

Razorback Production - Case History No. 32

Nole Lease - Nole 1

Oil Field Name: Rantoul

Location: Lawrence, Kansas

The Noll # 1 was producing an average 6 bbls per day of 24° API Gravity oil with 80 PSI gas pressure. Various chemicals and surfactants had been used with moderate success. However, no treatment lasted more than one week before production returned to its 6 bbl/day average.

Nole #1 Completion History:

| | |
|--|---------------|
| Drilled in | 1987 |
| Completion Depth | 1,550 ft. |
| Casing Depth | 1,540 ft. |
| Avg. oil production at completion | 6 BOPD |
| Oil production 1987 (Before WP-5 ⁺ Treatment) | 6 BOPD |
| Oil/Water ratio at completion | No Water |
| Oil/Water ratio 1987 (Before Treatment) | No Water |
| Type of Formation | McClouth Sand |
| Down Hole Temperature | 80° F |
| Thickness of Oil Bearing Formation | 30 ft. |
| Permeability (k) | 35 md |
| Porosity | 12.1% |
| API Gravity (Before Treatment) | 24.2° |
| Gas Pressure @ Completion | 80 PSI |
| Water Saturation: | 0% |

TREATMENT: One (1) 15 gallon injection of Wel-Prep 5 in March 7, 1988. The well was then shut-in for 5 days and then circulated for 24 hours. Gas pressure began to rise after the first 48 hours. A 150 PSI pop-off valve began venting every 15 to 30 minutes by the 4th. day. Well was turned into production on March 13.

Immediate Pre-Treatment

Oil: 6 bbl/day
API Gravity: 24.2°
Gas: 80 PSI

Post-Treatment

10 BOPD
API Gravity: 30.0°
150⁺ PSI

According to the producer, gas pressure increased on the Nole #1 within 48 hours following treatment. The Noll #1 was turned into production after a 5 day shut-in and one day's circulation. It was pumped continuously (24 hours a day) with no pump cycle set. As of 1 April 1988 oil production was holding at 10 bbls per day, gas pressure had tailed off slightly to 130 PSI and the API Gravity was holding at 29°.

NOTE: In spite of reporting these impressive results, the producer did not initiate a cyclic treatment or field flood program. As far as can be determined, Razorback Production went out of business in January of 1989.

File: RAM MEOR Trials

15 January 1989