

SOUTHLAND ROYALTY COMPANY

Holly "8A" Federal Com No. 1
1980' FSL & 1650' FWL
Sec. 8, T-18-S, R-30-E
Eddy County, New Mexico
LC-063621-A

To supplement USGS Form 9-331C "Application to Drill the following additional information is submitted concerning questions on Page 5 of NTL-6:

1. See Form 9-331C.
2. See Form 9-331C.
3. The geological name of surface formation is: Ochoa
4. See Form 9-331C.
5. See Form 9-331C.
6. The estimated tops of important geological markers are:

Anhydrite	220'	Glorieta	4545'	Atoka	10,680'
T/Salt	520'	1st Bone Springs	6720'	Morrow "A"	11,300'
B/Salt	1280'	2nd Bone Springs	7250'	Morrow "E"	11,480'
Yates	1450'	3rd Bone Springs	7970'		
Queen	2440'	Wolfcamp	8430'		
Grayburg	2810'	Strawn	10,390'		
San Andres	3200'				

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

San Andres	3200'	(Oil)
Wolfcamp	8430'	(Oil)
Strawn	10,390'	(Gas)
Atoka	10,680'	(Gas)

8. See Form 9-331C. All casing will be new.
9. See Form 9-331C for depths of strings. Cement volumes and additions as follows:
 - a. 13 3/8" csg: Cement w/300 sxs Class "C" cmt w/2% CaCl. Circ to surface.
 - b. 8 5/8" csg: Cement w/1600 sxs lite wt cmt & 400 sxs Class "C". Circ cmt to surface. Caliper log to be run in conjunction w/GR/CNL/DLL/CDL/BVI/ Caliper log to determine open hole volume for computation of actual cement volume to circ to surface.
 - c. 5 1/2" csg: Cement w/800 sxs lite wt cmt & 400 sxs Class "H" 50-50 Pozmix A. Run caliper log in conjunction w/open hole logs to determine exact hole volume. Top of cmt anticipated at 8500'. Cmt volume could vary w/development of intermediate horizons.
10. The pressure control diagram is attached to Form 9-331C. The following additional information is as follows:

13 3/8" casing installation: 10" Ser 900 3000 psi double hydraulic pipe and blind rams.