

Application to Drill
Drumstick 7 Federal Com No. 3
Cimarex Energy Co. of Colorado
Unit I, Section 7
T16S-R29E, Eddy County, NM

30-015-34437

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1. Location: SHL ^{1880'} ~~1980~~ FSL & 330' EL
BHL 1980 FSL & 330' FWL
2. Elevation above sea level: 3,668' GR
3. Geologic name of surface formation: Quaternary Alluvium Deposits
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
5. Proposed drilling depth: Pilot Hole 7,350' MD 11,015' TVD 6,890'
6. Estimated tops of geological markers:

San Andres	1,820'
Abo Shale	5,340'
Lower Abo Dolomite	6,935'
Wolfcamp LS	7,050'
7. Possible mineral bearing formation:
Abo Oil

8. Proposed Mud Circulating System:

Depth			Mud Wt	Visc	Fluid Loss	Type Mud
0'	to	340'	8.4 - 8.6	28	NC	FW
340'	to	2,500'	10.0	30-32	NC	Brine water
2,500'	to	7,350'	8.4 - 9.5	30-32	NC	FW, brine
KOP 6,780'	to	7,173'	9.0	28-32	May lose circ	2% KCl
7,173'	to	11,014'	9.0	28-32	May lose circ	2% KCl

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

Proposed drilling Plan

Drill 8 3/4" hole to 7,350' (pilot hole) and cement (see page 2 - Application to Drill). Set whipstock plug @ 6,790.' Mill window from 6,775' to 6,185.' Kick off 6 1/2" lateral @ 6,780.' Drill 6 1/2" hole to MD 11,014' and TVD 6,890.' Install 4 1/2" **Peak Completion Assembly**. BTC from 6,673' to 7,173.' LTC from 7,173' to 11,014.' Liner length 4,341.' Lateral drill hole length 4,125.'