

WORKOVER PROCEDURE

MCDONALD STATE A/C 2 WELL NO. 33
330' FEL AND 2,160' FSL
SECTION 13, T-22-S, R-36-E
LEA COUNTY, NEW MEXICO

1. Test safety anchors to 22,500#.
2. MIRU PU w/4,000' 2-7/8", 6.5 #/ft, N-80 tubing. Remove stuffing box and install rod stripper. POOH w/rods and pump.
3. ND wellhead. NU 6" Series 900 BOPs w/2-3/8" pipe rams on top and blind rams on bottom. POOH w/2-3/8", 4.7#/ft, J-55 tubing, Laying Down. Change pipe rams to 2-7/8".
4. RIH w/4-1/2" RBP on 2-7/8" workstring to ± 120 . Test pipe rams and casing to 2,000 psi. POOH w/2-7/8" workstring. Test blind rams to 2,000 psi. RIH w/2-7/8" workstring and release RBP. POOH w/same.
5. RU wireline company. RIH w/4-1/2" CIBP and set @ 5,400'. Dump bail 2 sxs cement on CIBP. Test CIBP to 1,000 psi for 15 minutes.
6. RU full lubricator. RIH 3-1/16" casing guns and perforated the Penrose @ 3,448'-63', 3,485'-3,507', 17'-23', 27'-31', 34'-49', 56'-57', 66'-77' and 86'-89' w/2 JSPF, 120° phasing, total of 164 holes. RD wireline company.
7. RIH w/4-1/2" RBP w/ballcatcher and 4-1/2" treating packer on 2-7/8" workstring. Set RBP @ 3,650'. PUH and set packer @ 3,600'. Test RBP to 1,000 psi surface pressure. PUH and set packer @ 3,510'.
8. RU service company. Drop SV. Test lines and workstring to 4,000 psi. Retrieve SV. Breakdown and acidize Lower Penrose (3,517'-3,589') w/1,700 gals of 15% NEFE acid @ 3-4 BPM using 135 ball sealer for divert. Flush w/2% KCl water.
9. Unset packer and RIH and retrieve RBP. PUH and set RBP @ 3,510'. PUH and set packer @ 3,350'. Breakdown and acidize the Upper Penrose (3,448'-3,507') w/1,500 gallons 15% NEFE acid @ 3-4 BPM using 126 ball sealers for divert. Flush w/2% KCl water.
10. Unset packer and RIH and retrieve RBP. RIH and set RBP @ 3,650'. PUH and set packer @ 3,350'. Swab on well to recover load.
11. Unset packer and RIH and retrieve RBP. POOH w/same.
12. RIH w/4-1/2" treating packer on 2-7/8" workstring. Set packer @ 3,350'. Pressure backside to 500 psi. RU service company. Drop SV. Test lines and workstring to 5,000 psi. Retrieve SV.
13. Fracture stimulate the Penrose (3,448'-3,589').

Basic Recommendation

35 lb crosslinked Gel
112,000 lbs of 12/20 Brady Sand
20 BPM
Estimated surface treating pressure - 3,000 psi

FLUID VOLUME (GALS)	CONC. (LB/GAL)	MESH SIZE	TYPE
27,000	0		
3,000	2	20/40	Brady Sand
3,000	4	20/40	Brady Sand
2,000	6	20/40	Brady Sand
4,000	7	20/40	Brady Sand
6,000	8	20/40	Brady Sand
800	0		

14. Flow well back immediately. Swab on well to recover load.
15. Unset packer @ RIH and tag fill. POOH w/packer on 2-7/8" workstring, tally same. If fill below 3,625', skip to Step 17.
16. RIH w/3-1/2" bit and bulldog bailer on 2-7/8" workstring and clean out to 3,625', if necessary. POOH w/same.
17. RIH w/bull plugged mud anchor, perforated sub, SN and TAC on 2-3/8", 4.7#/ft, J-55 tubing. Be sure TAC is above perfs and perf sub is below perfs.
18. ND BOPs. Install rod stripper.
19. RIH w/3/4" pump and rods.
20. Sep pumping unit. Hang well on and start pumping.
21. RD MOL.

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