



Weatherford®

REAL RESULTS

MagnumFrac™ L CO₂ Foam Frac Job Nearly Doubles Expected Production

Objectives

- Design and pump a fracturing treatment using the *MagnumFrac L* system, which uses an extremely low-residue CMHPG polymer. Base the initial design on offset wells that had been stimulated using a binary foam technique.
- Design the system for enhanced stability in carbon dioxide (CO₂) foam or CO₂-assisted applications.

Results

- The job was successfully executed, pumping 67,000 gal (253,623 L) of 65Q CO₂ *MagnumFrac L* 30 foam carrying 88,000 lb (39,916 kg) of 20/40 white sand at 45 BPM, achieving designed pumping rates and sand placement.
- Initial production was 454 MCFD, and current production is 286 MCFD. These numbers were nearly double the expectations based on offset production numbers.
- Load recovery was more complete and slightly faster than indicated by offset well data.

Value to Client

- Reduced flowback time enabled earlier production, while increased load recovery proved that the clean, low-residue system helped to protect the sensitive formation.
- The satisfied client awarded Weatherford an additional job, adding more marginal pay zones. In addition, the client has requested a two-stage CO₂ treatment with placement of 240,000 lb of sand.



Client

Unit Petroleum

Well

Robertson 5-1

Location

Crockett County, Texas, USA

Depth

6,100 ft (1,859 m)

Perforations

6,090 to 6,142 ft (1,856 to 1,872 m)

Bottomhole Temperature

136°F (58°C)

Treatment Conductor

4 1/2-in. casing

Fracture Gradient

0.75 psi/ft

Required Half-Length

500 ft (152.4 m)

Products/Services

MagnumFrac L