

Form 3160-3  
(July 1992)

OIL CONSERVATION DIV  
811 S. 1st ST.  
ARTESIA, NM 88210-2835

SUBMIT IN T  
(Other instructions on  
reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

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

2030' FNL & 660' FWL of Section 12

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)

660'

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

1320'

16. NO. OF ACRES IN LEASE

160

19. PROPOSED DEPTH

8,700'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3524' Ground Level

Secretary's Possess

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	4,300'	Sufficient to circulate
7 7/8"	5 1/2"	17 & 15.5#J-55	8,700'	2150sx - SEE STIPS.

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

Approved 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

*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 15 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., Aztec, 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 30-015-29073	Pool Code 96191	Pool Name MESA VERDE (DELAWARE)
Property Code	Property Name SOTOL "A" FEDERAL	Well Number 4
OGRID No. 109487	Operator Name SONAT EXPLORATION CO.	Elevation 3524

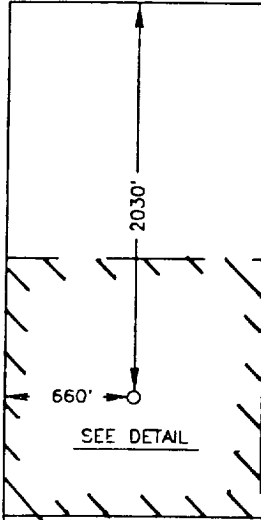
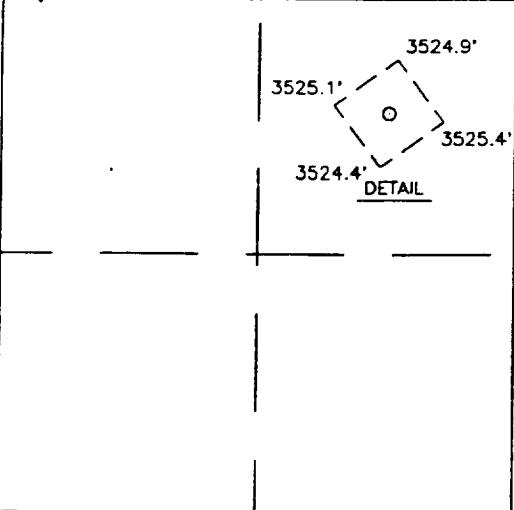
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	24 S	31 F		2030	NORTH	660	WEST	EDDY

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
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

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

		<p>EXHIBIT "C"</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>K. Glenn Carter</u> Signature</p> <p>K. Glenn Carter Printed Name</p> <p>Sr. Drlg. &amp; Prod. Engr. Title</p> <p>5/17/96 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>MAY 3, 1996</p> <p>Date Surveyed Signature &amp; Seal of Professional Surveyor Professional Surveyor NEW MEXICO 676-3239 12641</p> <p>DMCC</p> <p>676 3239 12641</p>
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**SONAT EXPLORATION****West ~~SONAT~~ TEXAS BUSINESS UNIT****Minimum Requirements for a 3,000 psi BOP  
Stack Manifold & Closing System**

BOP'S AND ALL  
REMOTE CONTROL VALVES  
CONTROLLED FROM RIG FLOOR.

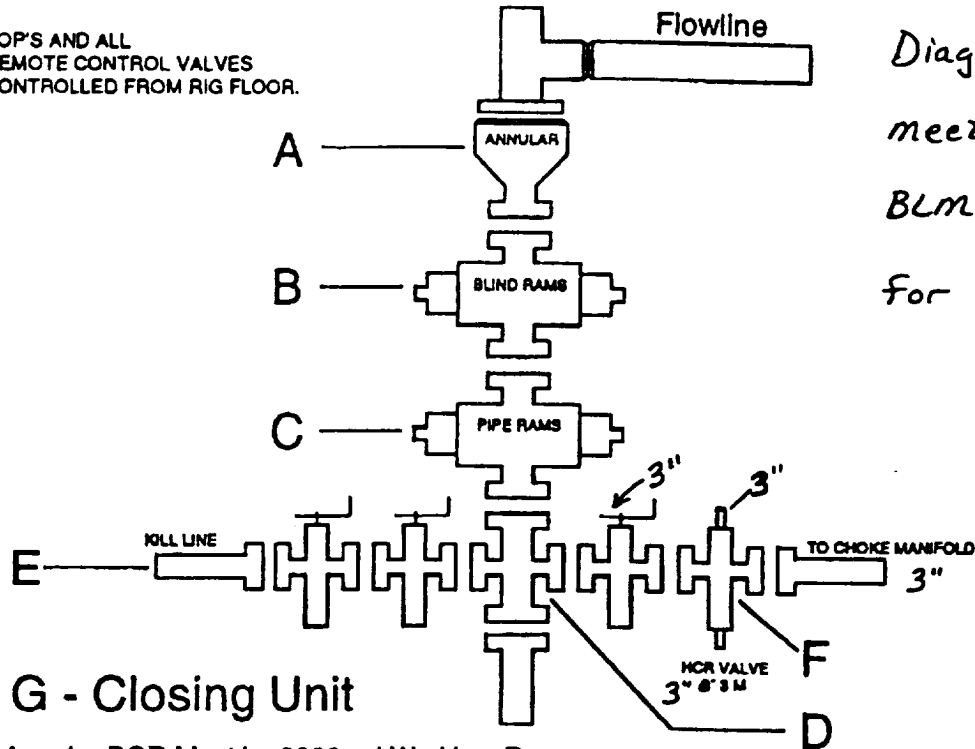


Diagram as shown  
meets the minimum  
BLM requirements  
for a 3M stack.

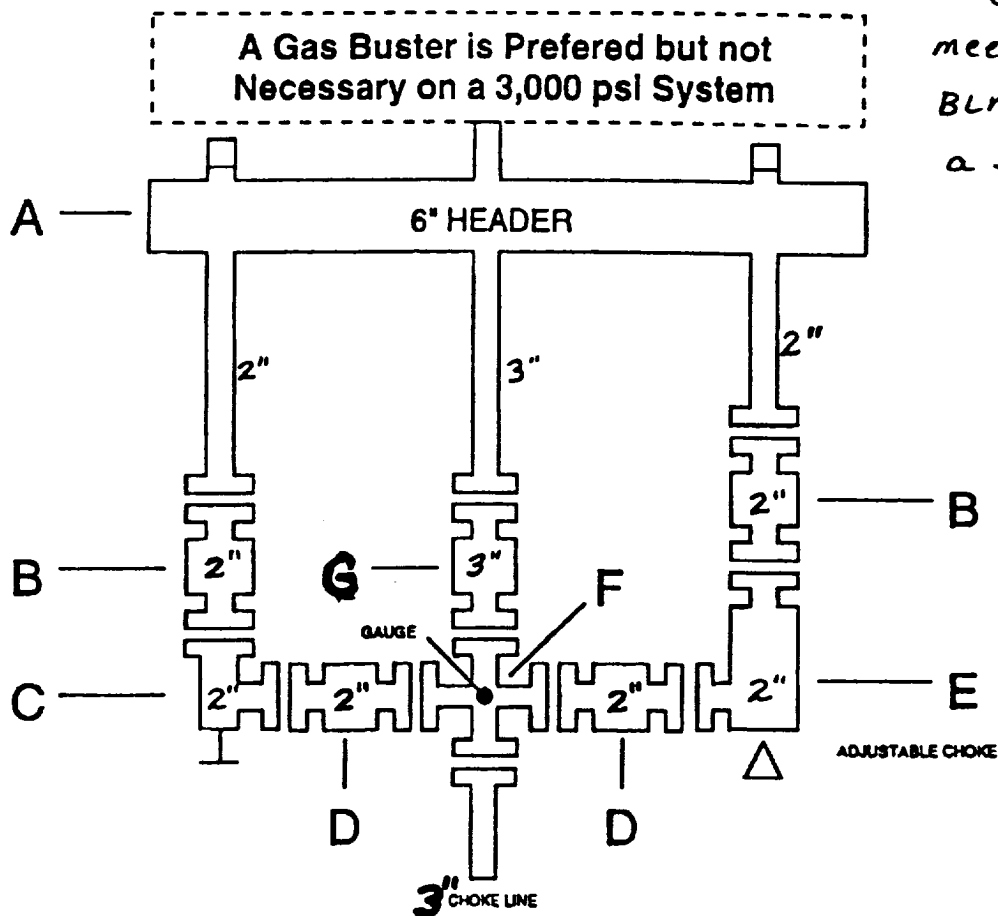
- A. Annular BOP Must be 3000 psi Working Pressure.
- B. Blind Rams Between Annular & Pipe Rams w/ 3000 psi Working Pressure.
- C. Pipe Rams Below Blind Rams w/ 3000 psi Working Pressure.
- Note: All Rams & Spools Must Meet Required I.D. for Hole Size.
- D. Drilling Spool w/ 2 Outlets for Choke Line & 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 (Kooimey) 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 or Positive 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