OPER. OGRID NO. 14245
PROPERTY NO. 21149
POOL CODE 13320
EFF. DATE 2/16/98
API NO. 30-025-34301

Form 3160-3
(December 1990)

UNIT
DEPARTMENT
BUREAU OF

CATE*
tions on
de)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PE

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Matador Operating Company

3. ADDRESS AND TELEPHONE NO.
8340 Meadow Rd, #158, Dallas, TX 75231, 214-987-7144

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
735' FNL; 660' FWL of Section 30
At proposed prod. zone
same
Unit D (1)

5. LEASE DESIGNATION AND SERIAL NO.
LC069276

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Hudson Federal ~~30~~ #4

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT
South Corbin Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 30, T18S, R33E

12. COUNTY OR PARISH
Lea

13. STATE
NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
34 miles west of Hobbs, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
660'

16. NO. OF ACRES IN LEASE
2440

17. NO. OF ACRES ASSIGNED TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
1320

19. PROPOSED DEPTH
11,500

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3775 GL

Capitan Controlled Water Basin

22. APPROX. DATE WORK WILL START*
February 23, 1998

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8 H-40	48#	385'	370 sx Circ to surface
11	8-5/8 J-55	32#	2950'	1000 sx. Circ to surface
7-7/8	5-1/2 N-80	17# & 20#	11,500'	500 sx TOC will be determine after viewing logs.

Drill 11,500' Wolfcamp development well. Drill 17-1/2" hole to 385'. Run and cement to surface 13-3/8" casing. NU BOP stack and drill 11" hole to +/-2950'. Run and cement to surface 8-5/8" casing. NU 5M BOP assembly and test. Drill 7-7/8" hole to +/- 11,500' and evaluate.

Well Location and Acreage Dedication Plat
Application for Permit to Drill (Drilling Program)
Surface Use Plan
Exhibit A, Area Map
Exhibit B, Wellsite Plan
Exhibit C, Production Map
Exhibit D, Blowout preventer requirements
Exhibit E, BOP Schmatic
Exhibit F, Choke Manifold
Well Plan Outline
Topo Map

Approval Subject to General Requirements and Special Stipulations Attached

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED J. W. Bell TITLE Drilling Manager DATE 1-13-98

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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:

APPROVED BY (ORIG. SGD.) ARMANDO A. LOPEZ TITLE Acting ADM. MINERALS DATE 2-11-98

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

DISTRICT I
P. O. Box 1980
Hobbs, NM 88241-1980

DISTRICT II
P. O. Drawer DD
Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd.
Aztec, NM 87410

DISTRICT IV
P. O. Box 2088
Santa Fe, NM 87507-2088

State of New Mexico
Energy, Minerals, and Natural Resources Department

OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 02-10-94

Instructions on back

Submit to the Appropriate District Office
State Lease - 4 copies
Fee Lease - 3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-34301	13320	South Corbin Wolfcamp

4 Property Code	5 Property Name	6 Well Number
021149	HUDSON FEDERAL ~~30~~	4

7 OGRID No.	8 Operator Name	9 Elevation
014245	MATADOR OPERATING COMPANY	3775'

10 SURFACE LOCATION

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
D	30	18 SOUTH	33 EAST, N.M.P.M.		735'	NORTH	660'	WEST	LEA

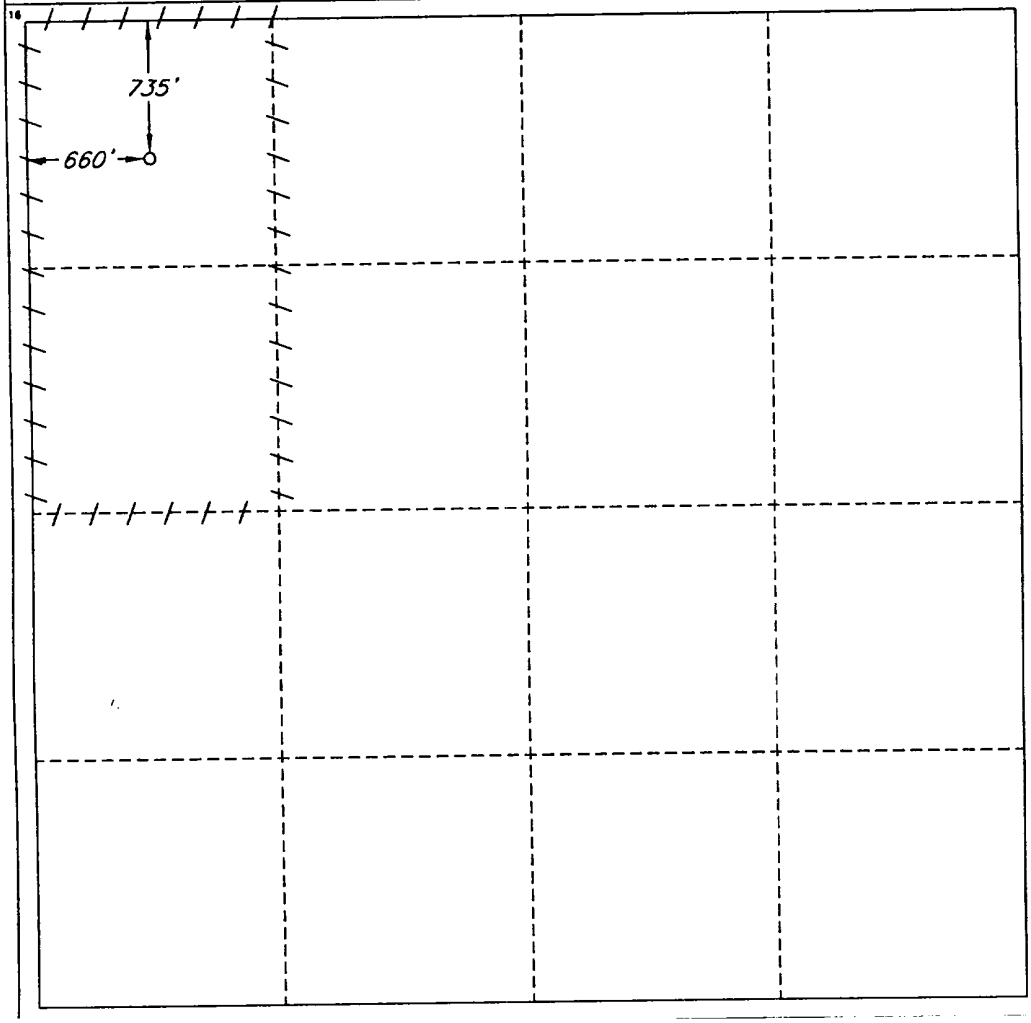
11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
80 ~~84.92~~			

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

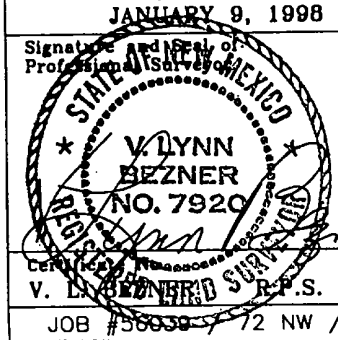
Signature: John W Bell
Printed Name: John W. Bell
Title: Drilling Manager
Date: 1-13-98

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: JANUARY 9, 1998

Signature and Seal of Professional Surveyor:



Certificate No. V. LYNN BEZNER R.P.S. #7920

JOB #58039-1/72 NW / JSJ

APPLICATION FOR PERMIT TO DRILL

MATADOR OPERATING CORPORATION
HUDSON FEDERAL 30 #4
735' FNL & 660' FWL
SEC. 30, T18S, R33E
LEA COUNTY, NEW MEXICO

In conjunction with Form 3160-3, Application for Permit to Drill, Matador Operating Company submits the following items of pertinent information in accordance with Onshore Oil and Gas Order Nos. 1 & 2, and with all other applicable federal and state regulations.

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geological Markers:

Permian Queen Fm	4100'	- 308'
Penrose	4350'	- 558'
San Andres	4970'	-1178'
Delaware	5315'	-1523'
Top Bone Spring	7076'	-3284'
1st Bone Spring Sand	8534'	-4742'
3rd Bone Spring Carb.	9746'	-5954'
Wolfcamp	10,290'	-6498'
Wolfcamp Main pay	10,954'	-7162'
TD	11,500'	-7708'

3. Estimated Depths of Anticipated Fresh Water, Oil, or Gas:

Upper Permian Sands	0-300'	fresh water
1st Bone Spring Sand	8534'	oil
Wolfcamp	10,954'	oil

The ground water will be protected by setting 13-3/8" surface casing at 385' and circulating cement back to surface. The productive Wolfcamp horizons will be protected by setting 5-1/2" production casing at TD with cement tied back to approximately 9000'. If Bone Spring appears productive, the top of cement will be brought up to 8200'.

4. Proposed Casing Program:

Hole Size	Interval	Casing OD	Description
25"	0-40'	20"	Conductor
17-1/2"	0-385'	13-3/8"	48#, H-40, ST&C, New, R-3
11"	0-2950'	8-5/8"	32#, J-55, LT&C, New, R-3
7-7/8"	0-10,000'	5-1/2"	17#, N-80, LT&C, New, R-3
7-7/8"	10,000-11,500'	5-1/2"	20#, N-80, LT&C, New, R-3

Proposed Cement Program:

20" Conductor: Ready-mix poured to surface.

13-3/8" Surface Casing: Cemented to surface with 170 sx 35:65 Poz (35% Poz:65% Class "C") + 6% Gel (Bentonite) + 0.25 lb/sk Cello Flake + 1% CaCl2 lead & 200 sx Class "C" +2% CaCl2 tail. Float equipment: Texas Pattern shoe with an insert float valve above the shoe joint and 2 centralizers. The shoe and first collar will be welded. One plug will be used to displace cement.

8-5/8" Intermediate Casing: Cemented to surface with 800 sx 35:65 Poz (35% Poz:65% Class "C") + 6% Gel (Bentonite) + 0.25 lb/sk Cello Flake + 5 lb/sk Salt lead & 200 sx Class "C" + 2% CaCl2 tail. Float equipment: Float shoe with a float collar 1 joint above the shoe joint and 10 centralizers. The shoe and float collar will be welded. One plug will be used to displace cement.

5-1/2" Production Casing: Cement with 400 sx Super "C" Modified with 11.0 PPS BA-90 Bonding + 0.4% FL-2 + 0.4% FL-25. Actual cement volumes and slurry may vary based on hole. Float equipment: Float shoe with a float collar above the shoe joint and centralizers across potential productive intervals as determined by the open hole logs. Thread lock will be used on the float shoe and the float collar. One plug will be used to displace cement. Displacement fluid will be fresh water treated with 2% KCl.

5. Pressure Control Equipment:

The blowout preventer equipment (BOP) shown in Exhibits D & E will consist of a double ram-type (5000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. Both BOP's will be nippled up on the 13-3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP

and accessory equipment will be tested to 5000 psi and the hydril to 70% of rated working pressure (2100 psi).

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 5000 psi WP rating which is shown in Exhibit F.

6. Proposed Mud System:

The proposed mud system will be a combination of fresh water, brine, cut brine, and polymer gel. The depths and mud properties of the mud system are listed below.

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)	ph
0-385'	Fresh Water	8.3-8.8	28-30	Not Critical	9-10
385-2950'	FW/Brine Wtr	8.8-10.2	28-30	Not Critical	9-10
2950-10,000'	Fresh Water	8.5-8.6	28-30	Not Critical	9-10
10,000-11,500	Polymer/Gel	9.0-9.5	30-32	10-15	9-10

Sufficient mud materials to maintain the above mentioned mud properties and meet minimum lost circulation and weight increase requirements will be kept at the location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A kelly cock will be kept in the drill string at all times.
- A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- A mud logging unit complete with H2S detector will be monitoring drilling penetration rate and hydrocarbon shows from 4500' to TD.

8. Drillstem Testing, Logging, and Coring Programs:

- Drillstem tests will be run based on shows encountered while drilling.
- No logs are planned for the 11" hole section. The electric logging program for the 7-7/8" hole sections will consist of GR-Dual Laterolog MLL-LSS and GR Compensated Neutron--LithoDensity from TD to intermediate casing. Selected sidewell cores and RFT's may be taken in zones of interest.
- No conventional coring is anticipated.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures and/or temperatures are anticipated. No hydrogen sulfide or other hazardous gases or fluids are known to exist in this area. No major loss circulation zones are expected.

10. Anticipated Starting Date and Duration of Operations:

The anticipated start date will be during February of 1998. Once commenced, drilling operations should be completed in approximately 30 days. If the well is productive, another 15 days will be required for completion work and facility installation.

Matador Operating Company
Hudson Federal 30 #4
735' FNL; 660' FWL
Sec 30, T18X, R33E
Lea County, New Mexico

Exhibit "D"

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

5,000 psi Working Pressure

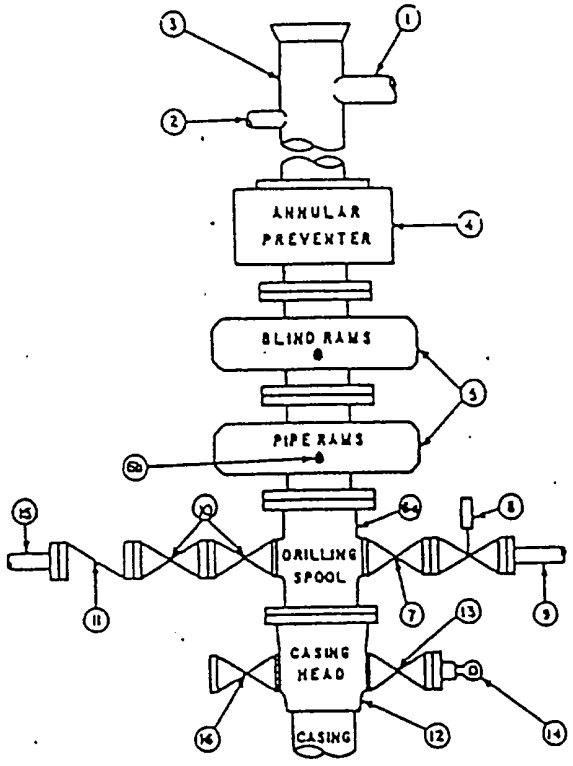
5 MWP

STACK REQUIREMENTS

No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
	—— or ——		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate ☐ Plug ☐	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate ☐ Plug ☐	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate ☐ Plug ☐	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL			
16	Flanged valve	1-13/16"	

CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 5,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

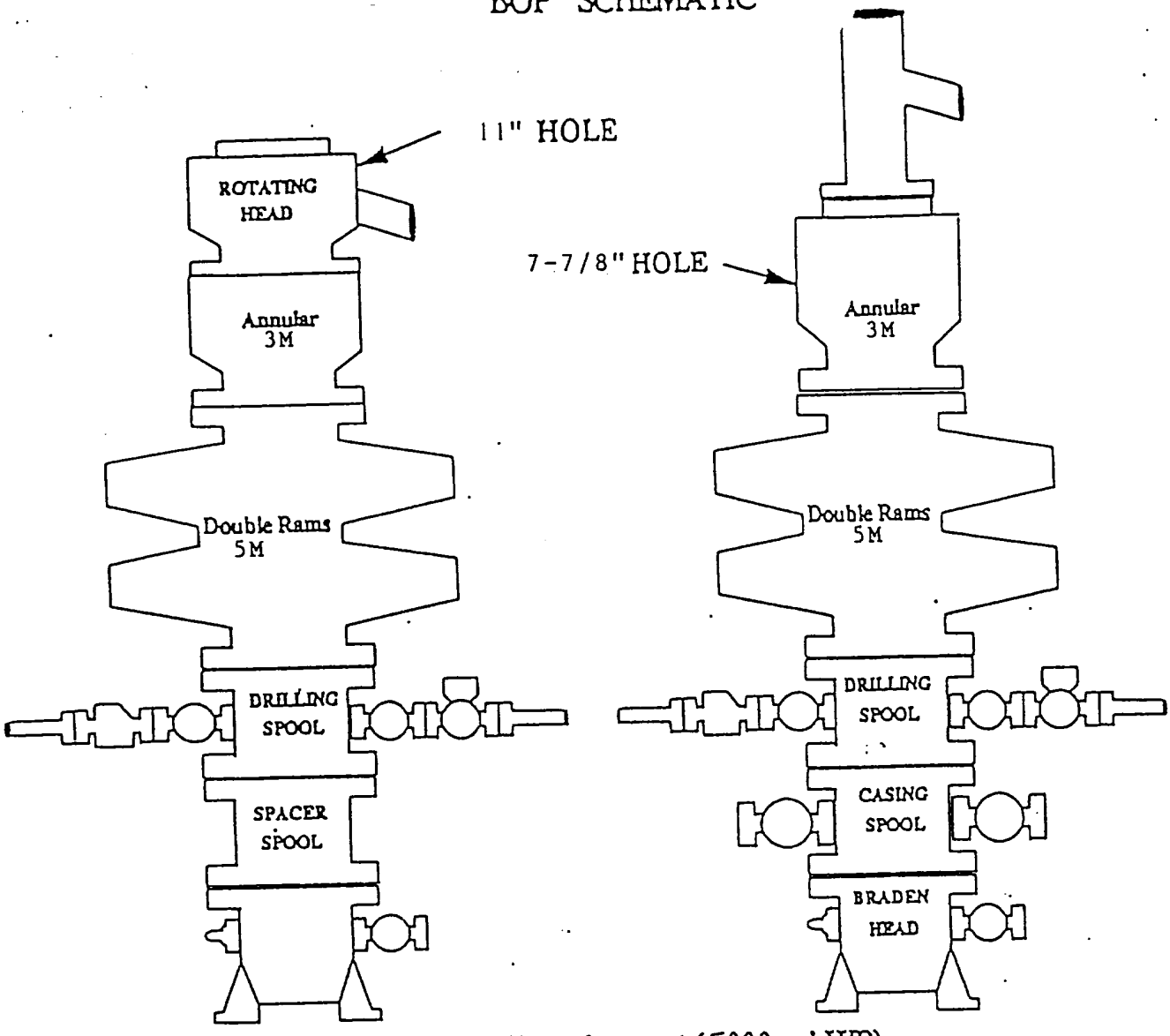
MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.

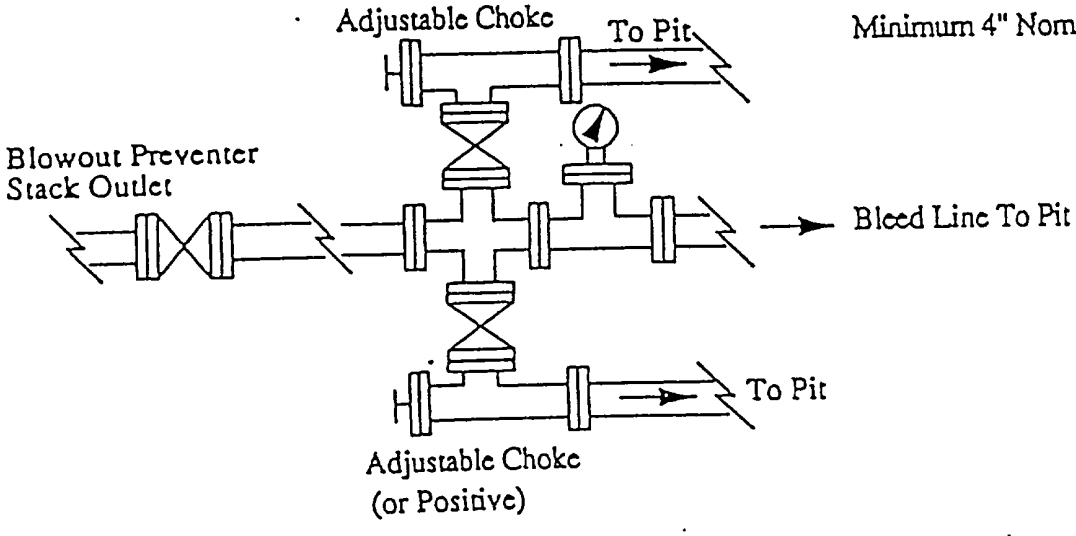
GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chokes. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.
7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (5000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

BOP SCHEMATIC



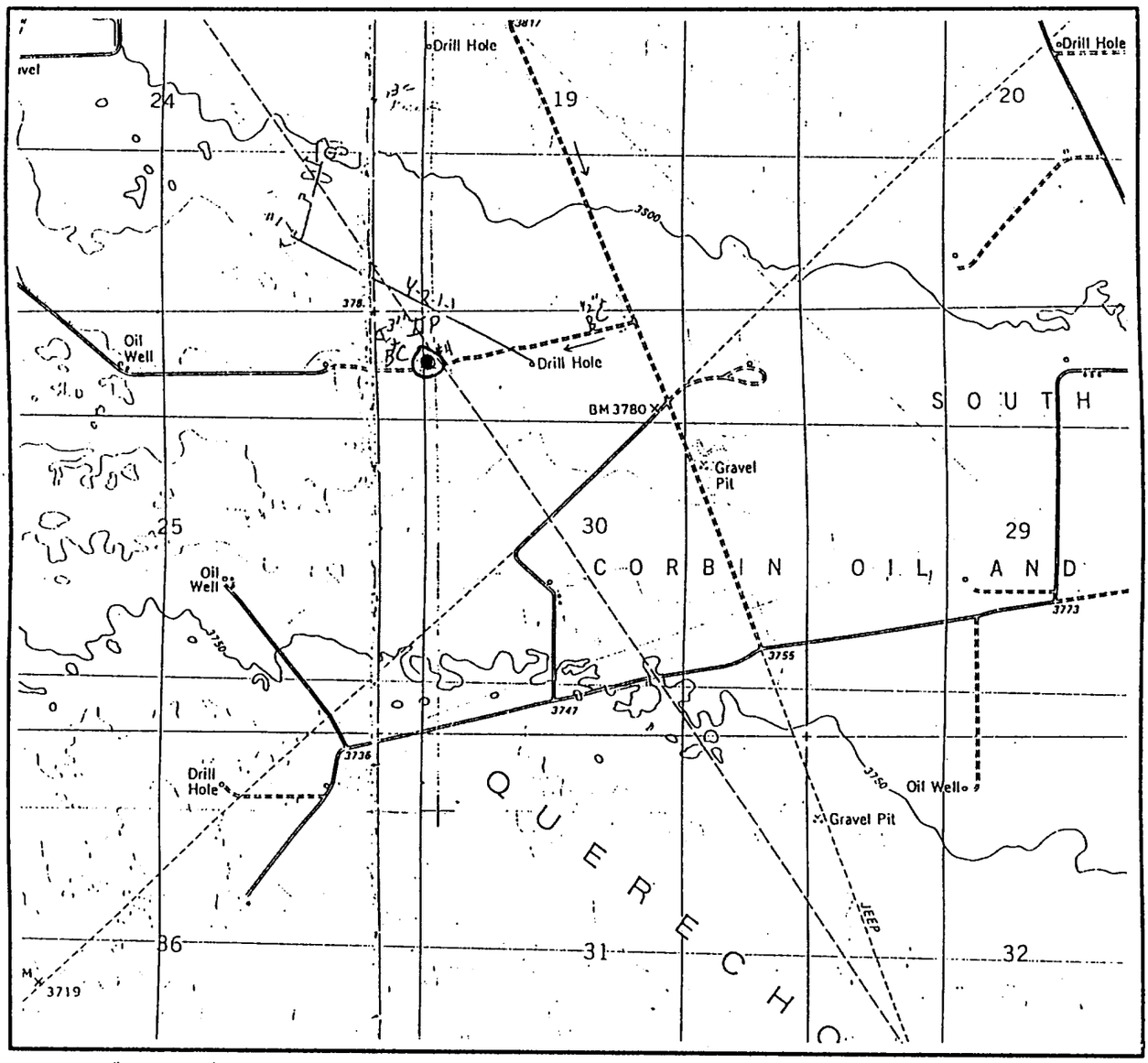
Choke Manifold Requirement (5000 psi WP)



Matador Operating Company
Hudson Federal 30 #4
735' FNL; 660' FWL
Sec 30, T18X, R33E
Lea County, New Mexico

Exhibit "E"

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 30 TWP 18-S RGE 33-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY LEA STATE NM

DESCRIPTION 735' FNL & 660' FWL

ELEVATION 3775'

OPERATOR MATADOR OPERATING COMPANY

LEASE HUDSON FEDERAL "30" #4

U.S.G.S. TOPOGRAPHIC MAP

LAGUNA GATUNA NW, NEW MEXICO

SCALED LAT. N 32°43'26"

LONG. W 103°42'31"

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

1307 N. HOBART
PAMPA, TX. 79065
(800) 658-6382

6709 N. CLASSEN BLVD.
OKLAHOMA CITY, OK. 73116
(800) 654-3219

2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653

ELF 8-8-2000

ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED