

ADDITIONAL INFORMATION FOR "APPLICATION FOR PERMIT TO DRILL"

Getty Oil Company  
Getty Federal "15" Well No. 1

1. The geological name of the surface formation is OGALLALA.
2. The estimated tops of important geological markers are as follows:

<u>FORMATION</u>	<u>DEPTH FROM SURF.</u>	<u>DEPTH SUBSEA</u> (3549.7 GL)
Delaware Mountain Group	5,100	- 1,550.3
Bone Springs	8,500	- 4,950.3
Wolfcamp	11,500	- 7,950.3
Atoka	13,350	- 9,800.3
Morrow Clastics	14,200	-10,650.3

3. The estimated depths at which anticipated water and oil could be encountered are:

<u>DEPTH</u>	
0 - 5,100'	Possible fresh water
5,100 - 8,500'	(Delaware Mountain Group) Possible Oil
8,500 - 11,500'	(Bone Springs) Possible Oil
13,350 - 14,200'	(Atoka) Possible Gas
14,200 - 14,900'	(Morrow) Possible Gas

4. The proposed casing program - see attached "Application for Permit to Drill".
5. The minimum specifications for pressure control equipment to be used - see Figure I. The BOP will be tested to 10,000 psi.
6. The drilling fluid from surface to 11,200' will consist of brine with sufficient gel to condition hole for logging and running casing. The mud will be a 10-12 ppg low solids low fluid loss oil base mud with additives from 11,200' to TD (14,900) to help prevent damage to the Morrow.
7. The auxilliary equipment to be used is as follows:
  - a. Kelly cocks
  - b. Monitoring equipment on the mud system
  - c. Sub on the floor with a full opening valve to be stabbed into drill pipe when kelly is not in the string.
8. There may be (2) cores taken in the Morrow interval between 14,200'-14,900'; and (4) drill stem tests may be conducted as needed for shows in the Delaware, Bone Springs, Atoka, or Morrow.