



# Weatherford®

## REAL RESULTS

### Selective Re-entry and Multilateral System Enable Innovative Wellbore Monitoring Capability in Kuwait

#### Objectives

- Create a horizontal well from an existing nonproductive vertical well and keep the vertical wellbore intact for future fluid saturation surveillance.
- Produce from the new horizontal wellbore while maintaining access to the original vertical wellbore for production logging.
- Provide a permanent depth and orientation datum for re-entry and a sealing point in the vertical wellbore for isolation while producing the horizontal well.

#### Results

- A new horizontal well was drilled.
- Weatherford used a SRS Level 2 selective re-entry system to produce from the new horizontal well and maintained access to the original vertical wellbore.
- A PakLatch™ packer was deployed into the well as a permanent orientation and depth datum for re-entry deflector placement. The deployed re-entry deflector provided a sealing point in the *PakLatch* packer for isolation in the vertical wellbore.

#### Value to Client

- By using the existing wellbore to create a new horizontal well, a number of cost savings were realized. Top-down drilling costs and the need for additional surface piping were eliminated as a result of not having to drill a separate horizontal wellbore.
- Running logging tools into the vertical wellbore below the *PakLatch* packer enabled reservoir monitoring and re-entry was achieved by running a re-entry deflector, allowing access to the horizontal lateral with minimal disruption to horizontal production, minimizing rig costs.



Crew members deploy the re-entry deflector assembly.

#### Client

Chevron

#### Location

Onshore Kuwait

#### Field

Ratawi

#### Well Type

Oil production

#### Formation

Limestone

#### Hole Size

6-1/8 in.

#### Casing Size

7-in., 26-lb, L80

#### Products/Services

- *PakLatch* orientation packer
- Multilateral Level 2 SRS