

REAL RESULTS

Offshore Romania: ZoneSelect[™] System, Fraxsis[®], BlackCat[™] Packers Provide Modular Solution that Isolates, Fractures Multiple Zones

Objectives

- Isolate and fracture multiple zones. After fracturing, the operator was experiencing an influx of proppant into the completion string and surface equipment, which required the operator to clean out the well, a costly and time-consuming process.
- · Reduce the proppant flowback.

Results

- Weatherford personnel deployed the modular *ZoneSelect* system to address multiple issues in the wellbore.
- Weatherford's WFX-style *BlackCat* packer rotated the string, hung the weight of the completion, and circulated the entire string while in the openhole section.
- The *Fraxsis* annulus swellable packer was used to meet the high-pressure and small-area requirements for zonal isolation.
- A *ZoneSelect* monobore sleeve was used because the operator required a monobore completion, restimulation or fracturing of the well, and the pressure to hold at 7,000 psi (48.2 MPa).
- The FloReg[™] RC inflow control device prevented proppant and sand flowback.
- Using the knockout landing collar, the operator circulated fluids through the collar while running in the hole. After the collar reached the bottom, a 0.9-in. ball was launched into the string and pumped into place on the landing collar ball seat. Finally, the pressure in the string was increased, and the collar was sheared closed.
- The small, 2.20-in. (55.8-mm) OD of the formation-saver valve-shifting tool enabled the fluid to pass through the 2.562-in. (65.0-mm) upper completion and reach the isolation zones.
- The system was run to the required total depth of 5,725 ft (1,745 m).
- The BlackCat packer was set in the first run.
- After the upper completion was installed and tested, the well was brought on line.



Weatherford's *ZoneSelect* openhole completion system, with its modular functionality, enabled the operator to isolate and fracture multiple zones in this offshore Romanian oil well, improving productivity and eliminating cross-contamination.

Location Black Sea, Romania

Well Type Offshore, gas producer

Hole Size 6-1/8 in.

Depth 5,725 ft (1,745 m)

Casing Size and Type 7 in., L-80

Products/Services

- ZoneSelect system
- WFX-style BlackCat packer
- Fraxsis annulus swellable packer
- ZoneSelect monobore sleeve
- FloReg RC inflow control device
- Knockout landing collar
- Formation-saver valve-shifting tool

Weatherford Don McRobb Openhole Completions Regional Product Line Manager don.mcrobb@eu.weatherford.com



REAL RESULTS

Value to Client

- Using Weatherford's modular *ZoneSelect* system enabled the operator to combine components to address particular issues at various zones in the well, saving overall installation time.
- The Weatherford solution enabled the operator to restimulate or fracture each zone multiple times as needed, enhancing productivity.
- The complete isolation of each zone enabled the operator to isolate the problem zone without contaminating another zone.
- Within nine months, the operator had increased production in all four zones to 11.6 MMSCFD (330,000 stm³/day), exceeding expectations.



Weatherford personnel deliver the *ZoneSelect* stimulation pumping equipment to the offshore rig.