Application For Drilling

Pogo Producing Company WBR Federal No. 1 Lea County, New Mexico

In conjuction with permitting the captioned well for drilling in Section 13, T-22-S, R-32-E, Lea County, New Mexico, Pogo Producing Company submits the following information in accordance with U.S.G.S. (NTL-6) letter dated July 1, 1976:

- 1. The surface formation is Quaternary sand and gravel.
- 2. Estimated tops of geologic markers as follows:

Rustler Anhydrite	900'
Base of Salt	4460'
Delaware Limestone	4820'
Bell Canyon Sandstone	4865'
Cherry Canyon Marker	6010'
Brushy Canyon Sandstone	7115'
Bone Spring Limestone, Sandstone and Shale	8650'
Wolfcamp Shale and Limestone	12,060'
Strawn Limestone	13,570'
Atoka Clastics	13,700'
Atoka Bank	13,845'
Morrow Limestone	14,200'
Morrow Clastics	14,540'
Lower Marker Morrow	15,050'

- 3. The depths at which oil, gas or water are expected are: 6010', 8650', 12,060', 13,700' and 14,540'.
- 4. Casing program and cement:
 - All casing is new. See attached "Casing Design Data Sheet".
 - 13 3/8": 48# H-40 @ 750' w/700 sxs Premium Plus w/2% CaCl₂.
 - 10 3/4": 40.50# K-55, 45.50# K-55 and 51# K-55 and N-80 @ 4850' w/1500 sxs Premium Plus Neat.
 - 7 5/8": 26.40# N-80 and S-95 and 29.70# S-95 @ 12,150' w/2 stages of cement as follows: