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HONEYMOON URANIUM PROJECT

SCOPE OF WORK - FEASIBILITY STUDY

The Honeymoon Uranium Project is located in South Australia, approximately 80 km north-west from the town of Broken Hill near the South Australia/New South Wales border. The project site is currently under care and maintenance and consists of:

- Four near mine In-situ Recovery (ISR) wellfields;
- Barren and pregnant leach solution ponds and distribution systems;
- A Solvent Extraction (SX) processing plant (including precipitation, drying and packaging circuits) with a capacity to produce 0.88 Mlb/a of U_3O_8 (equivalent);
- Water, air and reagent storage and distribution systems;
- A Groundwater Raffinate Treatment Plant (GRTP) for treatment and conditioning of groundwater and excess leach solution;
- A 150 person accommodation camp, administration buildings and offices, a workshop and stores building and a laboratory;
- A 75 km high voltage (33 kV) power line connecting to grid power from Broken Hill;
- A raw water bore field;
- A site access road from the Barrier Highway including shared and private sections; and
- A runway capable of landing light planes.

GR Engineering was appointed by Boss Resources Limited to carry out a Definitive Feasibility Study (DFS) for the Project. Phase 1 of the Study focused on recommissioning of the existing ISR wellfields and SX plant with various modifications to resolve historical processing issues, and upgrade of the drying and packaging facility to enable to production of a U_3O_8 yellowcake product. Phase 2 focused on expansion to 2.0 Mlb/a U_3O_8 equivalent production by the addition of a parallel Ion Exchange (IX) facility, upgrading the leach solution handling, reagent, water and air systems, installing a new groundwater treatment plant and multiple new ISR wellfields located within the greater Honeymoon restart area.

The GR Engineering scope of work for the Study included:

- Development of preliminary designs for the staged expansion of the project including the wellfields, processing plant and supporting infrastructure;
- Preparation of capital and operating cost estimates (including sustaining and deferred capital estimates) to an accuracy of -10%/+15%;
- Development of an implementation schedule and manning forecast;
- Preparation of an overall cash flow schedule for the life of mine (LOM);
- Carry out a risk and opportunity assessment for the project; and
- Provide recommendations for work in the next phase of project development.

Commodity: Uranium
Region: Australia
Location: South Australia, 80 km north-west of Broken Hill
Project Type: Definitive Feasibility Study

Client: Boss Resources (ASX: BOE)
Award Date: July 2019
Completion Date: June 2020
Project Manager: Ron O'Neil
Process Manager: Stan Kagiannis