

EMSUB #900
660' FNL & 1650' FEL, B-23-20S-36E
Lea County, New Mexico
30-025-04297
FA5440

1/24/2002

Producer Open Hole Under-reaming

Well Data

Tubing: 2-3/8"
Casing: 5-1/2", 17# @ 3746'
TD: 4127' PBSD: 4127' Elevation: 3569' GL

4-3/4" Open Hole 3746' – 4127'

Procedure

1. Comply with all company and governmental safety and environmental regulations.
2. Rig up pulling unit. ND wellhead. NU BOP.
3. TOH with rods and pump. Visually inspect for scale, paraffin, and wear. Scanalog 2-3/8" production tubing out of hole.
4. TIH with 5-1/2", 17# casing scraper on 2-7/8" workstring. Make scraper run to the casing shoe at 3746'. TOH with scraper.
5. TIH with 5-1/2", 17# treating packer on 2-7/8" workstring. Set packer at 3700'. Pressure test casing above packer to 300 psig for 30 minutes. Repair casing leak as required.
6. Rig up pump truck and Production Logging, Inc. Run pump in tracer survey of open hole section 3746' – 4127'. Rig down Production Logging, Inc. TOH with workstring and packer.
7. Rig up Weatherford reverse unit with operator or fisherman who is experienced at under-reaming. TIH with 4-3/4" mill tooth bit and 6 3-1/2" drill collars on 2-7/8" workstring. Clean well out to TD at 4127'. TOH with bit and collars.
8. TIH with 4-1/2" X 6-1/4" under-reamer and 6 3-1/2" drill collars on 2-7/8" workstring. Under-ream Grayburg 4-3/4" open hole section to 6-1/4" from 3850' – 4127' (277' total), changing reamers as required. Rig down Weatherford.
9. TIH with 5-1/2", 17# treating packer on 2-7/8" workstring. Set packer at 3700'. Acidize Grayburg open hole section 3746' – 4127' with 3500 gal 80/20 mix of HCl and solvent (2800 gal 20% HCl and 700 gal toluene) staged with rock salt in 10#/gal brine as diverter. Flush acid to casing shoe at 3746' with 2% KCl water.
10. Rig up pump truck and Production Logging, Inc. Run pump in tracer survey of open hole section 3746' – 4127'. Rig down Production Logging, Inc. TOH with workstring and packer.