

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

Sonat Exploration Company

## 3. ADDRESS AND TELEPHONE NO.

110 W. Louisiana, Su. 500, Midland, Texas 79701

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

990' FSL &amp; 1650' FEL of Section 1

At proposed prod. zone

Same

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

20 miles east of Loving, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

990'

## 16. NO. OF ACRES IN LEASE\*

640

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

1650'

## 19. PROPOSED DEPTH

8,700'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3540' Ground Level

## 22. APPROX. DATE WORK WILL START\*

2nd quarter -1996

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	11 3/4"	42# WC-40	400'	Sufficient to circulate
11"	8 5/8"	23# M-50	4300'	Sufficient to circulate
7 7/8"	5 1/2"	17 & 15.5#J-55	8,700'	2150sx

The operator proposes to drill to a depth sufficient to test the Delaware for oil. Specific programs are outlined in the following attachments:

## DRILLING PROGRAM

## SURFACE USE AND OPERATING PLAN

## EXHIBIT A - ROAD MAP

## EXHIBIT B - EXISTING WELL MAP

## EXHIBIT C - LOCATION AND ACREAGE DEDICATION PLAT

## EXHIBIT C-1 TOPO MAP

## EXHIBIT D - DRILLING AND RIG LAYOUT

## EXHIBIT E - BOP EQUIPMENT

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

*K. Glenn Carter*

TITLE

Sr. Drlg. and Prod. Engr.

DATE 5/17/96

(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

*Frank Splendore*

TITLE

*Acting State Director*

DATE

JUL 16 1996

\*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., Artec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-29071	Pool Code 96191	Pool Name MESA VERDE (Delaware)
Property Code	Property Name SOTOL FEDERAL	Well Number 8
OGRID No. 109487	Operator Name SONAT EXPLORATION CO.	Elevation 3540

Surface Location

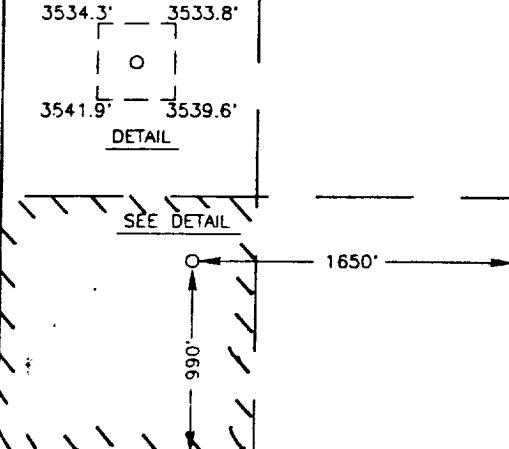
UL or lot No. 0	Section 1	Township 24 S	Range 31 E	Lot Idn	Feet from the 990	North/South line SOUTH	Feet from the 1650	East/West line EAST	County EDDY
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Bottom Hole Location If Different From Surface

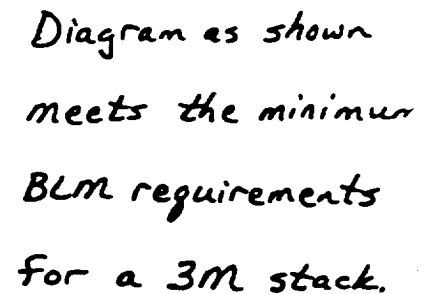
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 4 39.95 ACRES	LOT 3 39.96 ACRES	LOT 2 39.98 ACRES	LOT 1 39.99 ACRES
Exhibit "C"			
		SEE DETAIL	
<b>OPERATOR CERTIFICATION</b> I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  K. Glenn Carter Signature K. Glenn Carter Printed Name Sr. Drlg. & Prod. Engr. Title 5/17/96 Date			
<b>SURVEYOR CERTIFICATION</b> 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.  MAY 3, 1996 Date Surveyed Signature: [Signature] Professional Surveyor NEW MEXICO 96-1-0536 Certification No. JOHN W. FIDSON 676 3239 12641			

### Minimum Requirements for a 3,000 psi BOP Stack Manifold & Closing System



- A. Annular BOP Must be 3000 psi Working Pressure.
- B. Blind Rams Between Annular & Pipe Rams w/ 3000 psi Working Pressure.
- C. Pipe Rams Below Blind Rams w/ 3000 psi Working Pressure.
- Note: All Rams & Spools Must Meet Required I.D. for Hole Size.
- D. Drilling Spool w/ 2 Outlets for Choke Line & Kill Line
- E. Kill Line 2" 3 M w/ 2 Manual Valves Bolted & Flanged Below Bottom Pipe Rams. Either a Drilling Spool or the Outlet on the BOP Stack can be Used to Accommodate Kill Line and Choke Line.
- F. Choke Line w/ 3" 3 M Valves. Inside Valve can be Manual but the Outside Valve Must be Hydraulic (HCR). Choke Line Must be 3" 3 M.
- G. Closing Unit (Kooamey) w/ a Primary & Secondary Pressure Supply to Operate the BOP Stack. Also a N<sub>2</sub> Supply will be Provided as a Final Source of Operation to Close the BOP Stack. This Unit is Required to Contain a minimum of 1 1/2 Times the Needed Volume to Operate the BOP Stack at All Times. The Precharge of N<sub>2</sub> will be Checked Prior to Commencing Work for SONAT.

# SONAT EXPLORATION

## West ██████████ TEXAS BUSINESS UNIT

Minimum Requirements for a  
3,000 psi BOP Stack Manifold

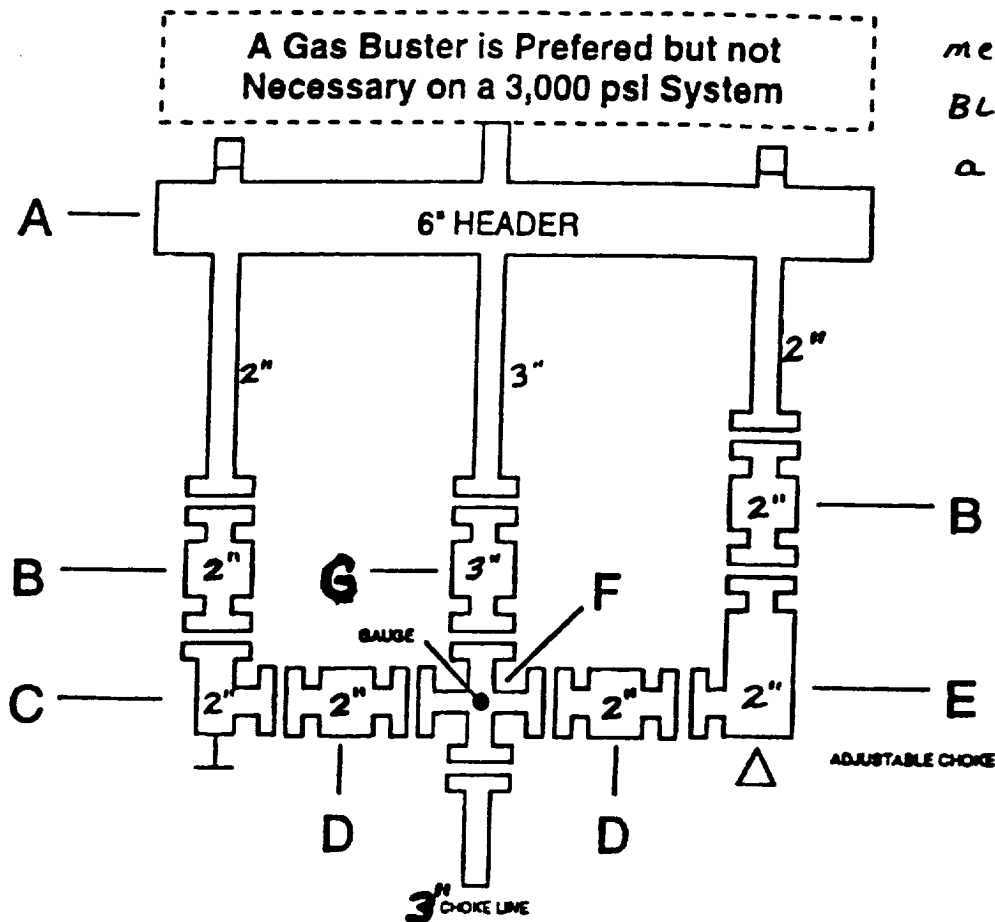


Diagram as shown  
meets the minimum  
BLM requirements +  
a 3m stack.

- A. Header for Gas Expansion 6" O.D. Tube.
- B. 2" 3 M Manual Valves on Down Stream Side of Choke.
- C. 2" 3 M Manual Adjustable ~~on Bottom Choke~~.
- D. 2" 3 M Manual Valve
- E. 2" 3 M Adjustable w/ Remote Station
- F. 3" 3 M Tee w/ Gauge in Top Side 3" Choke Line

Note: All Pipe Will be Flanged & Welded. No Screwed Connections.

G. 3" 3m Manual Valve