

SUPPLEMENTAL DRILLING DATA
for
HANAGAN PETROLEUM CORPORATION
#1 Lobo Federal
1750' FSL & 2075' FWL
Section 33 - T13S - R29E
Chaves County, New Mexico

The following items supplement Form 3160-3 in accordance with applicable BLM requirements.

1. ESTIMATED GEOLOGIC FORMATIONS:

Quaternary Sandy Alluvium @ Surface	
Rustler	250'
B/Salt	760'
Yates	865'
7-Rivers	1020'
Queen	1625'
San Andres	2200'
Glorieta	3600'
Abo	5800'
Wolfcamp	6925'
U/Penn Lm.	7625'
Atoka	8450'
Miss.	9025'
Devonian Pay	9725'

2. ESTIMATED WATER, OIL AND/OR GAS ZONES:
Water: No fresh water sources expected below 200'.

Oil or Gas:	Queen	1625'
	San Andres	2200'
	Devonian	9725'

3. PRESSURE CONTROL EQUIPMENT:

Pressure control equipment will include a 3000# WP blowout preventer stack (see attached diagram). BOPE will be nipped up and pressure tested to working pressure prior to drilling intermediate casing shoe. Pipe rams to be tested daily and blind rams tested when out of hole. Crew will hold weekly BOP drills. All drills and tests will be recorded in drillers log.

4. CASING & CEMENTING PROGRAM:

Surface String: Drill 17 1/2" hole to approx. 300' and set 13 3/8", 48.0 #/ft, H-40, STC casing. (Internal Pressure @ Min. Yield=1730 PSI, Min Collapse=770 PSI, Joint Strength=322,000#). Cement casing as follows:
180 sacks Class "C" lite cement with .25#/sc Flocele - Tail in with 150 sacks Class "C" w/2%CaCl - circulate excess cement to pits. Allow

18 hours for cement to set. Pressure test with rig pumps to 500# for 30".

Intermediate String: Drill 12 1/4" hole to approx. 2250' and set 8 5/8", 24 #/ft, J-55, STC casing. (Internal Pressure @ Min. Yield=2950 PSI, Min. Collapse=1370 PSI, Joint Strength=263,000). Cement casing w/approx. 1000 sacks "C" Lite w/6# salt per sack + 250 sacks "C" neat w/2% CaCl - circulate excess cement to pits - allow 18 hours for cement to set, pressure test to 1500# for 30 minutes using rig pumps.

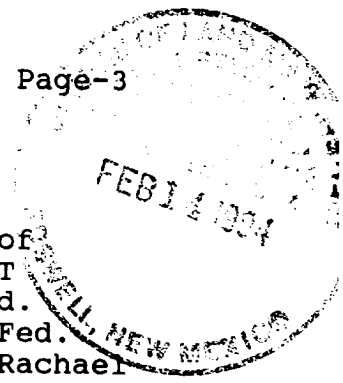
Production String: Drill 7 7/8" hole to approx. 9,750', if commercial production is indicated, set 5 1/2", 15.5#/17.0#, J-55, LTC casing (Internal Pressure @ Min. Yield=4810 PSI, Min. Collapse=4040 PSI, Joint Strength=239,000#). Cement as necessary to isolate productive interval, pressure test plug to 1900# before completion.

5. MUD PROGRAM: ^{350'}
a. Surface - 300'; Native fresh water mud
b. ^{350'}300' - 2250'; Saturated brine system
c. 2250' - 5500; Cut Brine system having a viscosity of 32-38 sec., weight between 8.6 & 10#.
d. 5500' - 8500; Brine water having viscosity of 35-40, MW 9.0-9.5#/gal, 5%-6% crude oil
e. 8500' - 9750'; Brine water having a viscosity of 40+, MW 9.0-9.7#/gal, 2%-4% crude oil, water loss below 12 cc.
6. AUXILIARY EQUIPMENT:
Auxiliary equipment will include a kelly cock on the kelly joint and a full opening safety valve with appropriate drill pipe fittings available on rig floor at all times.
7. TESTING, LOGGING AND CORING PROGRAM
Samples: Samples will be caught at 10' intervals from 300' - TD. A 2 man mudlogging unit will be utilized from 2200' - TD.

DST's: Anticipate at least one DST in Siluro/Dev.
Other possible DSTs as warranted by shows.

Coring: None anticipated

Logging: Gamma Ray/Neutron/Density/Pe/Caliper
Gamma Ray/ Dual Laterlog/MSFL



8. ANTICIPATED PRESSURE, TEMPERATURE, AND H₂S:
Anticipated maximum bottom hole pressures of less than 4,000# based on production and DST results from nearby Marathon #2 Marathon Fed. well, McClellan Oil Corporation #1 Stevens Fed. & #3 Stevens Fed, Kerr-McGee Oil #1 State, Rachael Exploration #1 Rachael & Santa Fe Exploration #1 Holmstrom wells.
Based on this previous activity in the immediate area no abnormal pressures are expected.

Anticipate bottom hole temperature of 155 deg.
No abnormal temperatures are expected.

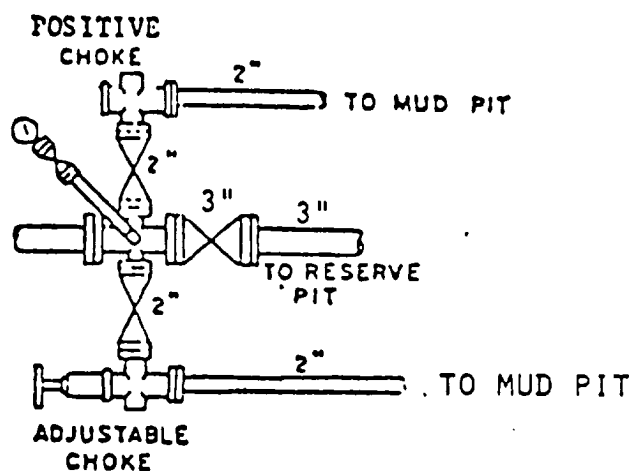
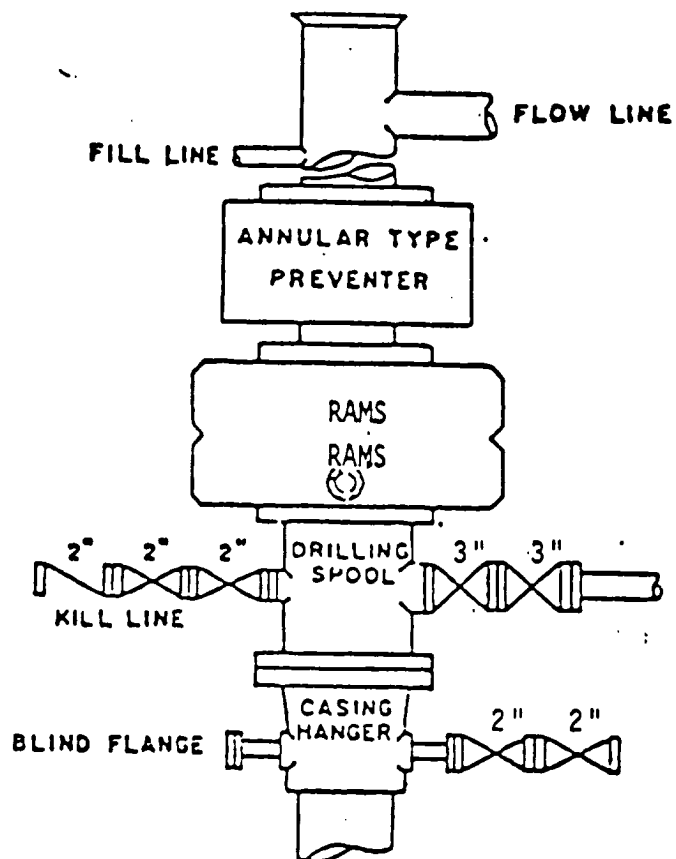
Hydrogen Sulfide has not been encountered on any of the above mentioned previous activity in the nearby vicinity. On the Marathon #2 Marathon federal well, which is located less than one mile from this location, Hydrogen Sulfide monitoring equipment was utilized throughout the drilling without any occurrence of Hydrogen Sulfide noted. Based on these numerous previous experiences in this area, H₂S is not expected to occur at this location.

9. HAZARDOUS SUBSTANCES

Do not anticipate that any material listed as Hazardous Material in CERCLA or RCRA will be utilized in the drilling of this well.

10. ANTICIPATED STARTING DATE:

Anticipate commencing dirtwork the first week of March with drilling operations to begin as soon as possible thereafter. Anticipate drilling operations lasting 30-35 days.



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT