

C-103 cont.

Ralph Nix

Lease Name - Merrill #1

Perforation & Stimulation

7/21/82 Start pumping to breakdown perfs. Unable to establish rate acid had gone into 2 or 3 perfs overnight. Pump additional 1000 gals 15% breakdown all perfs and established rate @ 40 BPM. Flow back & RIH & perforate second set of holes in lower yeso w/bullet gun size 0.47", 13 shots @ 3392, 3420, 32, 49, 72, 75, 96, 3504, 22, 30, 34, 43, 68. Frac down casing w/2000 bbls acid, 87,000 gals of gelled 2% KCL water carrying a total of 10,000# of 100 mesh sand & 160,000# of 20/40 sand, Max PSI 3750, Ave PSI 3350 Max rate 80.7 BPM, Ave rate 78 BPM. ISIP 1400 PSI, 5 min 1130 PSI 10 min 1070 PSI, 15 min 1030 PSI. Shut in 2 hours. Flow back to pit 2 hours, RIH 117 jts 2 3/8 tubing & overshot wash over 24' of sand from top of RBP latch on 3609.16 & POOH & lay down 12 jts tubing & set RBP @3223'KB. Pull up 1jt tubing to 3192' spot 1000 gallons 15% acid, POOH w/105 jts tubing & stand back. RU Dresser Atlas perforate first set of holes in upper yeso w/bullet gun 14 shots @ 2789, 2813, 36, 63, 78, 2928, 34, 3023, 44, 67, 81, 3105, 32, 70, size of holes 0.47" Start pumping to breakdown perfs @ 3000 PSI & establish injection rate @ 40 BPM. Flow back to pit, RU Dresser Atlas RIH & perforate second set of holes in upper yeso w/bullet gun 11 shots size 0.47" @ 2825, 50, 68, 2916, 47, 3036, 46, 76, 93, 3154, 93'. Frac down casing w/2000 gals 15% acid, 100,000 gallons 2% KCL gel water carrying a total of 10,000# 100 mesh sand & 200,000# of 20/40 sand, Max PSI 3610, Ave PSI 3100, Max rate 85.5 BPM, Ave rate 80 BPM, ISIP 1040 PSI, 5 min SI 900 PSI, 10 min 870 PSI, 15 min 950 PSI, Shut in well over night.

7/22/82 Flow load water back to pit for 3 hours RIH w/105 jts tubing & overshot to 3223'. After washing over 120' of sand in hole w/Halliburton pump truck latch on to RBP. POOH and lay down 17 jts POOH and stand back 88 jts tubing & release RBP. RIH with 2" x 1 25/32 x 12' x14', tubing pump & 88 jts of 2 3/8" 4.70# tubing to 2710.62 "GL (bottom of tubing) RIH w/70 3/4" Norris type 90 rods, 38 7/8" Norris type rods, stack rods and hang on.