

Form 3100
(August 2007)**RECEIVED**

DEC 04 2008

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**HOBBS OCD** APPLICATION FOR PERMIT TO DRILL OR REENTERFORM APPROVED
OMB No 1004-0137
Expires July 31 2010

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No. -----	
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. 24345 MADERA "30" FEDERAL # 2	
2. Name of Operator GREAT WESTERN DRILLING COMPANY (MILE CURE 432-682-5241)		9. API Well No. 30-025-40168	
3a. Address P. O. BOX 1659 MIDLAND, TEXAS 79702	3b. Phone No (include area code) 432-682-5241	10. Field and Pool, or Exploratory JABALINA-BONE SPRING	
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 660' FWL & 2000' FNL SECTION 30 T26S-R35E LEA CO. NM At proposed prod. zone SAME		11. Sec., T R M. or Blk. and Survey or Area SECTION 30 T26S-R35E	
14. Distance in miles and direction from nearest town or post office* Approximately 18 miles Southwest of Jal New Mexico		12. County or Parish LEA CO.	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 660'	16. No. of acres in lease 520	17. Spacing Unit dedicated to this well 40	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 1400'	19. Proposed Depth 9500'	20. BLM/BIA-Bond No. on file NMB-0996 NATION WIDE	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3189' GL.	22. Approximate date work will start WHEN APPROVED	23. Estimated duration 40 Days	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature <i>Joe T. Janica</i>	Name (Printed/Typed) Joe T. Janica	Date 09/03/08
Title Permit Eng		
Approved by (Signature) /s/ James Stovall	Name (Printed/Typed) /s/ James Stovall	Date DEC 02 2008
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****CAPITAN CONTROLLED WATER BASIN****APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED****JUN 23 2011**

APPLICATION TO DRILL

GREAT WESTERN DRILLING COMPANY
MADERA "30" FEDERAL #2
LOT #2 SECTION 30
T26S-R35E LEA CO. NM

In response to questions asked under Section II of Bulliten NTL-6, the following information on the above will be provided.

1. LOCATION: 660' FWL & 2000' FNL SECTION 30 T26S-R35E LEA CO. NM
2. ELEVATION ABOVE SEA LEVEL: 3189' GL
3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternary Aeolian Deposits.
4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
5. PROPOSED DRILLING DEPTH: 9500'
6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

Rustler Anhydrite	970'	Delaware Sd	5360'
Yates	2360'	Bone Spring	9450'
San Andres	3615'	TD	9500'
Delaware Lime	5325'		

7. POSSIBLE MINERAL BEARING FORMATIONS:

Delaware Lime	Oil	Bone Spring	Oil
Delaware Sand	Oil		

8. CASING PROGRAM:

HOLE SIZE	INTERVAL	OD OF CASING	WEIGHT	THREAD	COLLAR	GRADE	CONDITION
26"	0-40	20"	NA	NA	NA	Conductor	New
17½"	0-1040'±	13 3/8"	54.5#	8-R	ST&C	J-55	New
12½"	0-5300'±	8 5/8"	32#	8-R	ST&C	HCK-55 J-55	New
7 7/8"	0-9500'	5½"	17#	8-R	LT&C	N-80	New

DESIGN FACTORS: Collapse 1.125 Burst 1.0 Body Yield 1.5
Joint Strength: 8-R 1.8
Butress 1.6

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9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 1040±' of 13 3/8" 54.5# J-55 ST&C casing. Cement with 750 Sx. of 35/65 Class "C" POZ + 3% Salt, + 6% Bentonite, + additives, Yield 1.90. Tail in with 250 Sx. of Class "C" cement + 1% CaCl, Yield 1.34, circulate cement to surface.
		<i>See COA →</i>
8 5/8"	Intermediate	Set 5300' of 8 5/8" 32# as Follows: 1500' of 8 5/8" 32# HCK-55 ST&C, 3800' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of 35/65 CLASS "C" POZ, + 3% salt, + 6% Bentonite, + other additives, Yield 1.9, tail in with 500 Sx. of Class "C" +1% CaCl, + other additives, Yield 1.34, circulate cement to surface <i>on bottom</i>
5 1/2"	Production	Set 9500' of 5 1/2" 17# N-80 LT&C casing. Cement with 350 Sx. of 50/50 Class "C" POZ cement + 5% Salt, + 10% Bentonite + retarder, + additives, Yield 2.45. Tail in with 350 Sx. of Class "C" cement + additives, Yield 1.33 estimated top of cement 4500' from surface

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a ⁹⁰⁰ 1500 Series ^{2000 per operator} 5000 PSI working ^{11/24/8} pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nipple up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of the hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI working pressure choke manifold with dual adjustable chokes. No abnormal pressure or temperatures are expected while drilling this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-1040'	8.4-8.6	28-36	NC	Fresh water Spud Mud use paper to control seepage
1040- 5300'	10.0-10.2	28-38	NC	Brine water use paper to control seepage, and high viscosity sweeps to clean hole.
53-TD	8.4-8.7	28-30	NC	Fresh water if necessary add fresh water Gel to control viscosity to clean If water loss is needed use starch to control water loss.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing the viscosity and/or the water loss may have to be adjusted to meet these needs.

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12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Electric logs that will be run: GR/SP/DIL/ & Gamma Ray/Caliper/CNL/FDT, from TD back to 5300' Run MRI. Gamma Ray CNL from 5300' back to surface.
- B. Mud logger will be rigged up on the hole at 5300' and remain on the hole to TD.
- C. No full hole cores or DST's are planned at this time, sidewall cores may be taken.

13. POTENTIAL HAZARDS:

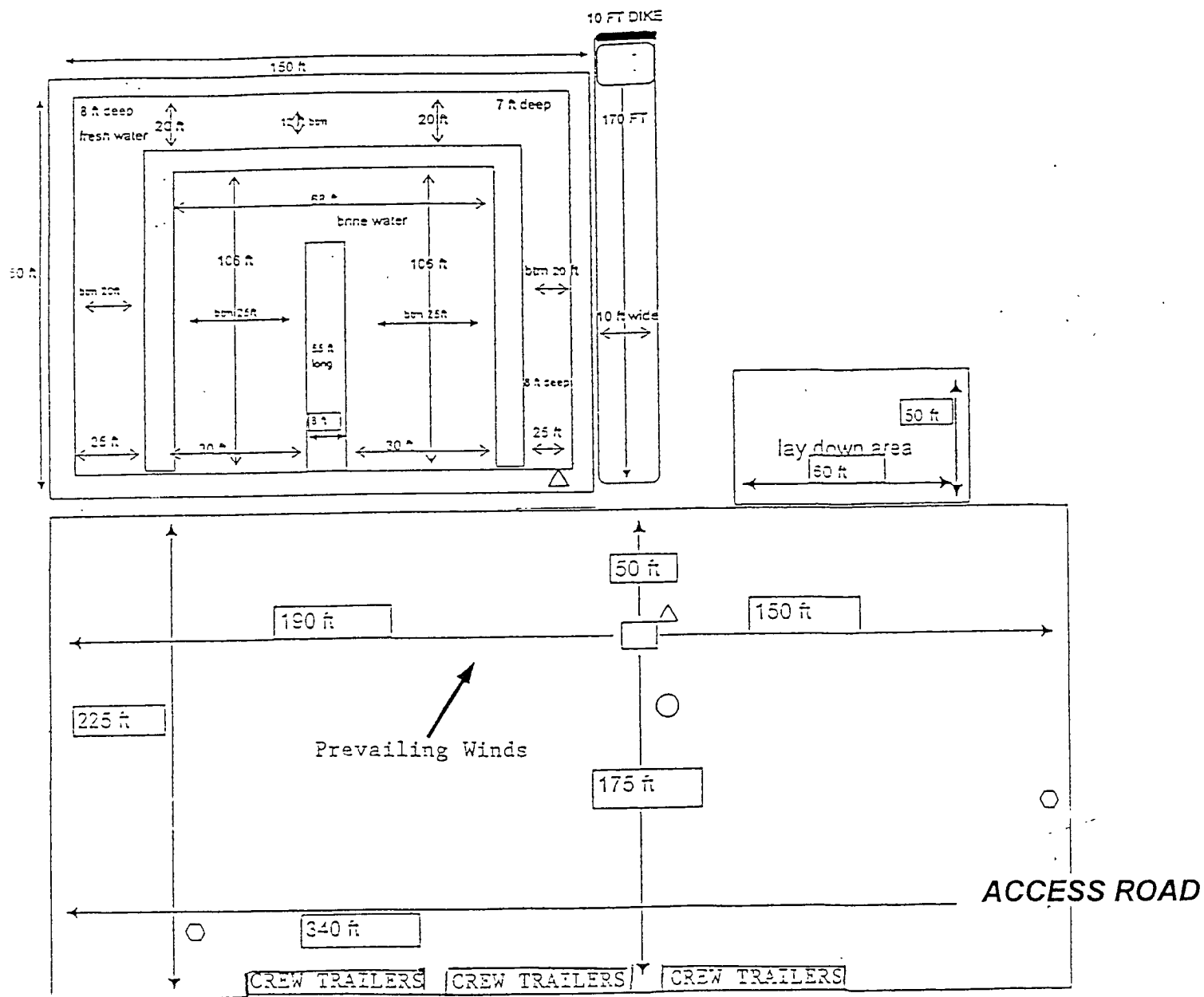
No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4700± PSI, and Estimated BHT 180°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 38 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

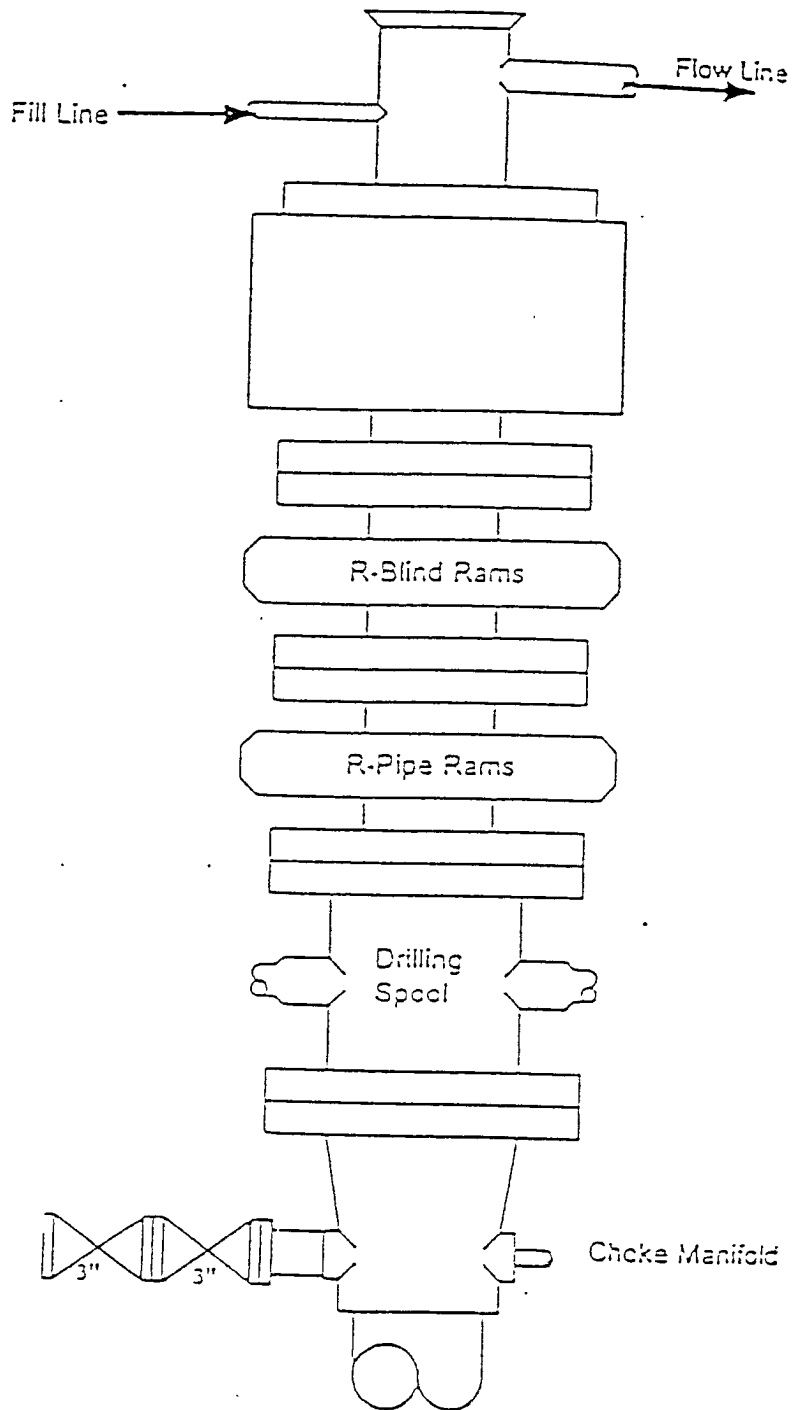
After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The BONE SPRING formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as an oil well.



- ⤴ Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

GREAT WESTERN DRILLING COMPANY
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Type 900 Series
3000 psi WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON
GREAT WESTERN DRILLING COMPANY
MADERA "30" FEDERAL #2
LOT #2 SECTION 30
T26S-R35E LEA CO. NM

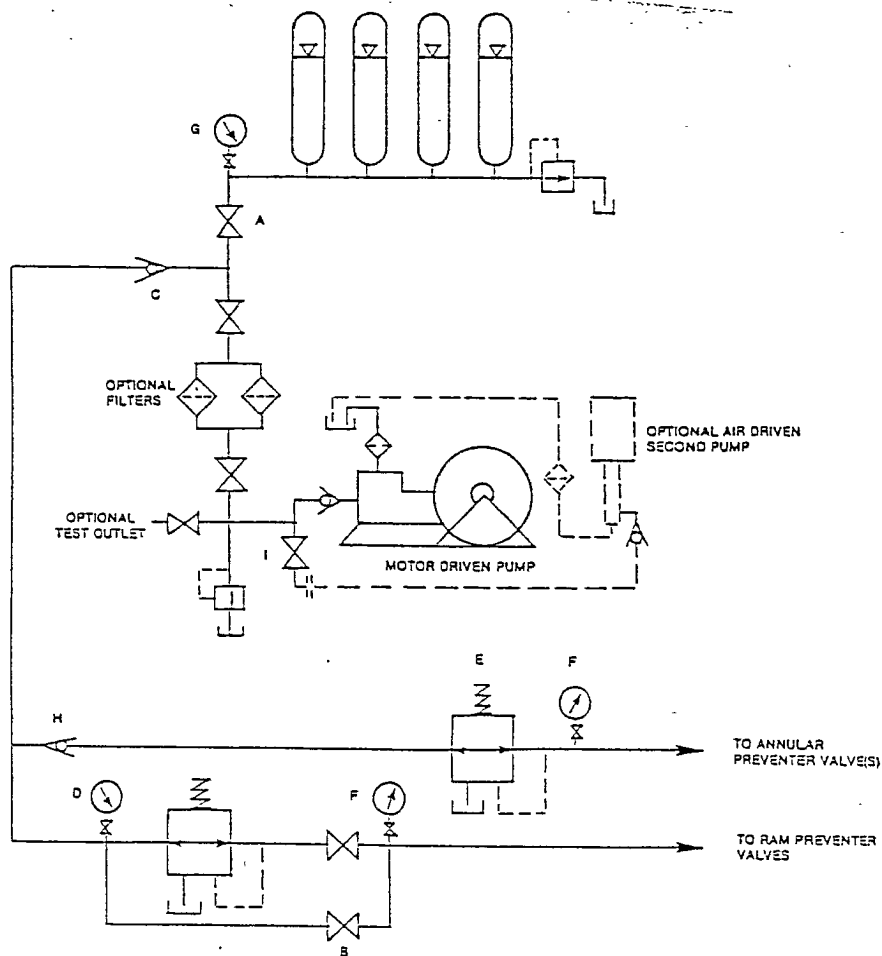


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

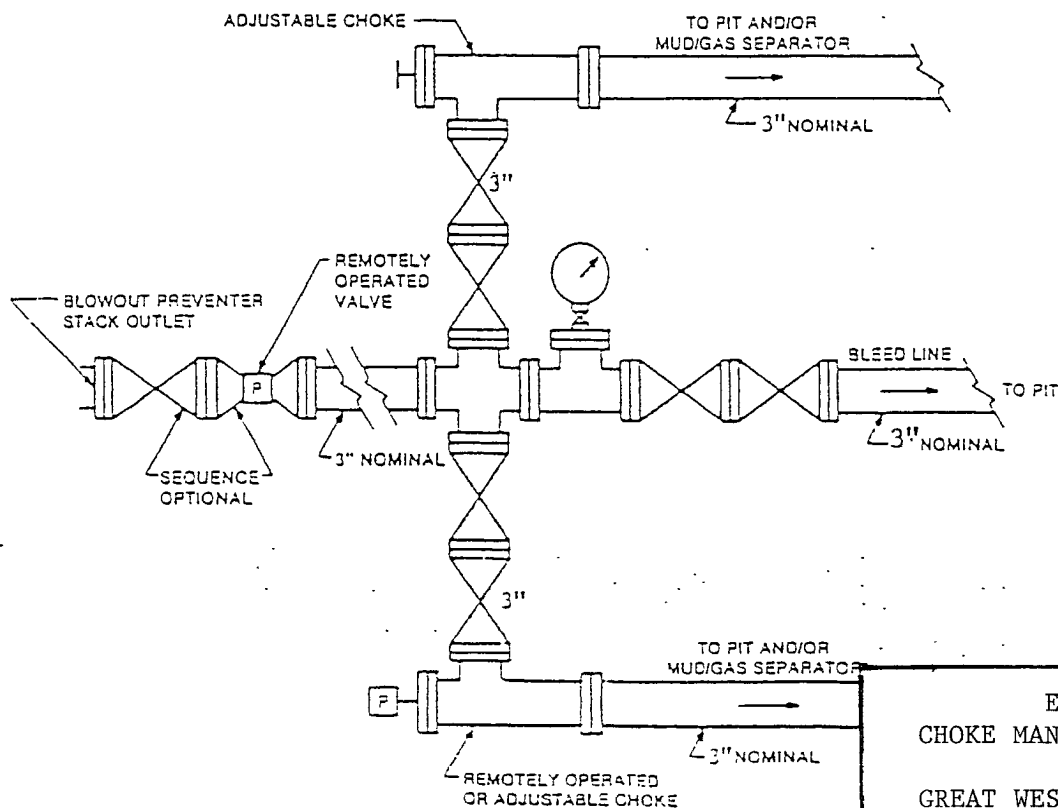


FIGURE K4-2. Typical choke manifold assembly for 5M rated work pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

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