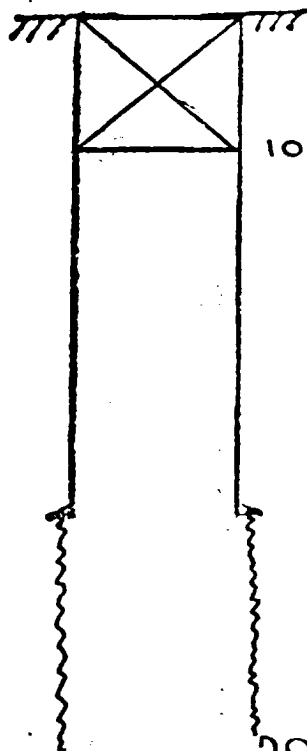


FIELD Cooper	OPERATOR Phillips Petroleum	DATE Sept. 20, 1977
LEASE C.D. Woolworth	WELL NO. 4	LOCATION SW/4 SW/4 Sect 23, T24S, R-36-E, Lea, New Mexico

PPA: January 1942

Recovered 2479' of 7" csg
" 709' of 9 5/8" csg



10' to surface cmted

12 1/2" casing set at 324.7' with 200 sx of cement
Hole size " circ

709' top of 9 5/8" csg

1380' spotted 35 sx cmt

2479' top of 7" 9 5/8" casing set at 1392' with 300 sx of cement
2570' Hole size "
2547' w/5 sx cmt

3195' - 3244' spotted 35 sx cmt

3244' cmt retainer w/125 sx cmt displaced +75 sx, 10 sx circ
3250' - 3265'
3270' cmt retainer w/50 sx cmt circ. 1/2 sx
3276'
3284' cmt retainer w/50 sx cmt circ. 2 1/2 sx.
3312' cmt retainer w/50 sx cmt circ 2 sx.
3350' cmt retainer w/100 sx cmt circ. 15 sx

3400'

PB 3420'

3425 - 3448'

PB 3448'

3435' - 3450

7" casing set at 3460' with 300 sx of cement
Total Depth 3509' Hole size "