

REAL RESULTS

ZetaFlow[™] Chemical Additive Eliminates Sand Production, Provides Cost-Effective Solution to Post-Treatment Problems

Objectives

- Reduce or eliminate sand production after hydraulic fracturing operations in a region with a history of post-treatment problems.
- Provide a flexible, cost-effective alternative to resin-coated proppant treatments to alleviate proppant flowback problems.
- Minimize the cost of the cleanup and reduce the erosion of the wellhead and its associated components.

Results

- Weatherford's *ZetaFlow* chemical additive was selected and the tight-gas formation was stimulated with slickwater treatments across six perforated intervals with a 7,700 ft (2,347 m) total vertical depth (TVD) and over 11,000 ft (3,353 m) measured depth.
- The six-stage treatment covered 2,848 ft (868 m) spaced out into 400 to 500 ft (122 to 152 m) segments with 75 to 80 perforations per segment.
- Each stage averaged 113,000 lb of 30/50 mesh proppant per stage at a rate of 90 BPM.

Value to Client

• The use of *ZetaFlow* as a chemical additive provided a costeffective alternative to resin-coated proppant treatments. Post-treatment gas production was 2,180 Mcf/d with oil production of 137 bopd. Post-treatment sand production has been eliminated, minimizing the cost of the cleanup and reducing erosion of the wellhead and its components.



Weatherford's fracturing technologies helped eliminate post-treatment sand production, minimizing cleanup costs and reducing erosion of the wellhead and its components.

Client Chaparral Energy LLC

Location Oklahoma, USA

Well Type Onshore gas producer

Formation Cleveland tight gas

Well Type Directional

Well Temperature 156°F (69°C)

Products/Services

- Weatherford fracturing technologies
- ZetaFlow chemical additive

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Cumulative gas and oil production

Average Daily Production



Average daily production of gas and oil

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