

CHALLENGE

A major operator in the Middle East was encountering near wellbore formation damage due to fines and sludge in a salt-water disposal well. The customer was looking for a cost-effective alternative to remove the blockages and return the well to a pre-damaged state. Due to previous success with the treatment of producing wells, the operator chose BLUESPARK® to treat this well.

ENVIRONMENT

Conventional oil field
 Vertically drilled
 Open Hole Completion
 Sandstone reservoir
 Depth: 7,200 ft (2,200 m)
 Temperature: 190 °F (88 °C)



Injecting Well



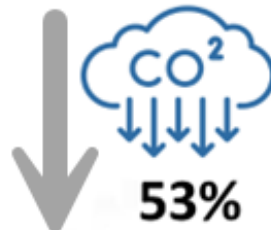
Scale Removal

OUTCOME

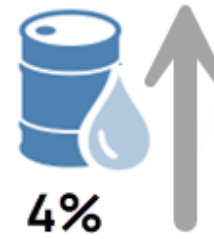
- The water injection rate increased by 175%
- The gas-oil separation facility saw a corresponding drop in the disposal network pressure, enabling two oil producing wells to start to flow, adding a 4% increase to the total oil output
- Along with a 50% reduction in intervention time, there was a 53% decrease in CO2 emissions



Job duration optimization



Less CO2 emission



Oil production gain

SOLUTION

Improve connectivity to the reservoir clearing out blockages using electro-hydraulic pulsing technology

- The BLUESPARK® 275 tool was run on third-party E-Line to the treatment interval of the well
- A 100-foot (30 m) open-hole interval was treated in a treatment time of 13 hours with 100% operational efficiency
- The intervention was completed in almost 50% less total time than a traditional intervention for the same problem
- The well was put back on injection and monitored

