Salt Lake Potash

Lake Way, Wiluna WA

Keller assisted with the design development and installation of 8km of sheet piles for the evaporation ponds.

The project

Salt Lake Potash have a number of leases on Lakes in the Goldfields from which it plans to extract hypersaline brine to produce sulphate of potash – a premium, potassium-rich nutrient used as a crop fertiliser. Keller assisted with the design development and installation of 8km of sheet piles for the evaporation ponds.

The challenge

The client wanted to use vinyl sheet piles to prevent corrosion from the salty water. The thin gauge sheets were prone to damage when installing through underlying stiff sediments and extreme heat conditions. Hiring excavators and plant equipment to use in this environment was either refused or highly priced. The remote location for supplies required additional consideration.

The solution

Keller decided to purchase the equipment required ensuring they were well prepared with corrosion protection. We set up support agreements in the area, should they need fitters and electricians. We kept manual handling to a minimum by designing our own vibrator mandrel so the excavator could pick up the sheets from a horizontal position, transition them to vertical and then install. The mandrel would keep the top of the sheet rigid and with slower penetration rates we successfully completed the installation. We rotated the staff between the air-conditioned machines regularly and ensured breaks and water were well supplied.

Project facts

Owner(s)
Salt Lake Potash

Keller business unit(s)
Keller Australia

Main contractor(s)
Salt Lake Potash

Solutions
Containment

Markets
Industrial

Techniques
Sheet piles