

SOUTHLAND ROYALTY COMPANY
(Operated by Meridian Oil Inc.)

Federal "MA" No. 3
660' FNL & 1980' FWL
Sec. 27, T-18-S, R-33-E
Lea County, New Mexico
NM-0997

To supplement USGS Form 3160-3 Application to Drill the following additional information is submitted concerning questions on Page 5 of NTL-6:

1. See Form 3160-3.
2. See Form 3160-3.
3. The geological name of surface formation is: Quaternary Alluvium
4. See Form 3160-3.
5. See Form 3160-3.
6. The estimated tops of important geological markers are:

Rustler	1485'	3rd Bone Spring	10,220'
Queen	4260'	Wolfcamp	10,530'
Bone Spring	6690'	Strawn	11,990'
1st Bone Spring	8745'	Atoka	12,470'

7. The estimated depths at which anticipated water, oil gas and mineral bearing strata are as follows:

Bone Spring	6690'	- Oil
Wolfcamp	10,530'	- Oil
Strawn	11,990'	- Oil

8. See Form 3160-3. All casing will be new.
9. See Form 3160-3 for depths of strings. Cement volumes and additions as follows:
 - a. 13 3/8" csg: Cement w/350 sxs C1 "C" cmt w/2% CaCl₂. Circ to surface.
 - b. 8 5/8" csg: Cement w/±1200 sxs Lite "C" cmt w/15# salt & 1/4# cello and 200 sxs C1 "C" w/2% CaCl₂. Circ.
 - c. 5 1/2" csg: Cement 1st stage w/±800 sxs C1 "H". Cement 2nd stage w/1200 sxs Lite & 100 sx C1 "H" to bring TOC @ 2900'.

A caliper log will be run prior to setting 8 5/8" & 5 1/2" pipe to determine exact cement volumes required.

10. The pressure control diagram is attached to Form 3160-3. The following additional information is as follows:

13 3/8" casing installation: 13 5/8"-3M annular BOP tested to 1000 psi for 30 minutes before drilling out 13 3/8" casing shoe.