

Application For Permit To Drill
 Grace Petroleum Corporation
 Smith Ranch Federal #1-3
 330' FSL & 330' FEL
 Section 11, T20S-R33E
 Lea County, New Mexico

In conjunction with Form 3160-3, Application For Permit To Drill, Grace Petroleum Corporation submits the following items of pertinent information.

1. Geological Surface Formation:

Quaternary alluvium and bolson deposits

2. Estimated Formation Tops: GR

<u>Formation</u>	<u>Estimated Depth</u>	<u>Remarks</u>
Yates	3300'	Poss. show oil
7 Rivers	3400'	" " "
Queen	4500'	" " "
Delaware	5700'	" " "
Bone Springs	8000'	" " "

3. Proposed Casing Program: See Form 3160-3 & Attachment I

4. Pressure Control Equipment: See Attached II

5. Mud Program: See Attachment III

6. Auxillary Equipment: As needed

7. Testing, Logging and Coring Program:
 Testing - Possible DST in Bone Springs & Delaware

Logging - 3000' to TD

Electric Logs

DSN-SDL w/CSNG	Int. csg to TD (DSN surf to TD)
FW Sonic	Int. csg to TD (DT surf to TD)
DLL w/GR & Cal.	Int. csg to TD
Dipmeter	Int. csg to TD
CBL	TD to TOC

Coring - 60' full diameter Bone Springs
 30 sidewall cores Bone Springs & Delaware

8. Known Drilling Hazards: None

9. Anticipated Starting Date: June 1, 1991