ATTACHMENT TO FORM 3160-3 SAGEBRUSH 24 FEDERAL COM #1 SECTION 24, T19S, R33E LEA COUNTY, NEW MEXICO

DRILLING PROGRAM

1. GEOLOGIC NAME OF SURFACE FORMATION

Red Beds

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Rustler	1,600'	Strawn	12,150'
Yates	3,490'	Atoka	12,450'
Queen	4,450'	Morrow	12,720'
Delaware	5,900'	TD	13,600°
Bone Spring	7,950'		giana.
Wolfcamp	11,050'		

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, OR GAS

Bone Spring Oil Morrow Gas

4. CASING AND CEMENTING PROGRAM

Casing Size	From To	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
13-3/8"	0-350'	48#	H40	ST&C
8-5/8"	0-2,000'	24#	K55	ST&C
	2,000'-4,400'	32#	K55	ST&C
	4,400'-5,200'	32#	HCK55	ST&C
5-1/2"	0-4,200'	20#	N80	LT&C
	4,200'-8,400'	17#	N80	LT&C
	8,400'-13,600'	20#	N80	LT&C

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

We plan to drill a 17-1/2" hole to equal 350'. 13-3/8" casing will be cemented with 400 sx "C" or volume necessary to circulate to surface.

We plan to drill an 11" hole to equal 5,200". 8-5/8" casing will be cemented with 2,300 sx 35/65 Poz "C" or volume based on a fluid caliper necessary to circulate to surface.

We plan to drill a 7-7/8" hole to equal to 13,600'. 5-1/2" casing will be cemented with 1,500 sx 50/50 and 35/65 Poz "H" or volume necessary to tie back to 8-5/8" casing.