

N. M. Oil Cons. Division

Form 3160-3
(July 1992)811 S. 1ST ST.
ARTESIA, NM 87003
SUBMIT 1
1534
FELICATE*
(Other instructions on
reverse side)FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995UNITED 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

1980' FNL & 660' FWL of Section 11

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'

16. NO. OF ACRES IN LEASE

1280

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

12,500'

20. ROTARY OR CABLE TOOLS

Rotary

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

3506' Ground Level

SECRETARY'S POTASH

22. APPROX. DATE WORK WILL START*

1st quarter -1997

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	670'	Sufficient to circulate
11"	8 5/8"	24# J-55	4,300'	Sufficient to circulate
7 7/8"	5 1/2"	17# N-80, S-95	12,500'	2400sx

CARLSBAD CONTROLLED WATER BASIN

The operator proposes to drill to a depth sufficient to test the Delaware and Bone Springs 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

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

K. Glen Cartwright

TITLE

Drilling Superintendent

Sr. Drilg. and Prod. Engr.

DATE

1/23/97

(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

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 United States a false statement or materially false representation as to any matter within its jurisdiction.

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

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

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

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

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-29441	Pool Code	Pool Name Wildcat (Delaware/Bone Springs)
Property Code	Property Name LOTOS "11" FEDERAL	Well Number 2
OGRID No. 109487	Operator Name SONAT EXPLORATION COMPANY	Elevation 3506

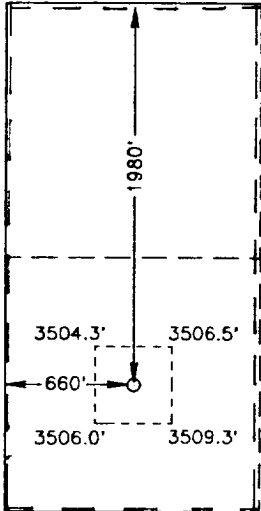
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	11	24 S	31 E		1980	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 80	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

OPERATOR CERTIFICATION

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

Dr. Supt.
Gr. Dr. & Prod. Eng.
Title

1/23/97
Date

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.

JANUARY 16, 1997

Date Surveyed JLP

Signature & Seal of Professional Surveyor

Ronald J. Eidson
Professional Surveyor

W.O. Num. 97-110090

Certificate No. JOHN S. WEST, 676
RONALD J. EIDSON, 3239
GARY D. EIDSON, 12641

SONAT EXPLORATION

West ~~XXXXXXXXXX~~ TEXAS BUSINESS UNIT

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



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

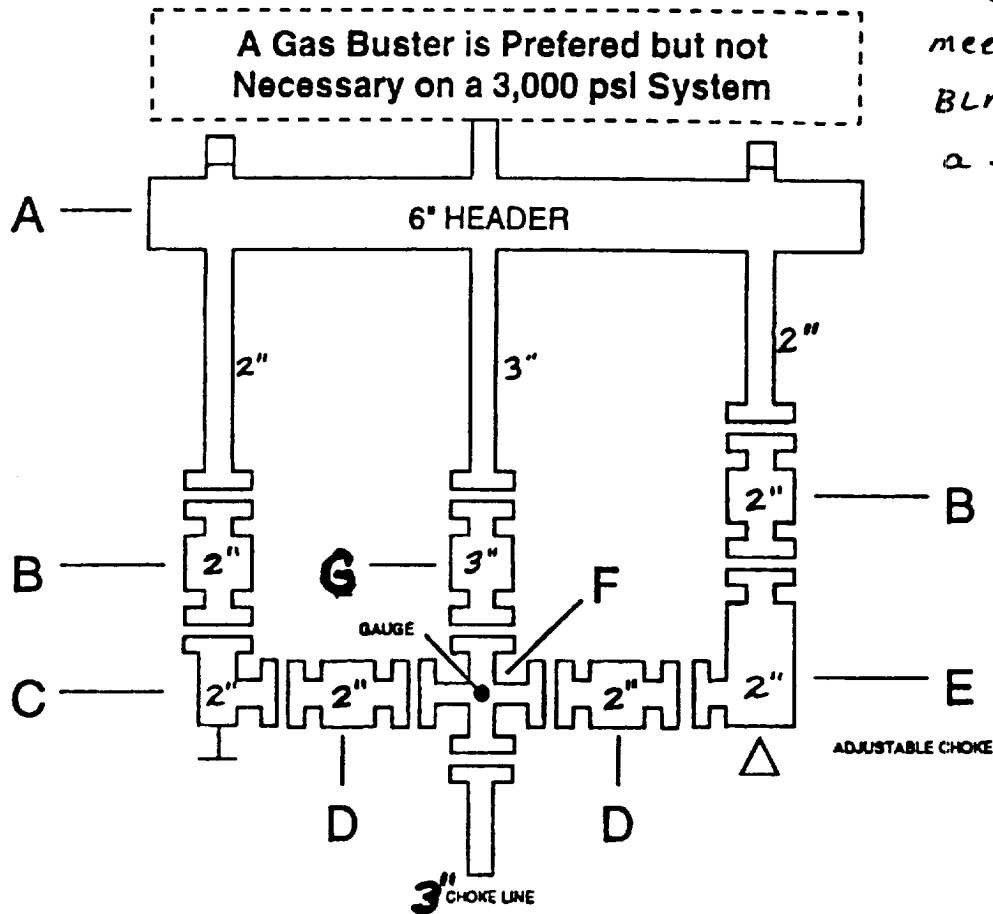
- A. Annular BOP Must be 3000 psi Working Pressure.
 - B. Blind Rams Between Annular & Pipe Rams w/ 3000 psi Working Pressure.
 - C. Pipe Rams Below Blind Rams w/ 3000 psi Working Pressure.
- Note: All Rams & Spools Must Meet Required I.D. for Hole Size.
- D. Drilling Spool w/ 2 Outlets for Choke Line & 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 (Kooamey) w/ a Primary & Secondary Pressure Supply to Operate the BOP Stack. Also a N₂ 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 N₂ 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

A Gas Buster is Preferred but not
Necessary on a 3,000 psi System

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 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

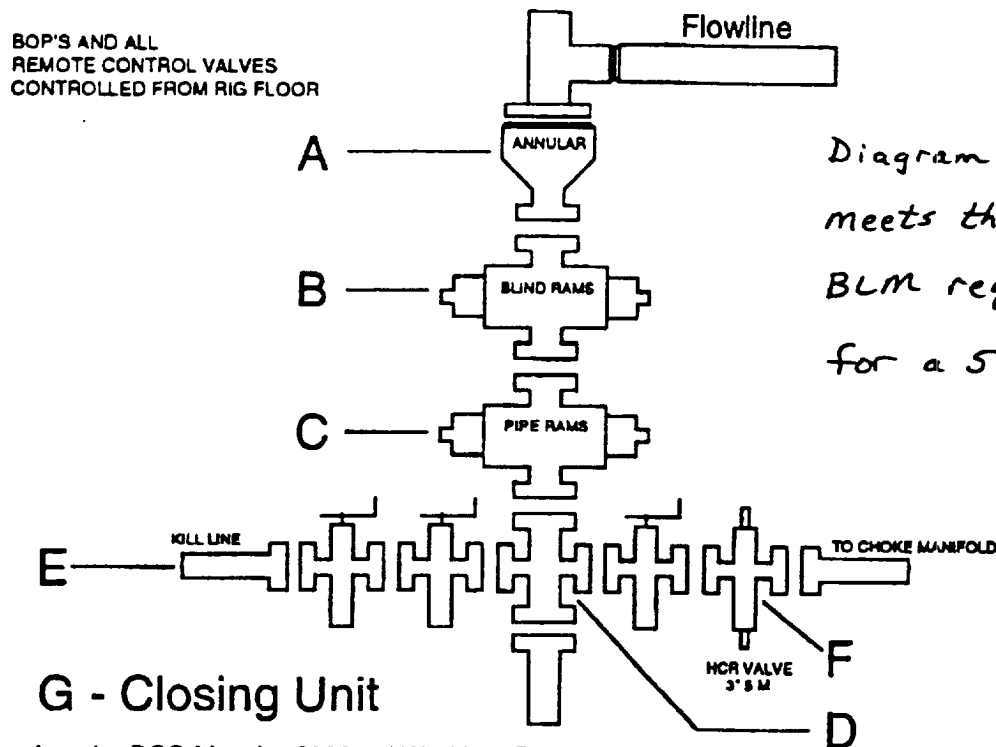
SONAT EXPLORATION**West ~~TEXAS~~ TEXAS BUSINESS UNIT****Minimum Requirements for a 5,000 psi BOP
Stack Manifold & Closing System**

Diagram as shown
meets the minimum
BLM requirements
for a 5M stack.

- A. Annular BOP Must be 5000 psi Working Pressure.
- B. Blind Rams Between Annular & Pipe Rams w/ 5000 psi Working Pressure.
- C. Pipe Rams Below Blind Rams w/ 5000 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" 5M 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" 5 M Valves. Inside Valve can be Manual but the Outside Valve Must be Hydraulic (HCR). Choke Line Must be 3" 5 M.
- G. Closing Unit (Kookey) w/ a Primary & Secondary Pressure Supply to Operate the BOP Stack. Also a N₂ 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 N₂ will be Checked Prior to Contractor Commencing Work for SONAT.

SONAT EXPLORATION**West [REDACTED] TEXAS BUSINESS UNIT**

Minimum Requirements for a
5,000 psi BOP Stack Manifold

**A Gas Buster is Necessary and Must be 16" O.D. x 14' Tall.
A Flare Line to Vent the Gas Away from Rig is Needed.**

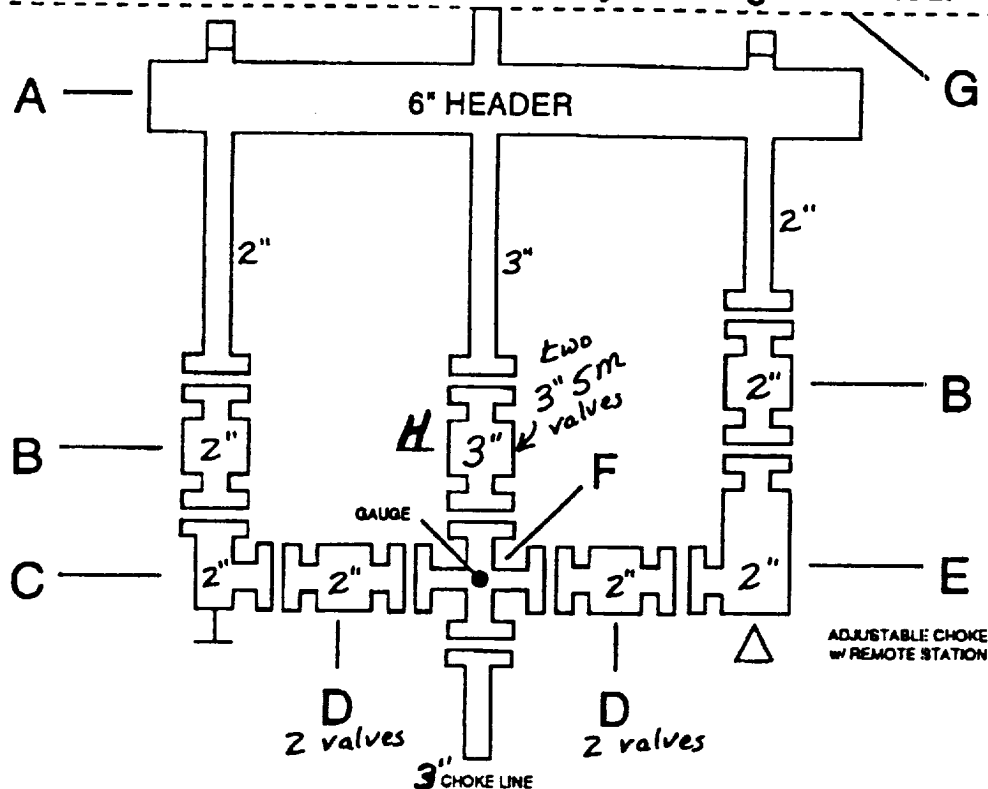


Diagram as
shown meets
the minimum
BLM requirem.
for a 5M sta

- A. Header for Gas Expansion 6" O.D. Tube.
- B. 2" 5 M Manual Valves on Down Stream Side of Choke.
- C. 2" 5 M Manual Adjustable or Positive Choke.
- D. 2" 5 M Manual Valve (2 valves on each side of cross)
- E. 2" 5 M Adjustable w/ Remote Station
- F. 3" 5 M Tee w/ Gauge in Top Side 3" Choke Line
- G. Gas Buster 14" O.D. x 12' tall w/ Flare Line to Vent Gas Away from Rig.

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

H. two 3" 5M manual valves