SOUTHLAND ROYALTY COMPANY (Operated by Meridian Oil Inc.)

North Shugart Federal No. 1 1980' FNL & 760' FEL Sec. 17, T-18-S, R-31-E Eddy County, New Mexico LC-029392-C

To supplement USGC 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: Ochoa
- 4. See Form 3160-3
- 5. See Form 3160-3
- 6. The estimated tops of important geological markers are:

Queen	3,100'	lst Bone Spring Ss	7,500'
San Andres	3,750'	2nd Bone Spring Dolo	7,820'
U. Delaware	3,950'	Wolfcamp	9,650'
Bone Spring	5,750'	Strawn	10,670'
		Atoka	11,000'
		Morrow	11,600'

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

Queen	3,100'	-	0i1
2nd Bone Spring	7,820'	-	0i1
Morrow	11,600'	-	Gas

- 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/ 420 sx "C" + 2% CaCl₂ + 1/4#/sx Cello-Seal. Circ. to surface.
 - b. 8 5/8" csg: Cement w/ 1135 sx Pacesetter Lite Premium w/ 15# salt +6% Gel + 1#/sx Hi-Seal. Tail in w/ 200 sx Cl "C" w/1% CaCl₂. Circ. to surface.
 - c. 5 1/2" csg: Cement 1st stage w/ 520 sxs super "H" + 6% Salt + 0.4% Diacel LWL + 0.3% CF-2. Cmt 2nd stage w/ 1000 sx Super "H" + 5% Salt + 0.3% CF-2. Bring TOC @ 2700' with stage tool at 9,000'.

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

A fluid caliper will be run prior to setting 8 5/8" pipe to determine exact cement volumes required.