

MARATHON OIL COMPANY

"Diagrammatic Sketch of Mechanical Equipment Used in Dual Completion"

Lea Unit, Well No. 11
 Unit N, Sec. 13, T-20-S, R-34-E
 Lea County, New Mexico

2-3/8" O.D., 1.995" I.D., 4.7#, EUE
 P-105 Tbg. Set @ 2269'

2-3/8" O.D., 1.995" I.D. 4.7#, HG,
 DSS N-80 Tubing

Devonian Production ←

→ Pennsylvania Gas Prod.

13-3/8" O.D., 48# Casing @
 1354' and Cem. w/1170 sx.
 Cement Circulated

2-3/8" O.D., 1.995" I.D., 4.7#
 EUE N-80 Tubing Set @ 14,396'

HOWCO 2-Stage Cement
 Tool @ 3395'

9-5/8" O.D. 36 & 40# Csg. @
 5508'. Cemented 1st stage
 w/702 sx. Lite-Wate Cement
 followed by 200 sx. Reg. Cmt.
 Cemented 2nd stage w/2518 sx.
 Lite-Wate Cmt. followed by
 100 sx. Reg. Cement. Cement
 Circulated.

J Udell ASC Gas Lift Valves

Cement Top @ 6955'

Circulating Valve @ 12,941'

Otis J-Latch Seal Assembly @
 12,944' w/Tbg. set @ 12,961'.

Otis 2-3/8" x 7" Hydraulic
 Dual Zone Pkr. w/J-latch
 Seal Assy. @ 12,944'.

Otis Type "N" Nipple @ 12,957'

Penn Gas Zone Perforations @
 12,987-12,996'.

Circulating Valve @ 14,179'

Otis Type "WA" Production Pkr.
 w/J-Latch Seal Assy. @ 14,182'

2-3/8" O.D., 1.995 I.D., 4.7#
 CS Hydril Tbg. Hung from "WA"
 Pkr. on J-Latch Seal Assy. Set
 @ 14,396'.

Otis Type "X" Nipples @ 14,307
 & 14,336'.

7" O.D. 29# Csg. Set @ 14,371' &
 Cmt. w/1240 sx. Reg. w/4% Gel
 & 1% Halad 9.

Tbg. Perf. w/six 1/4" Bullets
 @ 14,381-14,382'.

Circulating Valve @ 14,425'

2" O.D., 1.670" I.D. 3.3# I.J.
 Tbg. Set from 14,396-14,437'.

Devonian Open Hole Completion
 14,371-14,454'

PBTD 14,454'

TD 14,464'

