

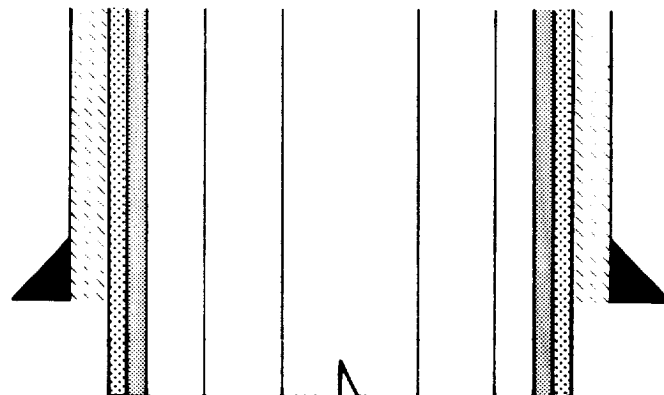
**MESA PET. CO.**  
**RED HILLS FEDERAL NO. 1**

660' FNL & 660' FEL

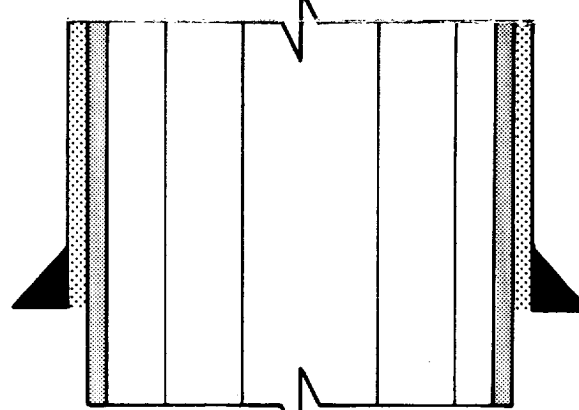
SEC. 6 , T26S , R33E

LEA CO., NEW MEXICO

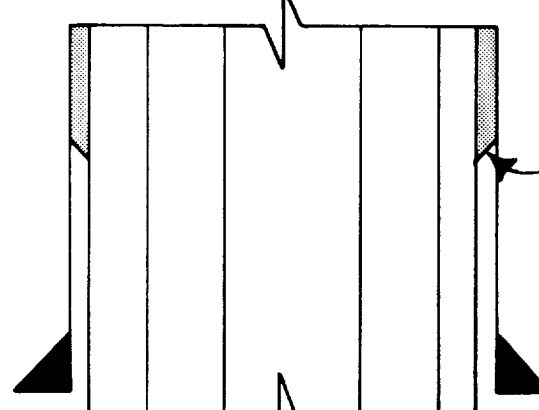
Set 20" 94\*H-40 ST&C Casing at 795' with centralizer at 780' and 740'. Cemented with 1200 sx HLW with 2% cc + 1/2 \* flocele followed by 300 sx Class "C" with 2% cc. Circulated 400sx to pit. Cement did not drop in annulus.



Set 13 3/8" 54.5-68\* K-55 and S-80 casing @ 4850' with DV tool at 3020'. Installed centralizer and cement basket at 3050' and 3040' respectively. Cemented 1st stage with 650sx HLW + 5\* gilsonite + 1/2\* flocele followed by 300sx Class "C" with 1/4\* flocele. Circulated and recovered 30 bbls of cement contaminated water. Opened DV tool at 3020' and cemented 2nd stage with 2000sx HLW + 5\* gilsonite + 18% salt + 1/2\* flocele followed by 100sx Class "C" with 2% cc + 1/4\* flocele. Circulated 300 sx of cement to surface. Cement dropped 100' in annulus. Filled with 7 yards of redi-mix.



Set 9 5/8" 43.5-53.5\* N-80 and S-95 casing at 13,300' with DV tool at 8521'. Installed centralizer at 13,280', 13,261' and 8599'. Installed 2 cement baskets at 8530'. Cemented 1st stage with 1000sx HLW + 5\* gilsonite + 1/4\* flocele + 0.6% Halad 22 followed by 300sx Class "H" + 0.8% Halad 22. Opened DV tool at 8521' and cemented 2nd stage with 1250sx HLW + 3\* gilsonite + 1/4\* flocele + 0.6% Halad 22 followed by 100sx Class "H". Started losing returns with 60 bbl displacement left. WOC 13, ran temperature survey; top of cement @ 7460'.



Top of Liner @ 12,898'

Long String 2 3/8" 5.95\* N-80 Hydril PH-6

Short String 2 3/8" 5.95\* N-80 DSS-HT

Baker Type "F" Seating Nipple @ 13,322'

Baker "A-5" Dual Packer @ 13,333'

WOLFCAMP PERFS. from 13,431' to 13,653'

Blast Joints from 13,418' to 13,680'

Baker Type "F" Seating Nipple @ 14,441'

Baker "D" Permanent Packer @ 14,475'

Baker Type "F" Seating Nipple @ 14,509' & 14,541'

ATOKA PERFS. from 14,616' to 14,894'

Set 7" 29\* S-95 Hydril liner from 12,898'-15,248'. Cemented with 900sx Class "H" with 0.8% Halad 22 + 0.4% CFR-2 + 3\* KCL + 0.3% HR-4. Cleaned cement out of tie-back sleeve and ran 7" 29-32\* S-95 and P-110, leg-up string. Cemented with 250 sx Class "H" + 1% CFR-2. Top of cement by bond log = 11,250'.

PLUG-BACK TOTAL DEPTH - 15,194'

TOTAL DEPTH — 15,249'

