

N. M. Oil Cons. Division

811 S. 1ST ST.

Form 3160-3
(December 1990)

ARTESIA, NM 87003-0004 SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

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

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1A. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Matador Operating Company

14245

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

1830 FSL, 1650 FWL

At proposed prod. zone

Unit 1K

85305

Unders. Shugart; Morrow, NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

42 miles west of Hobbs

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

810'

16. NO. OF ACRES IN LEASE

320 ac

17. NO. OF ACRES ASSIGNED TO THIS WELL

320 ac

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

NA

19. PROPOSED DEPTH

12,550

20. ROTARY OR CABLE TOOLS

Rotary

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

3531' GL

22. APPROX. DATE WORK WILL START*

December 26, 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#	500'	360 sx
11" or 12-1/4"	8-5/8" J-55	32#	3500'	1000 sx
7-7/8"	5-1/2" L-80 & S-95	17#	12,550'	700 sx

Drill 12,550' Morrow test. Drill 17-1/2" hole to $\pm 500'$. Run and cement 13-3/8" casing to surface. NU BOP stack and drill 11" or 12-1/4" hole to $\pm 3,500'$. Run and cement 8-5/8" casing to surface. NU 5M BOP assembly and test. Drill 7-7/8" hole to $\pm 12,550'$ and evaluate.

Well Location and Acreage Dedication Plat

Application for Permit to Drill (Drilling Program)

Surface Use Plan

Exhibit D, Blowout preventer requirements

Exhibit A, Area Map

Exhibit E, BOP schematic

Exhibit B, Wellsite Plan

Exhibit F, Choke manifold

Exhibit C, Production Map

Topo Map

* 5. USA NM0560352, USA NM0560354, NM99038, NM0246, NM06084

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

[Signature]

TITLE

Drilling Manager

DATE

12-3-98

(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:

Assistant Field Office Manager,
Lands and Minerals

(ORIG. SGN.) ARMANDO A. LOPEZ

DEC 28 1998

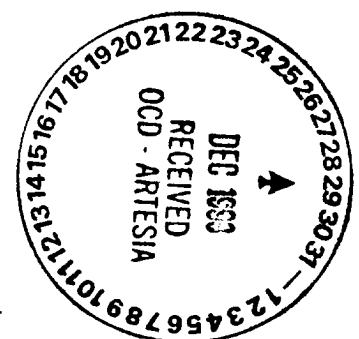
APPROVED BY

TITLE

DATE

*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

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

Form C-102
Revised 02-10-94
Instructions on back

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

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

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

DISTRICT III
1000 Rio Brazos Rd.
Aztec, NM 87410

☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name Wildcat (Morrow)	
4 Property Code		5 Property Name SHUGART DEEP FEDERAL COM '31'			6 Well Number 1
7 OGRID No. 014245		8 Operator Name MATADOR OPERATING COMPANY			9 Elevation 3531'

10 SURFACE LOCATION

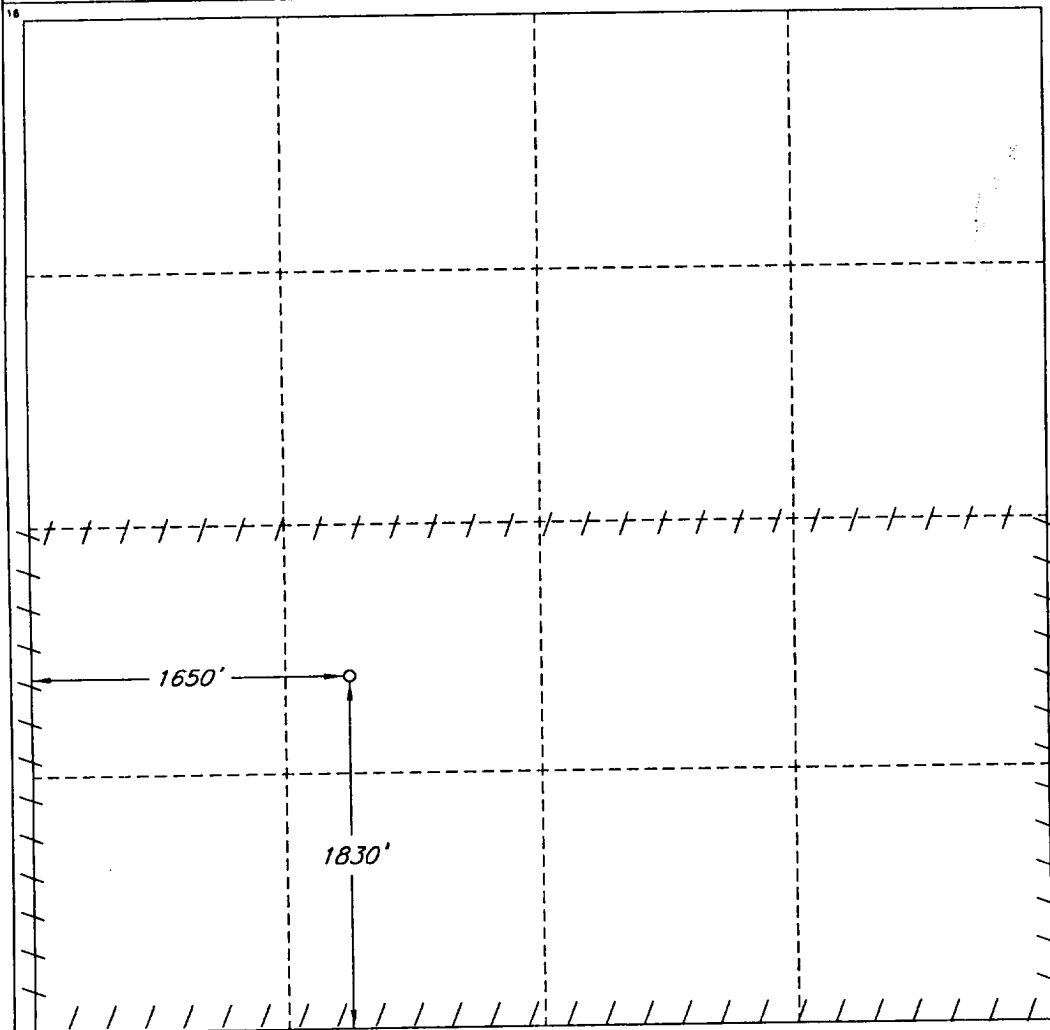
UL or lot no. K	Section 31	Township 18 SOUTH	Range 31 EAST, N.M.P.M.	Lot Ida	Feet from the 1830'	North/South line SOUTH	Feet from the 1650'	East/West line WEST	County EDDY
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"BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE"

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres 320 ac	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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



OPERATOR CERTIFICATION

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

Signature

Printed Name

John W. Bell

Title

Drilling Manager

Date

12-3-98

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

OCTOBER 19, 1998

Signature and Seal of
Professional Surveyor

Professional Surveyor
12128
ROGER M. ROBBINS
#12128
JOB #60897 / 73 NW / V.H.B.

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

5,000 psi Working Pressure

5 MWP

Matador Operating Company
Shugart Deep Federal 31 Com #1
1830' FSL, 1650' FWL
Sec 31, T18S, R31E
Eddy County, New Mexico

Exhibit D Blowout Preventer Requirements

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		
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"	
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CONTRACTOR'S OPTION TO FURNISH:

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

MEC TO FURNISH:

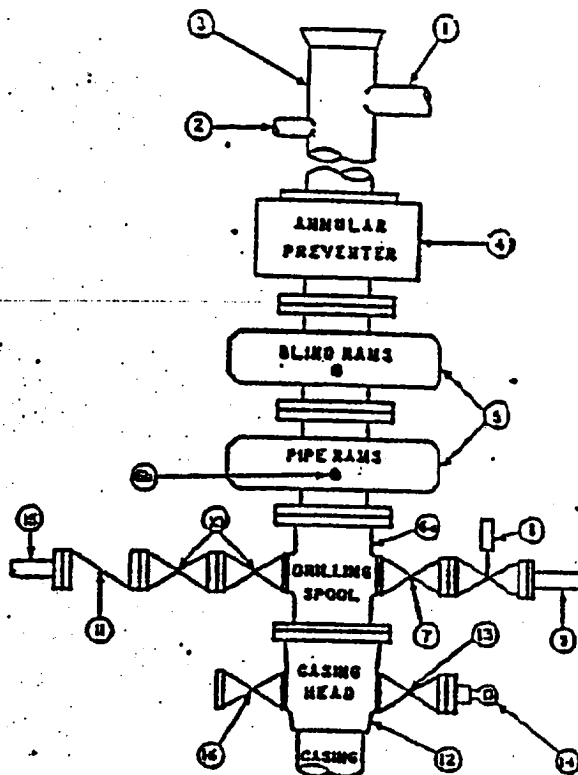
- Bradenhead or casinghead and side valves.
- Wear bushing if required.

GENERAL NOTES:

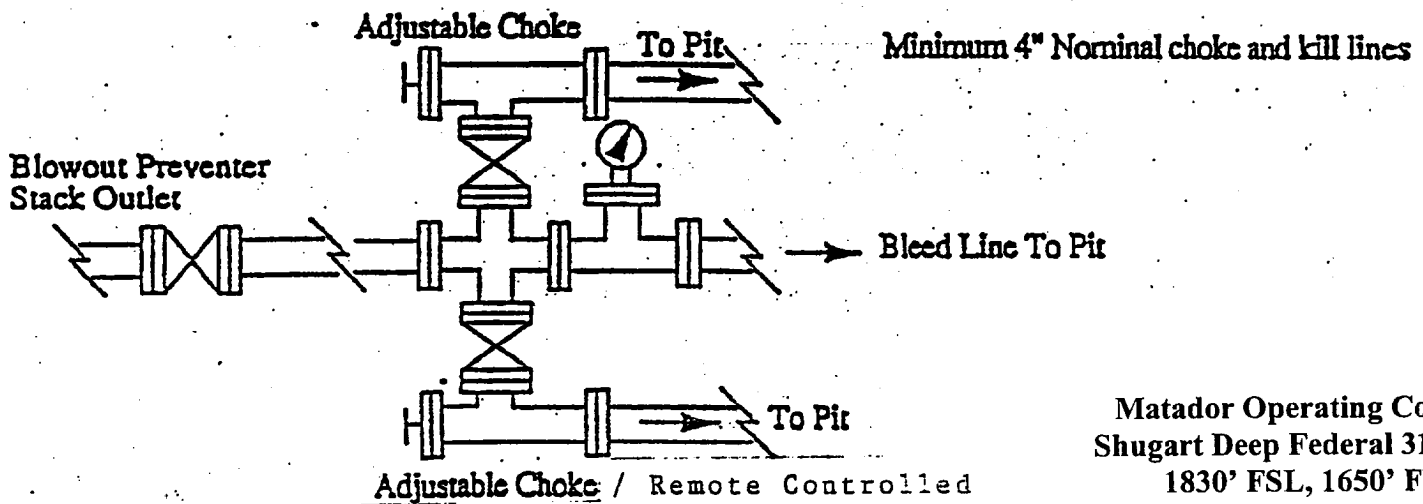
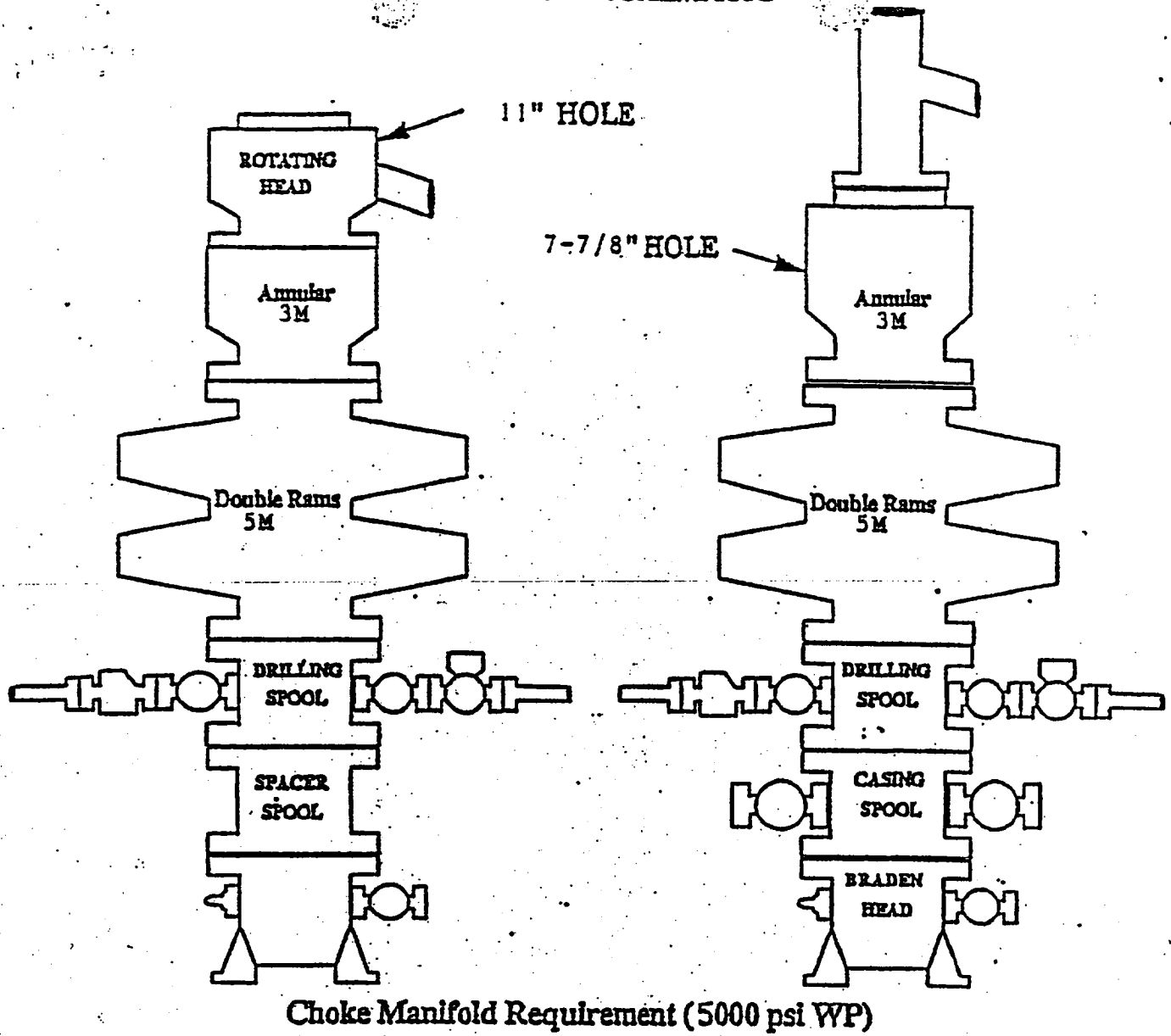
- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 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.
- All valves to be equipped with handwheels or handles ready for immediate use.
- Choke lines must be suitably anchored.

- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (5,000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- Do not use kill line for routine fill-up operations.

CONFIGURATION A



BOP SCHEMATIC



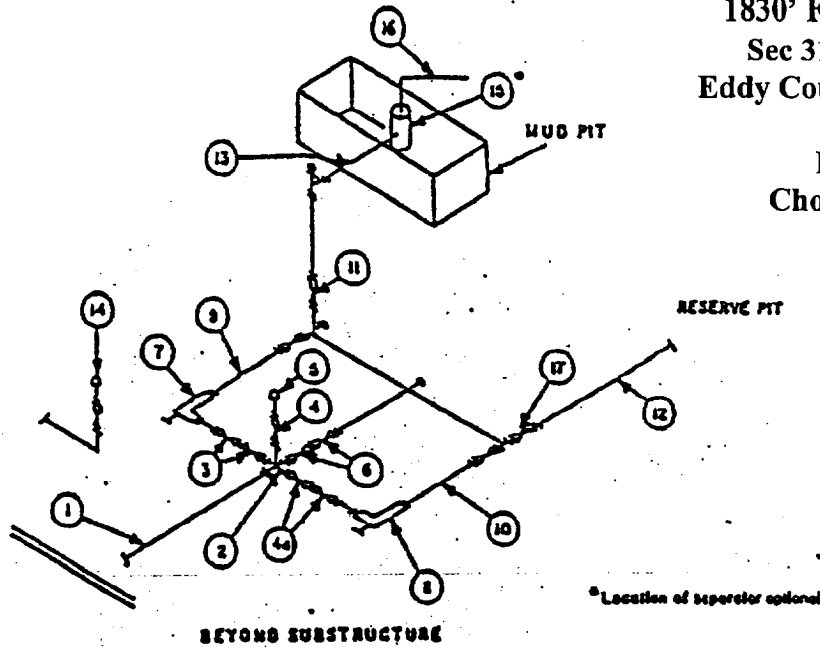
Matador Operating Company
Shugart Deep Federal 31 Com #1
1830' FSL, 1650' FWL
Sec 31, T18S, R31E
Eddy County, New Mexico

MINIMUM CHOKE MANIFOLD
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP • 5 MWP • 10 MWP

Matador Operating Company
Shugart Deep Federal 31 Com #1
1830' FSL, 1650' FWL
Sec 31, T18S, R31E
Eddy County, New Mexico

Exhibit F
Choke Manifold



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves (1) Gate ☐ Plug ☐ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate ☐ Plug ☐ (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate ☐ Plug ☐ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate ☐ Plug ☐ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2"x5"			2"x5"			2"x5"	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate ☐ Plug ☐ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3LL.

(2) Gate valves only shall be used for Class 10LL.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.