



# Weatherford®

## REAL RESULTS

### Thru-Tubing Hybrid Fishing Technology Saves Russian Independent More Than \$800,000, Returns Well to Production

#### Objectives

- Retrieve the lock mandrel, and return the well to production. After two years of unsuccessful thru-tubing fishing operations to retrieve a damaged 3-in. Camco lock mandrel, seated in 1993, this Russian independent was facing the possibility of having to pull the 3 1/2-in. completion tubing (valued at an estimated US\$800,000); but before resorting to this approach, the operator turned to Weatherford.
- Use Russian coiled tubing and pump unit rather than bringing additional equipment on board.

#### Results

- Successfully acidized salt bridges and improved access to troubled zone.
- Speared and retrieved Camco lock mandrel in one trip.
- Restored gas production.

#### Value to Client

- Cost savings: The operator saved the completion tubing (\$800,000) and additional operating costs by turning to Weatherford's thru-tubing hybrid fishing technology.
- Production: The Weatherford solution restored the well to full production.



Weatherford 2 1/8-in. thru-tubing bottomhole assembly with impact hammer, retrieving spear, and 3-in. Camco lock mandrel (no fishing neck ).

#### Client

Independent operator

#### Location

Russia

#### Formation

Cased hole

#### Depth

4,593 ft (1,400 m)

#### Well Type

Gas

#### Completion String

3 1/2-in. OD

#### Products/Services

Thru-tubing fishing services