

SAUDI ARABIA

KHURAIS FIELD

Lithology	Carbonate
Well type	Horizontal and multilateral
Bottomhole pressure	<5,000 psi [34.4 MPa]
Bottomhole temperature	145 degF [63 degC]

Background

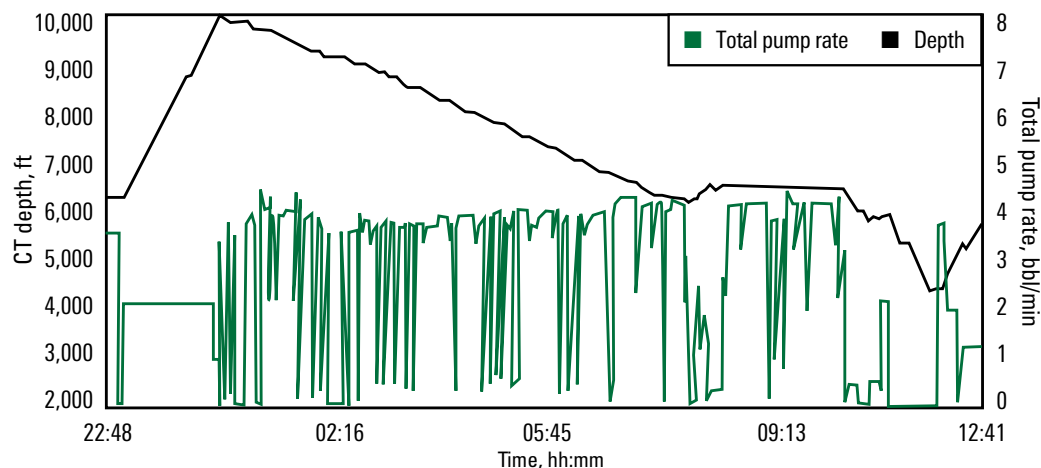
An operator needed to laterally identify, assess, and stimulate three dual-lateral power water injector wells for matrix stimulation treatment in openhole carbonate reservoirs located in Khurais and Central Arabia fields without affecting real-time downhole pressure and temperature readings.

Technologies

- ACTIVE* family of live downhole coiled tubing services
- Discovery MLT* multilateral reentry system
- VDA* viscoelastic diverting acid

Operator Significantly Increases Efficiency While Reducing Pumping Time by 50%

ACTIVE services enable high-rate pumping during matrix stimulation interventions



ACTIVE services enabled CT stimulation to be executed at a maximum pump rate of 4.5 bbl/min in dual lateral wells compared with 2.0 bbl/min during previous operations using real-time downhole parameters. Average pump rates of 4.0–4.5 bbl/min were achieved during the treatments while pumping up to 2,500 bbl of stimulation fluids per lateral, including VDA acid, 20% HCl, and mutual solvent—all while keeping downhole readings intact.