

APPLICATION FOR PERMIT TO DRILL

MATADOR OPERATING COMPANY

Pipeline "A" Federal #2

660' FSL; 660' FEL

Sec 8, T19S, R34E

Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Matador Operating Company submits the following items of pertinent information in accordance with Onshore Oil and Gas Order Nos. 1 & 2, and with all other applicable federal and state regulations.

1. Geological Name of Surface Formation: Permian

2. Estimated Tops of Important Geological Markers:

	Measured Depth	Subsea	
Evaporites	1570'	+2235'	
Upper Permian Yates	3350'	+455'	
Upper Permian Seven Rivers	3800'	-5'	
Queen	4445'	-640'	
San Andres	5100'	-1295'	
Lower Permian Delaware	5725'	-1920'	+
Lower Permian Bone Spring	7950'	-4145'	
1 st Bone Spring SS Mbr	9220'	-5415'	+
2 nd Bone Spring SS Mbr	9715'	-5910'	+
3 rd Bone Spring SS Mbr	10510'	-6705'	
Lower Permian Wolfcamp SH	10675'	-6870'	
Lower Permian Wolfcamp "Chert"	10725'	-6920'	
Upper Penn Cisco	11845'	-8040'	
Upper Penn Canyon	12040'	-8235'	
Upper Penn Strawn	12140'	-8335'	
Lower Penn Atoka	12410'	-8605'	
Lower Penn Atoka LS	12715'	-8910'	
Lower Penn Morrow	12905'	-9100'	
Middle Morrow Clastics	13100'	-9295'	*
Lower Morrow	13380'	-9575'	*
PTD	13700'	-9895'	

* Primary Reservoir Target

+ Secondary Reservoir Target