

## Case Study:

# World's first DTS installation in a horizontal ICD completion

DTS used to determine horizontal flow contribution and shut-in cross flow in world's first DTS installation with a horizontal ICD completion

### Well Data

**Location:** Saudi Arabia

**Well Type:** Single lateral horizontal oil producer

**Installation Date:** 2009

**Hole Size:** 6 1/8"



### Project Objectives

To successfully install DTS in an ICD completion and use the data to determine the inflow rate allocation to within 20% of PLT results.

### TAQA Solution

TAQA's high resolution DTS system was used to read the downhole temperature. The data was monitored using TAQA's data interpretation software FloQuest. Multi-rate testing and PLT was compared.

### Project Results

Results were published in SPE paper SPE 122448 showing flow. Contribution matches to within 20% of the PLT results, hence successful conclusion of the trial test.

- DTS surveys were successfully taken
- Clear indications of well shut-in, well producing and change of rate
- Flow detected along the horizontal interval in all segments at all production rates

