

San Juan 29-5 (#89) #35R
Recompleting in the Mesaverde Formation
Unit K, 2300' FSL & 1830' FWL
Section 34, T29N, R5W
Rio Arriba County, New Mexico

Reminder: In 1994 the Dakota formation was temporarily abandoned and this well will now be named S. J. 29-5 Unit #35R.

On 12/14/95 received verbal approval from Ernie Busch to further perforate and frac the MV zone (making sure to stay in the Mesaverde zone).

Procedure followed to recomplete in the Mesaverde formation was as follows:

1. 12/12/95 - ND WH & NU WH w/Frac Valve. PT - OK.
2. RU Petro Wireline & BJ Services. Load 4-1/2" casing w/ 3 bbls 2% KCl water.
3. RIH w/4-1/2" gauge ring to 6100'; perforate PT Lookout Interval - 5901'-5896', 5857'-5852' w/3-1/8" HSC gun @ 2 spf = 20 .39" holes. Breakdown PT Lookout @ 350 psi. Pumped 20 bbls 2% KCl water @ 180 psi @ 8 bpm.
4. Perf. Pt. Lookout (additional intervals) 6208'- 6203', 6195'-6190', 6103'-6098' with 3-1/8" HSC gun @ 2 spf = 30 .39" holes.
5. PT lines to 5000# - OK. Acid frac Pt Lookout w/1500 gal 15% HCl acid, 90 - 7/8" ball sealers, 21,504 gal. 2% KCl water. Avg rate 18 bpm, good ball action, complete ball off @ 4350 psi. Surged balls off, flush acid. Max treating pressure - 4350 psi, min. Treating pressure 600 psi, avg treating 2000 pis. ISIP - 400 psi. Flow back on 2" line. SI for pressure build up. RD Petro & BJ.
6. RU Petro and run gauge ring to 6375' and set RBP a 5820'. Dump bail 10' sand on top of plug. PT casing to 2000# - okay.
7. Perf. Cliffhouse and Menefee - @ 2 spf phased 120 degrees; 5785'-5790', 5708'-5713', 5622'-5627', 5600'-5605', 5565'-5570', 5528'-5533', 5485'-5490', 5470'-5475', 5460'-5465' = 90 .35" holes. RD Petro.
8. RU BJ - treat Cliffhouse & Menefee down 4-1/2" casing through perfs with 4500 gal 15% HCl and 28,000 gal 2% KCL and 135 ball sealers in 7 stages. Balled off. Avg. pressure 2300 psi, max. pressure 4400 psi, avg. rate 21 bpm. SI to build up pressure.

9. RU Petro Wireline & RIH w/gauge ring to 5808'. POOH & recovered 106 balls. RIH w/4-1/2" Baker RBP and set 4900'. Load hole w/48 bbls 2% KCl and PT to 3000 psi, OK
10. TIH w/Bailer and dumped 2 sx sand on RBP @ 4900'.
11. Perforate Lewis Interval - 4380'-4390', 4405'-4415', 4430'-4440', 4620'-4630', 4640'- 4650', 4660'-4670', w/3-1/8" HSC gun = 120 .39" holes @ 2 spf.
12. Breakdown Lewis Interval @ 2500 # psi @ 2 bpm w/10 bbls water. ISIP = 400#.
13. RU BJ - PT lines to 5000# - OK. Acid frac Lewis w/3000 gal 15% HCL acid, 180 - 7/8" ball sealers, 21,276 gal 2% KCl water @ 19 bpm. Had fair ball action and complete ball off @ 4000 psi. Flush Acid, max treating = 4400#, min treating = 2000#, avg treating = 2600#, ISIP = 1500#. Flowed back on 1/8" choke. Shut - in.
14. RU Petro - RIH w/junk basket & recovered 72 balls. Shut-in to build up pressure.
15. RU Big A 1/3/96. PU 2-3/8" tubing to RBP, Blow well w/air. Flow well on 1/4" choke.
16. CO well with soap sweeps. Blew well clean. RIH w/2-3/8" 4.7# tubing and landed @ 5819.59 KB.
17. ND BOP & NU WH. PT - OK. Pump exp. check off @ 800 psi. RD & release rig 1/11/96.