

10 POINT PLAN  
Yates Federal C-26  
Section 4, 21S, 27E  
Eddy County, New Mexico  
May 9, 1983

1. The geologic name of the surface formation: Recent

2. The estimated tops of important geologic markers:

Delaware Mt. Grp. : 2500'  
Bone Spring : 4700'

3. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to occur:

Deepest FW : 500'  
Oil  
Bone Spring : 4700'

4. Proposed casing program:

<u>STRING</u>	<u>SIZE</u>	<u>WEIGHT/GRADE</u>	<u>CONDITION</u>	<u>DEPTH INTERVAL</u>
Conductor	20"	94#/H-40	New	0- 40'
Surface	13-3/8"	54.5#/K-55	New	0- 600'
Intermediate	8-5/8"	24#/K-55	New	0-2500'
Production	5-1/2"	14# & 15.5#/K-55	New	0-5000'

5. Minimum specifications for pressure control equipment:

- A. Wellhead equipment - Threaded type, 2000 psi WP for 13-3/8" x 8-5/8" x 5-1/2" casing program with 2-7/8" tubing hanger.
- B. Blowout preventers - Refer to attached drawings and lists of equipment titled "Type II-C" for description of BOP stacks and choke manifold.
- C. BOP control unit - Unit will be hydraulically operated and have at least two control stations.
- D. Testing - Upon installation, the Type II-C BOP's for the 13-3/8" surface casing and the 8-5/8" intermediate casing will be tested to a low pressure (200-300 psi) and to a high pressure of 2000 psi. Casing rams will be tested in a like manner. An operational test of the blowout preventers will be performed on each round trip, (but not more than once each day); the annular and pipe rams preventers will be closed on drill pipe and the blind rams will be closed while pipe is out of the hole.

6. Type and anticipated characteristics of drilling fluid:

<u>DEPTH INTERVAL</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>FUNNEL VISC.</u>	<u>WL</u>	<u>pH</u>
0- 600	FW	8.4-8.8	25-30	--	10.5+
Surf-5000	Cut BW	8.8-9.5	30-32	--	10.5+

7. Auxiliary control equipment:

- A. Kelly cocks: Upper and lower installed on kelly.
- B. Safety valve: Full opening ball type to fit each type and size of drill pipe in use will be available on rig floor at all times. The valves will be in the open position for stabbing into drill pipe when kelly is not in the string.
- C. Trip tank: Will be installed after setting surface casing to insure that the hole is full of fluid and that the hole takes the proper amount of fluid on trips.
- D. Mud system monitor: Monitoring equipment and floats at the bit will not be used unless conditions dictate. A flow rate indicator will be installed after surface casing has been set.

8. Testing, logging and completion programs:

- A. Logging: Surface casing - TD GR - Sonic  
Intermediate casing - TD FDC - CNL  
Intermediate casing - TD DLL MSFL
- B. Proposed completion procedure: Spot acid across pay zone. Run GR-CCL and perforate. Acidize with 1500 gallons 15% gelled NE HCl.
- C. Production method: Run tubing anchor on 2-7/8" tubing and set above perforations. Produce by artificial lift.

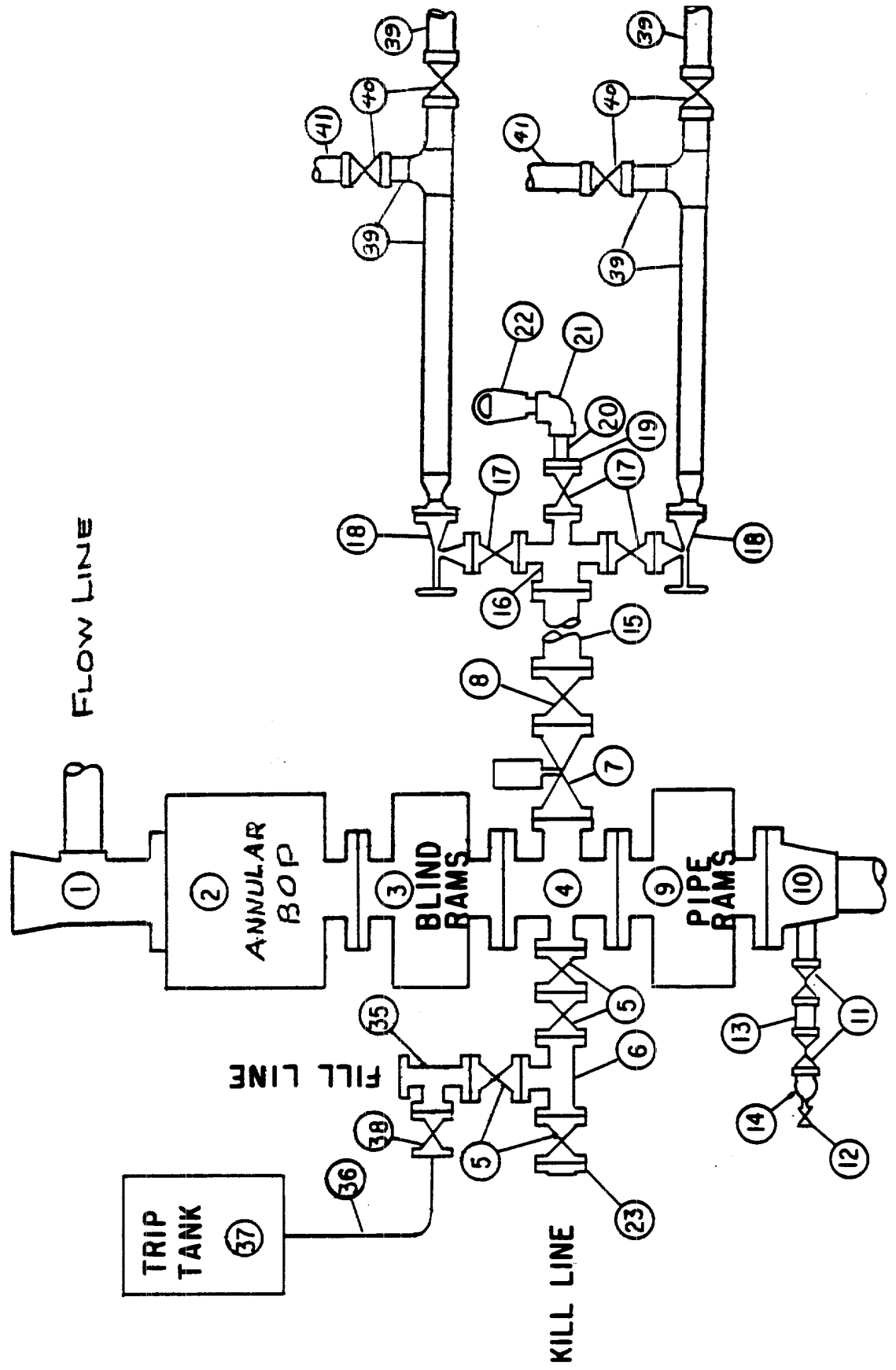
9. Abnormal pressure and other possible hazards.

- A. No abnormal pressure is anticipated.
- B. No H<sub>2</sub>S problem is expected.

10. It is anticipated that drilling and completion operations will begin during the Second Quarter of 1983.

TDY/drh

# MIDLAND DRILLING ORGANIZATION BLOWOUT PREVENTER SPECIFICATION TYPE II - C



**BLOWOUT PREVENTER SPECIFICATION**  
**EQUIPMENT DESCRIPTION**

**TYPE II-C**

All equipment should be at least 2000 psi WP or higher unless otherwise specified.

1. Bell nipple.
2. Hydril or Shaffer bag type preventer.
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 4-inch and one 2-inch (minimum) outlet.
5. 2-inch (minimum) flanged plug or gate valve.
6. 2-inch by 2-inch by 2-inch (minimum) flanged tee.
7. 4-inch pressure operated gate valve.
8. 4-inch flanged gate or plug valve.
9. Ram type pressure operated blowout preventer with pipe rams.
10. Flanged type casing head with one side outlet (furnished by Exxon).
11. 2-inch threaded (or flanged) plug or gate valve (furnished by Exxon).  
Flanged on 5000# WP, threaded on 3000# WP or less.
12. Needle valve (furnished by Exxon).
13. 2-inch nipple (furnished by Exxon).
14. Tapped bull plug (furnished by Exxon).
15. 4-inch flanged spacer spool.
16. 4-inch by 2-inch by 2-inch by 2-inch flanged cross.
17. 2-inch flanged plug or gate valve.
18. 2-inch flanged adjustable choke.
19. 2-inch threaded flange.
20. 2-inch XXH nipple.
21. 2-inch forged steel 90° Ell.
22. Cameron (or equal.) threaded pressure gage.
23. Threaded flange.
35. 2-inch flanged tee.
36. 3-inch (minimum) hose. (Furnished by Exxon).
37. Trip tank. (Furnished by Exxon).
38. 2-inch flanged plug or gate valve.
39. 2-1/2-inch pipe, 300' to pit, anchored.
40. 2-1/2-inch SE valve.
41. 2-1/2-inch line to steel pit or separator.

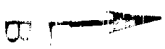
**NOTES:**

1. Items 3, 4 and 9 may be replaced with double ram type preventer with side outlets between the rams.
2. The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.
3. Kill line is for emergency use only. This connection shall not be used for filling.
4. Replacement pipe rams and blind rams shall be on location at all times.
5. Only type U, LWS and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
6. Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.

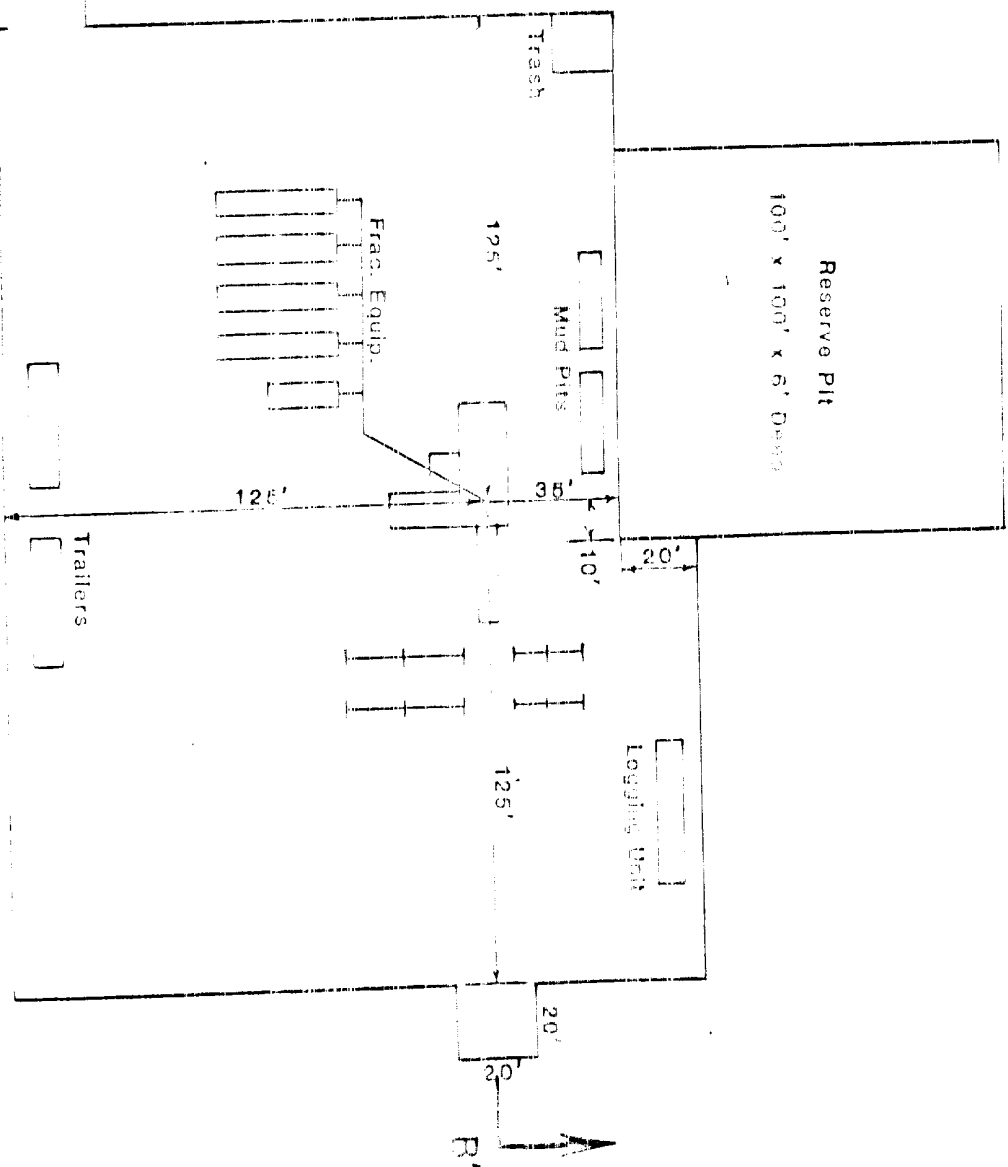
1200'  
1.7



1200'  
1.3



ACCESS ROAD



# WELL SITE LAYOUT

Scale: 1" = 50'

## CROSS SECTIONS

Scale: Horizontal: 1" = 40'  
Vertical: 1" = 10'

