

SUNRAY MID-CONTINENT OIL COMPANY

TUBINGLESS DUAL COMPLETION  
PROPOSED CONDITIONS

N. M. State "Y" LEASE, WEST No. 3

N. Shugart Queen Grayburg & Culwin Yates  
Pool, Eddy County, New Mexico

RECEIVED

MAY 8 1961

O. C. C. OFFICE

N. Shugart Queen Grbg Prod.

Culwin-Yates Production

Datum Elev. 3600' (est)

8 5/8" OD J-55 24# Csg  
Set @ 900' w/ 250 sx cmt  
Cmt Circulated

Yates csg 2 7/8" OD J-55 6.4#  
buttress thread  
Set @ 2800' Collar OD 3.500"  
Csg ID 2.441" Collars beveled

Top Cmt @ 2000'

Culwin Yates: Perfs 2600-2700'  
w/directional perforating gun  
8" Hole

Reduction Point @ 3350'

6" Hole

N. Sh. Qn. Grbg 2 7/8 OD J-55 6.4# Csg  
buttress thread  
Set @ 3800' Collar OD 3.500"  
Csg ID 2.441"

N. Sh. Qn. Grbg Perfs 3200-3700'

TD 3800'

- NOTES: 1. Centralizers will be used on 30' spacing from TD up to 100' above Queen-Graybu
2. Turbulizers will be used on each joint of both strings from bottom of Yates cs to 100' above Yates pay.
3. Will cement down long string with sufficient cement to bring cement up to shc string and then cement down Yates casing with sufficient cement to bring cem 600' above Yates zone. Will use approximately 160 sx on long string and 250 on short string.