting new frontier in lithium - unlike the majority of hard rock lithium opportunities, Bitterwasser potentially provides real scale, given the 58km<sup>2</sup> areal extent of the salt pans**
- **Previous drilling has identified the presence of elevated lithium and potassium in clays**
- **Bitterwasser salt lake system also to be assessed for lithium brine potential**
- **Sediment sampling to validate existing data will commence immediately**

GB Energy Ltd (ASX: GBX or the Company) is pleased to announce it has entered into an Option Agreement which, if exercised and subject to regulatory approvals, provides a right to farm-in to a 70% interest in the Bitterwasser Lithium Clay Project (Bitterwasser Project) in Namibia. The Option Agreement entitles the Company to an exclusive 120 day option period in which to conduct due diligence on the Project. Due diligence, including preliminary sampling, will commence immediately.

The project comprises three granted Exclusive Prospecting Licences (EPLs) with an area exceeding 593km<sup>2</sup> covering a chain of salt pans prospective for lithium and potassium (potash).

The signing of the Option Agreement is consistent with the current Company strategy of targeting minerals critical for the future energy environment, including uranium and lithium. The Bitterwasser Project, if the Company chooses to exercise its option to acquire, will complement the existing uranium and lithium focussed assets held by the Company.

### **Bitterwasser Lithium Clay Project**

Located approximately 160km south east of the Namibian capital Windhoek, the Bitterwasser Project consists of five large salt pans with a total area of around 58km<sup>2</sup> (see Figure 1).

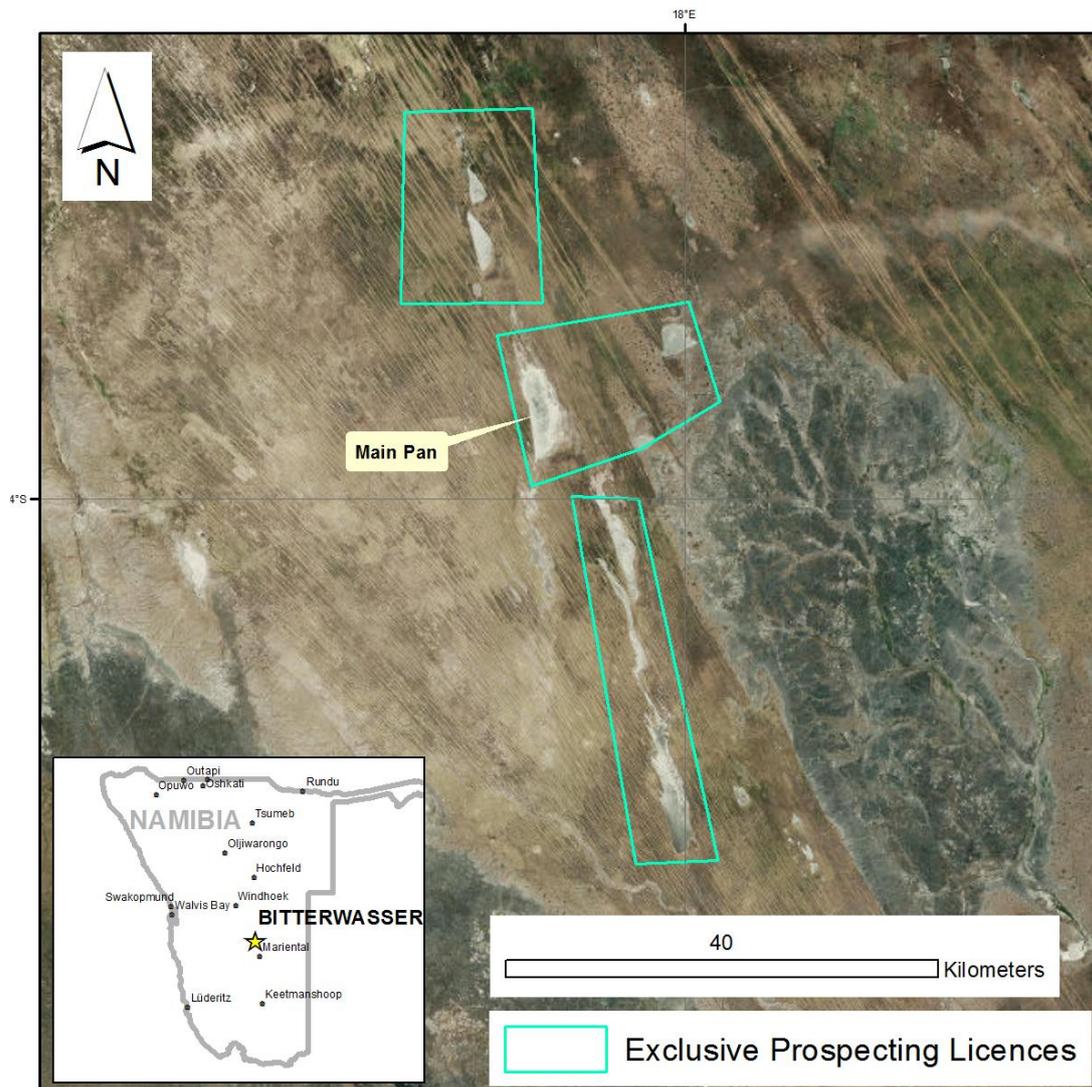
The Bitterwasser Project was identified by a private equity firm interested in securing potential lithium assets in sub-saharan Africa. Citing geological similarities between South America and southern Africa, the private equity firm undertook an extensive surface sampling exercise on a number of pans and identified Bitterwasser as the most prospective.

More recently, four boreholes were drilled in the main pan, one of five pans across the three EPLs that comprise the Bitterwasser Project (see Figure 2). The main pan has an area of

approximately 14km<sup>2</sup> which is 24% of the total area of the five salt pans combined. The other four salt pans have not been drilled.

Drilled to a depth of approximately 30m, the drillholes were sampled every three metres and assayed in South Africa for lithium, potassium, boron and sodium.

Sediment samples returned highly anomalous concentrations of lithium, potassium and boron from surface to beyond 15m depth. Interestingly, potassium (potash) and lithium both comprise roughly 50% of the value proposition.



**Figure 1: Bitterwasser location plan showing EPLs and salt pans**

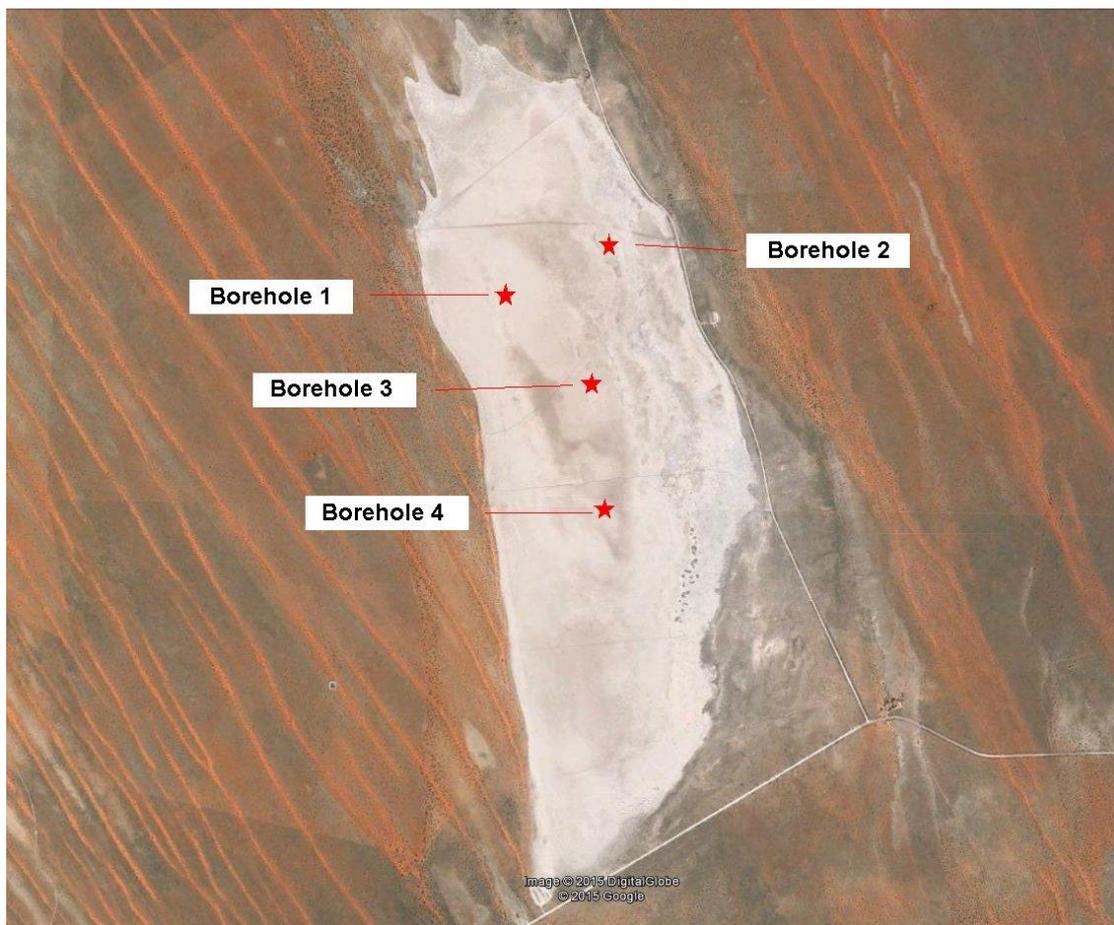
Check samples were assayed in Australia together with some preliminary metallurgical work and XRD analysis. In the check sample, both the potassium and lithium concentrations were significantly greater than the original assay results from the South African laboratory. Further, preliminary results from the basic metallurgical analysis conducted in Australia confirmed that the lithium is present within smectite clays with a sizing analysis conducted indicating a simple isolation of the fine fraction through screening upgrades the lithium concentration by over 200%.

Whilst the assay work to date is encouraging there is some inconsistency with lithium and potassium grades reported between laboratories as well as possible issues with drilling and sampling techniques undertaken.

As part of the 120 day option period, GB Energy will conduct preliminary sampling to confirm lithium and potassium concentrations in the Bitterwasser Project clays. This work will commence immediately with analysis to be undertaken in Australia.

Unlike the majority of hard rock lithium opportunities, Bitterwasser potentially provides the Company with a lithium project of considerable scale, given the 58km<sup>2</sup> areal extent of the salt pans as well as the depth from surface and potential homogeneity of the clays.

As mentioned above, GB Energy has not yet been able to verify the Bitterwasser historical results. GBE will report further in relation to the project and historical results once work has been completed in accordance with the JORC Code 2012.



**Figure 2: Previous drilling on the main pan**

## Lithium Clays - Context

Lithium has traditionally been derived from relatively low cost, low grade salt pan brines centred primarily in South America or higher grade hard rock mines, primarily pegmatite-hosted spodumene.

Several years ago a new resource – clay minerals – became considered as a third source of lithium. Currently, 7% of global resources are sourced in clay minerals<sup>1</sup>.

Currently there are two notable developers of lithium clay deposits, TSX-listed companies Lithium Americas (formerly Lithium West) and Bacanora Minerals.

As well as a large advanced lithium brine project located in Argentina, Lithium Americas (TSX market cap \$206M as at 18 May 2016) also owns one of the largest lithium resources in North America – the Nevada Project (formerly the King's Valley Project). The Nevada Project's Resource derives from lithium contained within a trioctahedral smectite clay. Considerable research and innovation has been applied to the Nevada Project which has pioneered the technology required to potentially commercially extract lithium and potassium from the clay material.

Bacanora Minerals (TSX market cap: \$153M as at 17 May 2016) owns the Sonora Project in Mexico in which it has finalised a conditional long-term lithium hydroxide supply agreement with Tesla Motors, Inc. (Tesla), the maker of electric vehicles and energy storage solutions. The Sonora Project clays are polyolithionite which are described as lithium mica.

Based on preliminary observations to date, in terms of mineralisation style or type of lithium clay host, the Bitterwasser Project appears comparable to Lithium America's Nevada Project. This is potentially advantageous for the Company considering the ground-breaking technological innovation applied to metallurgical extraction of lithium from clays at the Nevada Project.

## Transaction Terms

A wholly owned GBX subsidiary (Namib Lithium Pty Ltd) has entered into a Heads of Agreement (HoA) with a South African Company, which holds an option to acquire the Bitterwasser Project (Bitterwasser Option) subject to regulatory approvals. The HoA grants the GBX subsidiary, for a nominal fee, a 120 day Option to enter into a farm-in agreement on the Bitterwasser Project. The South African company will exercise the Bitterwasser Option to enable the farm-in by the GBX subsidiary to commence.

During the 120 day Option period the GBX subsidiary will be conducting due diligence including preliminary sampling and analysis. Furthermore, the Bitterwasser Option currently expires on 14 July 2016. The 120 day Option is subject to this term being extended for the full term of the 120 day Option.

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<sup>1</sup> Source - USGS website <http://geomaps.wr.usgs.gov/lithiumclays/index.htm>

At the GBX subsidiary's discretion, at any time during the 120 day option period, it can exercise the option through payment of N\$1,000,000 (approx. AUD\$85,000) and enter into the Farmin Agreement as summarised below.

- **Acquisition of 25% of the project through minimum expenditure of AUD\$150,000** – that includes a drilling programme of >1,000m and analysis of not less than 500 samples, a bulk sample for metallurgical testing and assessment of brines undertaken within one year of exercise of the option.
- **Acquisition of a further 45% of the project (total 70%) through minimum expenditure of a further AUD\$600,000** – that includes a drilling programme of >3,500m and analysis of not less than 2000 samples; delineation of an Inferred JORC Resource and further metallurgical assessment undertaken within one year of earning 25% of the project (first earn-in period).

Upon the GBX subsidiary earning 70%, the South African company shall be free carried by the GBX subsidiary up to a further in-ground expenditure of AUD \$1.5M within two years which includes the completion of a detailed Pre-Feasibility Study (PFS) by an internationally recognised geological consultancy. Upon completion of the PFS the parties would contribute pro-rata to further development of the joint venture or dilute as per standard dilutionary clauses.

In the event that the GBX subsidiary earns a 25% project interest and either advises that it does not intend to earn a further 45% project interest or fails to earn a further 45% project interest by the required time, the South African company may acquire the 25% project interest from the GBX subsidiary for AUD\$150,000.

In the event that the GBX subsidiary earns a 70% project interest and advises that it does not intend to sole-fund AUD\$1,500,000 under the joint venture, the South African company has a call option to acquire the 70% project interest from the GBX subsidiary for AUD\$700,000.

In the event that the GBX subsidiary earns a 70% interest and advises that it does intend to sole-fund AUD\$1,500,000 under the joint venture, the South African company has a put option requiring the GBX subsidiary to acquire its remaining 30% project interest for AUD\$500,000.

GBX has consulted with ASX and ASX has determined that the exercise of the option will require shareholder approval pursuant to ASX Listing Rule 11.1.2.

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