Marquee Commences Drilling - Kibby Basin Lithium Project, Nevada

- Marquee commences drilling at the highly anticipated Kibby Lithium Project in Nevada. The Project is fully permitted for water extraction for the use of brine processing and production of lithium compounds within the 2,560 acres (~10.35sqkm) Project, a key feature should a Large-Scale brine and clay lithium deposit be identified.

- The two (2) stage drill program for a total 3,000 metres across three (3) drill holes will target a highly conductive geophysical anomaly, which has the signature for a potential lithium enriched aquifer beneath the Kibby Playa (dried lakebed).

- The Project is located ~4 hours from Tesla’s Gigafactory Number 1 and ~50kms north of ASX-listed Ioneer Ltd's (ASX: INR) flagship Rhyolite Ridge Lithium-Boron Project which has recently been Joint Ventured with Sibanye Stillwater Limited (Sibanye-Stillwater) to develop the project, with Sibanye-Stillwater contributing US$490 million for a 50% interest in the Joint Venture.

- The setting of the Kibby Valley is a 7.4km long structure identified with characteristics interpreted to be akin to major structures bounding the south side of Clayton Valley, indicating a basin large enough to develop layers that could act as aquifers, as well as allow for development of a favourable hydrogeologic setting to host lithium-bearing brines.

Marquee Resources Limited (Company or Marquee) (ASX: MQR) is pleased to announce that drilling at the highly prospective Kibby Basin Lithium Project (Project) in Nevada, USA has commenced.

The two (2) stage – 3,000 metre drill program across three drill holes will target a highly conductive geophysical anomaly, which has the signature for a potential lithium enriched aquifer beneath the Kibby Playa (dried lakebed).

Figure 1 - Kibby Basin Section and Proposed Drill Holes
The objective of the drill program is to delineate a lithium-enriched brine aquifer deposit in Kibby Basin, Nevada, USA that is amenable to mining, using wells to extract brine for processing to a saleable lithium hydroxide monohydrate (LiOH-H2O) product.

The potential deposit type is a continental, mineral-enriched brine aquifer within a hydrographically closed basin (endorheic basin). Continental brines are the primary source for lithium products worldwide. Bradley and others (2013) noted that “all producing lithium brine deposits share several first-order characteristics: (1) arid climate; (2) closed basin containing a playa or salar; (3) tectonically driven subsidence; (4) associated igneous or geothermal activity; (5) suitable lithium source-rocks; (6) one or more adequate aquifers; and (7) sufficient time to concentrate a brine.”

The Project target is a potential lithium enriched aquifer at an estimated 800-1,000 metre depth. It is at this depth, Albemarle, who owns the only producing lithium mine in North America which is located in Clayton Valley has been successfully extracting lithium brines.

**Kibby Basin Lithium Project**

![Image of Kibby Basin Lithium Project location]

*Figure 2 - The Kibby Basin Lithium Project is located within a 50km radius of ASX-listed Ioneer Ltd’s (ASX: INR) flagship Rhyolite Ridge Lithium-Boron Project and 60km north of North America’s only producing Lithium mine, Silver Peak, in Clayton Valley.*
Summary

The Project is a highly prospective asset located within a 60km radius of North America’s only producing Lithium mine, owned by the world’s largest Lithium producer, Albemarle. The Project contains potentially favourable conditions for the development of lithium-rich brines and has similar features as Clayton Valley which hosts Albemarle’s Silver Peak Lithium mine.

The Project is a fully permitted and drill-ready project that significantly adds to and is complimentary to Marquee’s own existing Clayton Valley Lithium Project, which will also be the subject of an aggressive Lithium exploration campaign to be embarked on by the company.

The company believes the Project fits the criteria for a potentially Large-Scale Lithium Project and is also located within a 50km radius of ASX-listed Ioneer Ltd’s (ASX: INR) flagship Rhyolite Ridge Lithium-Boron Project which has recently been Joint Ventured with Sibanye Stillwater Limited (“Sibanye-Stillwater”) to develop the project, with Sibanye-Stillwater contributing US$490 million for a 50% interest in the Joint Venture.

Adding further excitement to the 2,560 acres (~10sqkm) project is the fact the Project is fully permitted for water extraction for the use of brine processing and production of lithium compounds - a very scarce commodity in the immediate area and will prove extremely valuable should exploration success lead to lithium production.

The company is buoyed by the 7.4km long structure identified in Kibby Valley with characteristics interpreted to be akin to major structures bounding the south side of Clayton Valley, that forms a pull-apart drop-down closed basin within a 700sqkm drainage catch basin.

Location

The Project is located 60kms north of Clayton Valley, Nevada which hosts the sole North American producing Lithium mine (Silver Peak Lithium) owned by the world’s largest Lithium producer, Albemarle. Marquee’s 100% owned Clayton Valley Lithium Project also sits in the Clayton Valley.

Figure 3- Kibby Basin location shows the property outline relative to roads, towns, county boundaries and topography in southwestern Nevada.

1 Kibby Basin Property Gravity Survey Basin Model, James L. Wright M.Sc. 26 June 2016
**Property Geology**

The Project has similar features as Clayton Valley, Nevada and contains potential favourable conditions for the development of lithium-rich brines such as; an arid climate, major catch basin, basin has structural traps and is closed with no outlets for drainage, associated igneous or geothermal activity, suitable lithium source rocks and one or more adequate aquifers.

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2 Kibby Basin Property Gravity Survey Basin Model, James L. Wright M.Sc. 26 June 2016

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Figure 4 - The Kibby Basin and similar features as Clayton Valley.
Recent Activity at the Project

A gravity survey was completed over the Kibby Basin property in June 2016 with the objective of generating a model of the basin fill as an aid to lithium exploration. Results of the survey are integrated with an earlier airborne magnetic survey completed by the USGS and reported upon by Wright (2016).

The gravity survey showed the Kibby Basin to be a “drop down” basin which provides a catch basin for lithium bearing ash and gravels over millions of years.

In 2018 a Magnetotelluric (MT) survey was completed over the Kibby Basin, Nevada, by Quantec Geoscience Ltd in order to measure the conductivity of material (lithium brines are highly conductive), indicating a large highly conductive anomaly beneath the Playa lakebed at surface, which may be the signature for a lithium brine pool trapped by the easterly fault, again similar to Clayton Valley³.

³ Geophysical Report for Spartan MT Survey over the Kibby Basin Area (Hawthorne, Nevada), 28 February 2018 by Quantec Geoscience Ltd.
Figure 6 - Magnetotelluric (MT) Conductive Anomaly and Basin.

**Kibby Basin Lithium Claims Permitted for Water**

The Kibby Basin lithium property is fully permitted by the state of Nevada to extract a maximum 2,896 acre-feet (944 million gallons) annually of water for brine processing and production of lithium compounds. Obtaining a water permit for the Kibby Basin lithium project was a major consideration for Marquee in entering into this Project. Water is of major importance to any potential mining operation. The Clayton Valley Basin for instance is over-appropriated (current water rights are in excess of water volumes available for an average year) and obtaining water rights for proposed operations is a hurdle that several companies in the Clayton Valley Basin are yet to overcome.

Cypress Development (TSV:CYP) recently paid $3,000,000 for a water permit in Clayton Valley which allows for the beneficial use of 1,770 acre/feet of water annually for mining, milling and domestic use.

**Executive Chairman Comment**

Marquee Executive Chairman, Mr. Charles Thomas, commented: “This is an extremely exciting time for the Company and its shareholders as we begin this exploration campaign at the Kibby Basin Lithium Project. Should this campaign result in our favour then this will be a transformational period for MQR. Like all shareholders, we are eagerly awaiting the results of this campaign and will update the market as results come to hand.”

**Next Steps**

Marquee is currently conducting a drill program for the Kibby Basin Lithium Project consisting of:

1. Two phase 3,000m drill program
2. Phase I – 2,000m: Drill holes MQR01 (1,000m) and MQR02 (1,000m) will test the large conductive anomaly at depth.
3. Phase II – Depending upon Phase I results, MQR03 (1,000m) will focus on infilling between MQR01 & MQR02 to determine brine volume estimation.
COMPETENT PERSON STATEMENT

The information in this report which relates to Exploration Results is based on information compiled by Dr. James Warren, a Competent Person who is a member of the Australian Institute of Geoscientists. Dr. Warren is the Chief Technical Officer of Marquee Resources Limited. Dr. Warren has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr. Warren consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Marquee Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

This ASX Release has been approved by the Board of Directors.

Charles Thomas
Executive Chairman
Marquee Resources
info@marqueeresources.com.au