

SUPPLEMENTAL DRILLING DATA
NEARBURG PRODUCING COMPANY
BISON "12" FEDERAL #1

1. **SURFACE FORMATION:**

Red Beds

2. **ESTIMATED TOPS OF GEOLOGIC MARKERS: (Get from Geo. dept.)**

T/Delaware	5,300'
T/Bone Spring	7,780'
T/Wolfcamp	10,730'
T/Strawn	12,040'
T/Atoka	12,320'
T/Morrow	12,610'

3. **ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:**

Morrow

4. **CASING AND CEMENTING PROGRAM:**

*See casing and cementing program for
Maduro Federal Unit #5 for additional
detail. (attached)*

Casing Size	Setting Depth		Weight	Grade	Joint
	From	To			
13-3/8"	0	350'	48#	H-40	STC
8-5/8"	0	5,200'	24# & 32#	H-55 H-55 & S80	STC
5-1/2"	0	13,600'	17# & 20#	N-80	LTC

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

13 3/8" casing will be cemented to surface.

8-5/8" casing will be cemented to surface.

5-1/2" production casing will be cemented with approximately 950 sx of Class "H" 50/50 POZ.

5. **PRESSURE CONTROL EQUIPMENT:**

The BOP stack will consist of a 3,000 psi working pressure, dual ram type preventer and annular.

A BOP sketch is attached.