

## QUARTERLY ACTIVITIES REPORT

### JUNE 2019

#### Highlights

- **Heads of Agreement signed to acquire potentially large and disruptive, European lithium project via acquisition of Vulcan Energy Resources**
- **Aiming for unique, Zero-Carbon Lithium Production at the Vulcan Lithium Project in Germany through Dual-Purpose wells & very short distance to potential markets**
- **Location close to Stuttgart, home to major German car manufacturers, means Vulcan Project positioned to provide much-needed secure, domestic lithium supply to the burgeoning European EV market**
- **Geological similarities to Hell's Kitchen lithium project in California, which is advancing to production with Controlled Thermal Resources**
- **Dr Francis Wedin, founder of Vulcan, proposed to join board as MD with Gavin Rezos proposed to join as Chairman**
- **Norwegian exploration continuing with work programmes being planned for Tverfjellet and Undal**

During the Quarter Koppar Resources Limited (ASX:KRX) (**Koppar** or the **Company**) signed a binding heads of agreement to acquire 100% of Vulcan Energy Resources, owner of the Vulcan Lithium Project in Germany, and continued its work on its Norwegian Projects with the aim of delineating drilling targets.

#### Vulcan Lithium Project Summary

The Vulcan Lithium Project is in the Upper Rhine Valley (URV) geothermal field in Germany, an area **uniquely endowed with lithium-rich, hot sub-surface brines**. These brines have been sampled extensively at multiple locations throughout the URV, **with lithium grades often above 150mg/l Li and up to 210mg/l Li** (average 161 mg/l, Table 1, also refer ASX Announcement 10 July 2019). These concentrations are similar to the Hell's Kitchen lithium project in California (owned by Controlled Thermal Resources).

The aim will be to explore and develop the Vulcan Project to produce **battery-grade lithium hydroxide** from geothermal brines. Subject to confirmation in proposed study work, a **direct precipitation process**

will be used for lithium processing which is **quicker and less water and carbon-intensive** relative to the evaporative method used in South American salars. The temperature of the brines is anticipated to be an advantage in the development of the processing method.

Subject to entry into an offtake or joint venture agreement with a geothermal power producer, as a by-product of the production process, renewable geothermal energy could be generated from dual-purpose wells that fully offsets energy consumed in lithium production & processing, providing a premium, **“Zero Carbon Lithium”** product for the EV market.

The project comprises two granted licenses and three license applications covering a total area of approximately 78,600ha (Figure 1, Table 2). The Upper Rhine Valley brine field has been extensively studied due to its geological and geothermal characteristics, including exploration for oil and gas. As a consequence, the Company is acquiring a project in a very well understood brine field with considerable amounts of existing seismic and drilling data potentially available for exploration and resource evaluation.

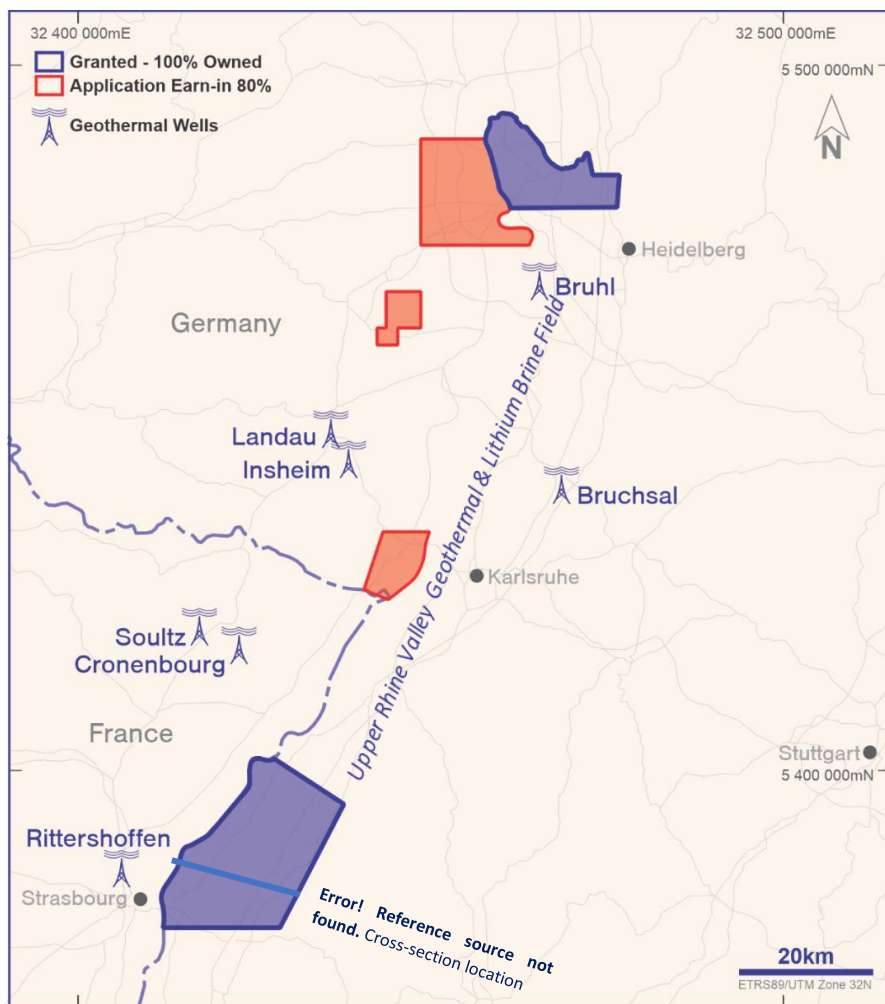


Figure 1: Location of Vulcan Project and sampled geothermal wells mentioned Table 1.

Table 1: Lithium concentrations in geothermal brine sampling in the Upper Rhine Valley (references detailed in Appendix 1). Note that chemical concentrations relate to the Upper Rhine Valley brine field but not specifically within the Vulcan Project itself. Based on a geological review of extensive studies of the area, it is considered to be a reasonable assumption that the mineralised brine fluids will also be present in the Vulcan Project licenses. \*Since Brühl sample was taken during production and circulation tests, it may not be representative data, due to admixture of remaining drilling fluid, freshwater from injection test etc. Therefore, the lithium concentration of the Brühl reservoir is expected to be higher during operation.

Name	Lat	Long	Depth m	Temperature at BOH	Li mg/l	K mg/l	Mg mg/l
Landau Geothermal Well Head 2011 Sample	49.1856	8.12251	3,044	160	179	4000	76
Landau Geothermal Well Head 2013 Sample	49.1856	8.12251	3,044	160	182	3795	85
Insheim Geothermal Well Head	49.1537	8.15373	3,600	165	168	3816	99
Soultz Geothermal Well Head	48.9330	7.88117	5,000	200	173	3195	131
Rittershoffen Geothermal Well Head	48.8966	7.94340	2,580	160	190	3789	138
Cronenbourg Geothermal Well Head	48.6011	7.72451	2,870	140	210	4030	126
Bruchsal Geothermal Well Head 2012 Sample	49.1309	8.57618	2,542	120	159	3113	301
Bruchsal Geothermal Well Head 1992 Sample	49.1309	8.57618	2,542	120	166	2200	434
Brühl Geothermal Well Head*	48.6984	8.13125	2,655	115	41	494	1930

Table 2: Licenses Comprising the Vulcan Project

Name	Area (ha)	Status	Date Granted / Applied for	Ownership
Ortenau	37,360	Granted	03/2019	100%
Mannheim	14,427	Granted	06/2019	100%
Taro	3,268	Application	03/2019	Earn in to 80%
Ludwig	17,716	Application	04/2019	Earn in to 80%
Rheinaue	5,848	Application	04/2019	Earn in to 80%

Further information on the Terms of the Acquisition, the Vulcan Project and its geological setting can be found in the ASX Announcement of 10 July 2019.

## Work Program

Koppar plans to rapidly advance the Vulcan Lithium Project to a Scoping Study over the next 12 months. Work programmes will commence with acquisition of all available seismic and geochemical data from the region.

The company will also commence processing test work on brine samples taken from existing wells within the Upper Rhine Valley.

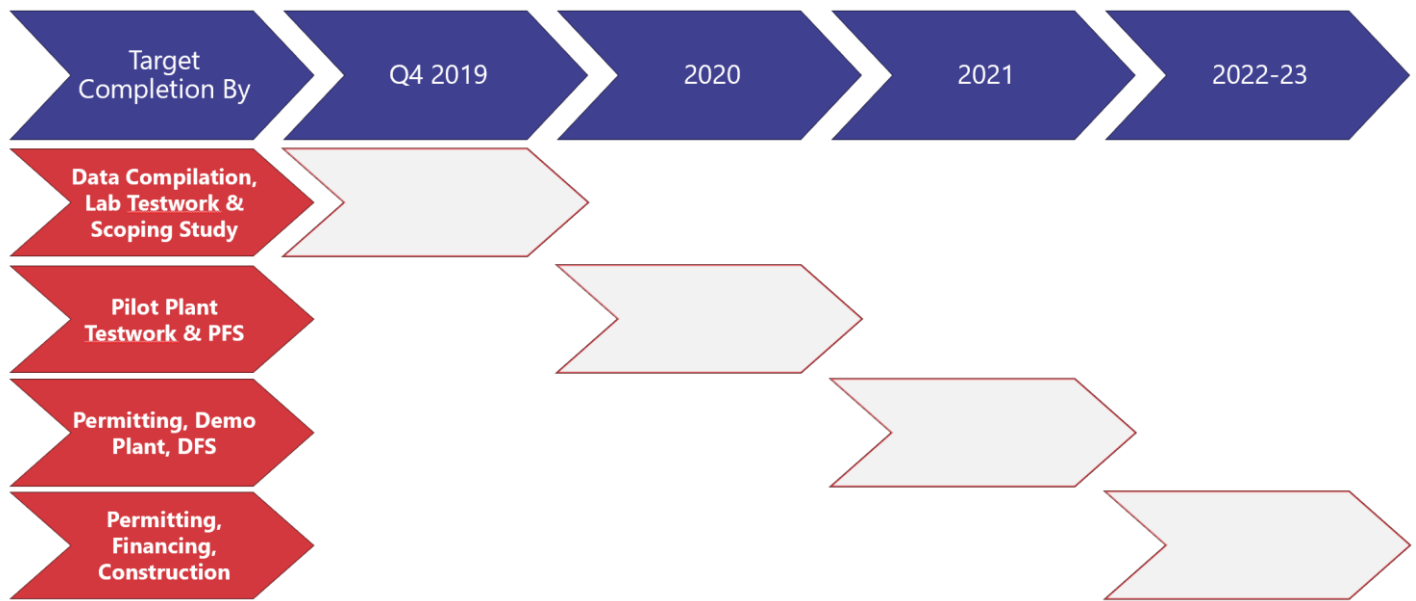


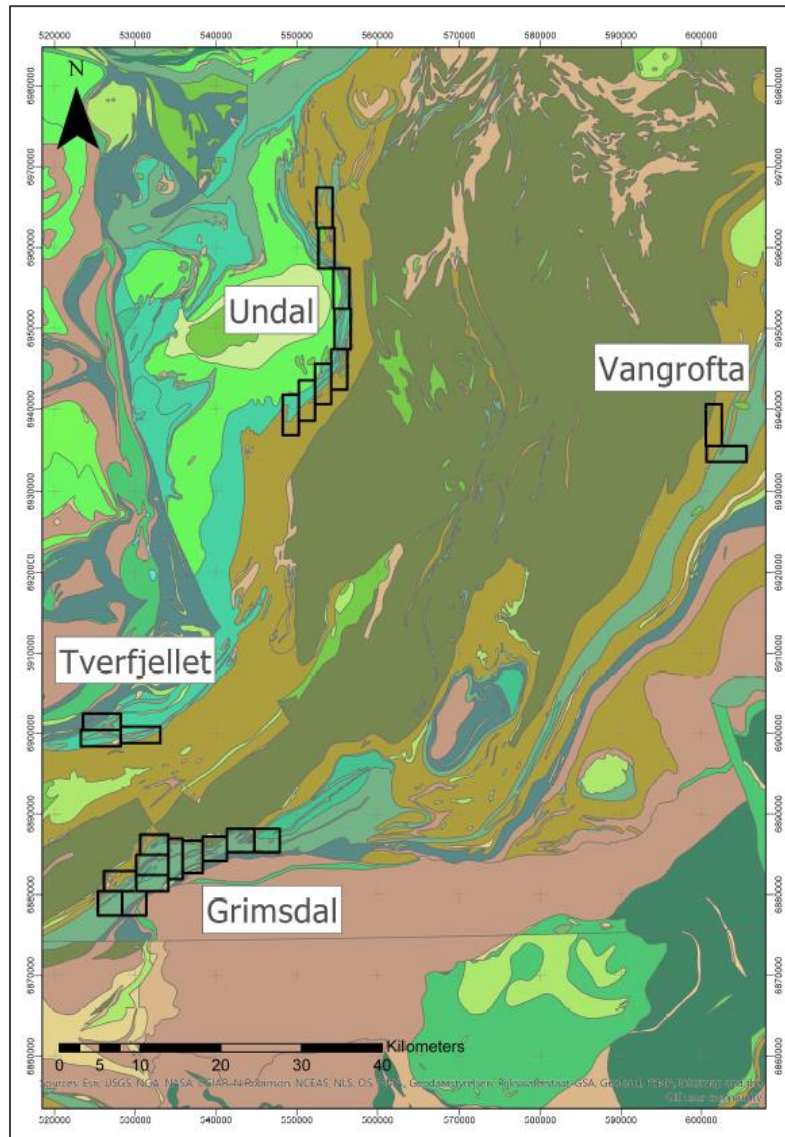
Figure 2: Planned work programme for Vulcan Lithium Project, pending exploration success at each stage.

## Norwegian Projects

During the Quarter the Company built on the technical review of Koppar's extensive copper-zinc portfolio in Norway by highly respected geological consultant Grant "Rocky" Osborne. The focus was on the Tverrfjellet and Undal Projects (Figure 3) with the aim of delineating robust targets for base metals mineralisation via geological, geochemical and geophysical methods which can then be drill tested during the Norwegian winter.

The Company is planning to complete airborne EM and ground geophysical and geochemical surveys at Tverrfjellet and is currently reviewing the planning and design of these. The Company also intends to complete field programmes at both Tverrfjellet and Undal to investigate mapped mineralisation occurrences.

Figure 3: Overview of Koppar's tenement holding and the focus of the Company's 2019 Norway exploration program underlain by regional 1:250,000 mapping by the Norwegian Geological Survey



## Management Changes

**Dr Francis Wedin**, founder and major shareholder of Vulcan Energy Resources is proposed to join the board of Koppar as Managing Director. Dr Wedin previously discovered and defined two new JORC lithium resources, on two continents, in under a year, including Lynas Find, which was bought by Pilbara Minerals to become part of its very large Pilgangoora Lithium Project (ASX:PLS).

Francis has a PhD and BSc (Hons) in mineral exploration, is a Fellow of the Geological Society, London, and a member of the Australasian Institute of Mining and Metallurgy. He is bilingual in English and Turkish, with proficiencies in other languages. He is currently studying a part-time MBA. The terms of Mr Wedin's appointment are set out in the ASX Announcement of 10 July 2019.

Following completion of the transaction **Mr Gavin Rezos** is proposed to join the board as Chairman. As a Principal of Viaticus Capital for almost 20 years, Gavin has helped start-up companies in the technology and resources sectors move to public listings on the ASX, NASDAQ, AIM and Frankfurt Exchanges. In that role, Gavin has held Executive Chairman or CEO positions of two companies that grew from start ups to entry into the ASX 300.

Gavin has also held Director positions of public listed companies in the technology or resources sectors in Australia, the UK and the US. Gavin is currently Chairman of Resource and Energy Group (ASX:REZ) and a principal of Viaticus Capital. Gavin was also previously a Non-Executive Director of Iluka Resources (ASX:ILU), Chairman of Alexium International Group, Non-Executive Director of Metalysis Plc and of Rowing Australia, the peak Olympics sports body for rowing in Australia. The terms of Mr Rezos' appointment are set out in the ASX Announcement of 10 July 2019

The Company has also agreed to appoint Viaticus Capital, a related body corporate of Mr Rezos who is based in Europe, as an investor relations advisor and to introduce the company to European and US based sophisticated and institutional investors. The appointment is for an initial term of 12 months, or such longer period as the parties may agree. The terms of the appointment are set out in the ASX Announcement of 10 July 2019.

The other director of Vulcan Energy Resources, **Dr Horst Kreuter**, will join the Company as a Consultant. Dr Kreuter is an engineering geologist with a long career in geothermal energy. He is CEO of Geothermal Group Germany GmbH and GeoThermal Engineering GmbH (GeoT). He has been successful in geothermal project development and permitting in Germany and worldwide. Based in Karlsruhe, Dr Kreuter is local to Vulcan's project area in the Upper Rhine Valley and has a widespread political, investor and industry network in Germany and Europe.

## **Capital Raising**

Subsequent to the end of the Quarter the Company raised A\$1.1 million at \$0.15 per share (Placement). The proceeds from the Placement will be used to fund due diligence and initial work at the Vulcan Lithium Project which will comprise seismic data acquisition and initial processing testwork.

Xcel Capital Pty Ltd acted as Lead Manager to the Placement which was completed at a 5% discount to the 5-day VWAP of \$0.157.

Proposed Chairman Mr Gavin Rezos has agreed to subscribe for \$150,000 shares under the Placement (subject to shareholder approval).

## **For and on behalf of the Board**

Mauro Piccini

Company Secretary

For further information visit [www.kopparresources.com](http://www.kopparresources.com)

## **Competent Persons Statement**

The technical information in this announcement complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Dr Francis Wedin, Proposed Managing Director of Koppar Resources Ltd. Dr Wedin is a Member of the Australasian Institute of Mining and Metallurgy and a Fellow of the Geological Society, London. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code. Dr Wedin consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

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