

# ROCKBLOCK® 3 Significantly Reduced Losses in Problematic Tayarat Formation in Kuwait

## Middle East

### CHALLENGE:

- ▶ Severe lost circulation, over 200 bbls/hr
- ▶ Highly-deviated well

### SOLUTION:

- ▶ ROCKBLOCK 3 pumped – two 50 bbl pills

### RESULT:

- ▶ First pill reduced losses by 50%
- ▶ Second pill reduced losses by over 85%

### OVERVIEW

In the Burgan Field, an operator was experiencing severe mud losses, over 200 bbls/hr, in a highly-deviated well in the Tayarat Formation.

Severe losses began at 4608-ft., while drilling 16-in. with a 9 lb/gal water-based mud (WBM). The operator continued drilling to 4658-ft., expanding the lost zone before utilizing lost circulation material (LCM). At that point, dynamic losses increased to 250 bbls/hr and static losses reached 180 bbls/hr. After experiencing stuck pipe twice, the operator was able to pull of out hole (POOH) seven stands.

### SOLUTION

The decision was made to pump a 50 bbl pill of ROCKBLOCK® 3 (50 lb/bbl). After the first pill was pumped, dynamic losses were reduced to 120 bbls/hr and static losses to 60 bbls/hr. Another 50 bbl pill of ROCKBLOCK 3 (50 lb/bbl) was pumped. The operator POOH to 4070-ft., the pill was cleared, and dynamic losses were reduced to 30 bbls/hr.

### RESULT

ROCKBLOCK 3 reduced total losses over 85%, allowing the operator to drill to total depth of 7990-ft.

After spotting the first 50 bbl pill of ROCKBLOCK 3 dynamic losses were decreased from 250 bbl/hr to 120 bbl/hr with static losses of 60 bbls/hr. After spotting the second 50 bbl pill of ROCKBLOCK 3, dynamic losses dropped to 30 bbl/hr and static losses were 5 bbl/hr.



*“ROCKBLOCK 3 reduced losses over 85%,  
allowing the operator to drill to total depth.”*