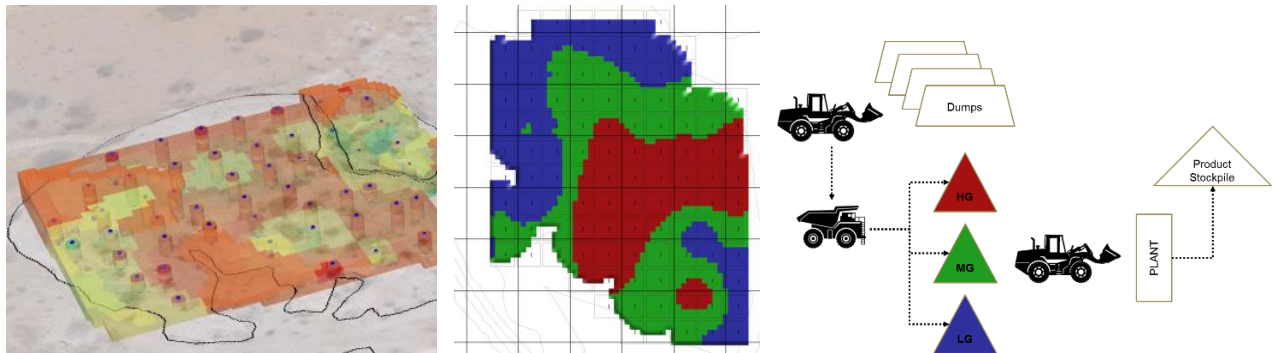


# RUBICON MINE DUMPS, NAMIBIA ORE BLENDING STRATEGY



## PROJECT DESCRIPTION

The **Desert Lion Energy** Lithium Project is located in the mining-friendly jurisdiction of Erongo, Namibia. The project is situated on open semi-arid, scarcely populated lands, approximately 120 km to the north-west of Windhoek, the capital city of Namibia. The site is 30 km south-east of Karibib, providing proximity to excellent infrastructure.



# DESERT LION ENERGY

This mine was first discovered in the 1930s and has a long history of small-scale mining operations. Massive volumes of dumps from the historic mining are located around the Rubicon 1 and Rubicon 2 open pits. These dumps contain material from the historic open pit and underground mining, and consist of a mixture of ore, waste and tailings resulting in very heterogeneous dumps.

This posed a challenge to the potential processing of the dumps because the processing facility would require a consistent flow of ore at a very consistent grade.

## MINXCON INVOLVEMENT

***We managed to feed a consistent grade to the processing plant by developing a practically executable mine plan blending material from 19 Dumps***

Minxcon was mandated by Desert Lion Energy to prepare a detailed mine plan defining the mining sequence and loading schedule to be used by the mining contractors. The overall objective was to prepare a sequence and schedule to ensure the mining activities would deliver product to the processing facility at a consistent grade. This mine plan had to minimise re-handle and prevent sterilisation of any low grade material.

Minxcon utilised the resource models, which were prepared after an extensive exploration programme, to define the optimal grade cut-off for three grade stockpiles. The stockpiling philosophy was to ensure there is always material available on all three stockpiles ensuring availability of ore to be fed to the processing facility. A consistent grade could only be achieved by defining a loading ratio blending the ore from each of the stockpiles.

Minxcon prepared a practical mining schedule, sequencing the mining activities bench-by-bench and dump-by-dump. In addition, Minxcon targeted a maximum of two active mining dumps in a period to ensure minimal fleet movements between the 19 dumps.

Utilising the material-blending capabilities of GEOVIA MineShed™ software, Minxcon set up a material flow network detailing the requirements to achieve the blending strategy.

Minxcon was able to practically mine and efficiently blend the material from the 19 dumps feeding the plant a consistent grade by following the resulting loading ratio.