

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

| | | |
|---|-------------------------------------|---|
| 1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> | | 5. LEASE DESIGNATION AND SERIAL NO NM-63759 |
| b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME |
| 2. NAME OF OPERATOR Sonat Exploration Company 109487 | | 7. UNIT AGREEMENT NAME |
| 3. ADDRESS AND TELEPHONE NO. 110 West Louisiana, Suite 500, Midland, Texas 79201 | | 8. FARM OR LEASE NAME, WELL NO. 17818 Lotos "C" Federal # 903 |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *) At surface 1980' FNL & 660' FEL of Section 9 At proposed prod. zone 1st H | | 9. API WELL NO. 30-015-30043 |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE. 25 miles east of Loving, N.M. | | 10. FIELD AND POOL, OR WILDCAT Wildcat (Delaware/B.S.) |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) | 16. NO. OF ACRES IN LEASE 320 | 11. SEC., T., R., OR BLK. AND SURVEY OR AREA Section 9, T-24S, R-31E |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320' | 19. PROPOSED DEPTH 8700' | 12. COUNTY OR PARISH Eddy Co. |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3445' Ground Level | 20. ROTARY OR CABLE TOOLS Rotary | 13. STATE N.M. |
| 23. PROPOSED CASING AND CEMENTING PROGRAM | | 22. APPROX. DATE WORK WILL START* Last quarter of 1997 |

| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|-----------------------|-----------------|---------------|-------------------------|
| 14-3/4" | 11-3/4" WC-40 | 42# | 400' | Sufficient to circulate |
| 11" | 8-5/8" M-50 J55 | 23# 24 # | 4300' | Sufficient to circulate |
| 7-7/8" | 5-1/2" J-55 | 17 & 15.5# | 8500' | 2150 sx |

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 DEDICATION PLAT
EXHIBIT "C-1" - TOPO MAP
EXHIBIT "D" - DRILLING RIG LAYOUT
EXHIBIT "E" - 3M BOP EQUIPMENT

SUBJECT TO
LIKE APPROVAL
BY STATE

Posted ID-1
HL & API
1-30-98

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 deeper directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. K. Glen Carter Drilling Superintendent 11/26/97
SIGNED K. Glen Carter TITLE Sr. Drilling & Production Engineer DATE 11/26/97

(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 Richard A. Whitney TITLE Acting State Director DATE 12-30-97

*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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---------------|---------------------------|-----------------------------------|
| API Number | Pool Code | Pool Name |
| | | WILDCAT (DELAWARE / BONE SPRINGS) |
| Property Code | Property Name | Well Number |
| | LOTOS "C" FEDERAL | 903 |
| OGRID No. | Operator Name | Elevation |
| 109487 | SONAT EXPLORATION COMPANY | 3445 |

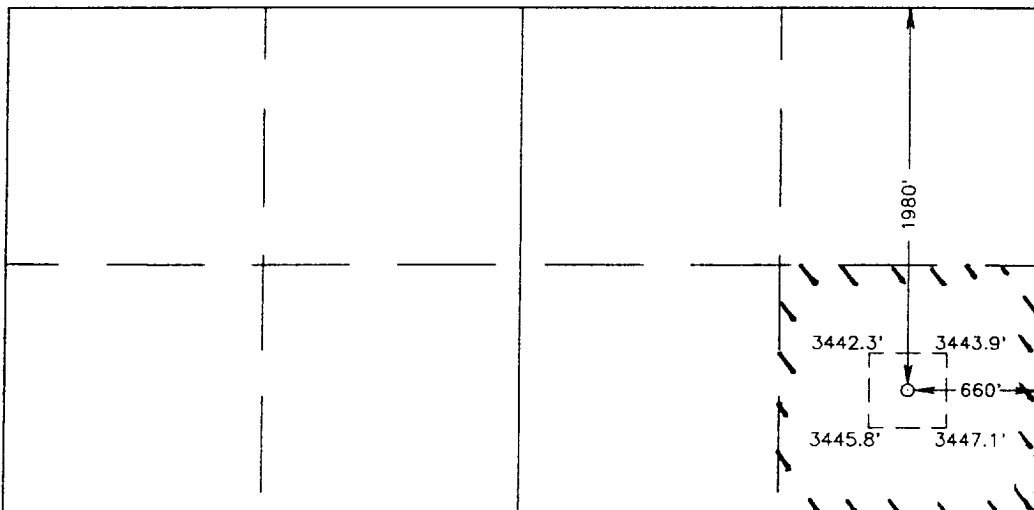
Surface Location

| | | | | | | | | | |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| H | 9 | 24 S | 31 E | | 1980 | NORTH | 660 | EAST | 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 | Joint or Infill | Consolidation Code | Order No. | | | | | | |
| 40 | | | | | | | | | |

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>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><u>K. GLENN CARTER</u> Printed Name</p> <p><u>Drilling Superintendent</u> Title</p> <p><u>11/12/97</u> Date</p> |
| <p><u>EXHIBIT "C"</u></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>NOVEMBER 4, 1997</p> <p>Date Surveyed</p> <p>Signature & Seal of Professional Surveyor</p> <p><u>Ronald J. Tidson</u> Professional Surveyor</p> <p>DMCC</p> <p>Certificate No. JOHN W. CHASE RONALD J. TIDSON PROFESSIONAL SURVEYOR</p> <p>676 3239 12641</p> |

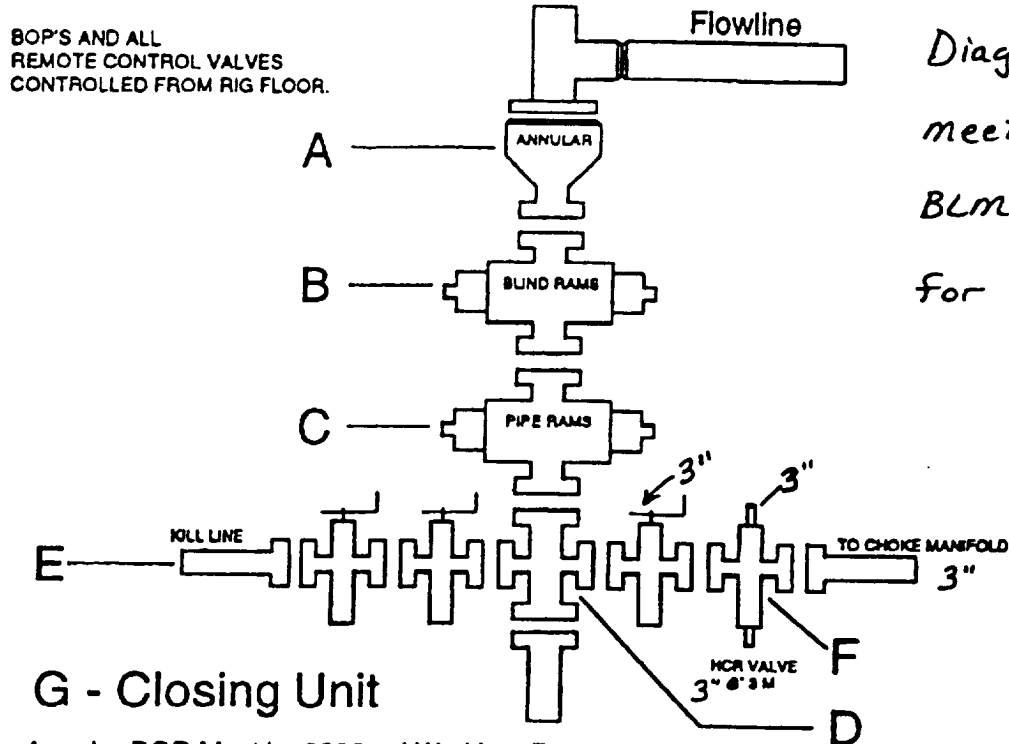
SONAT EXPLORATION**West ~~SONAT~~ TEXAS BUSINESS UNIT****Minimum Requirements for a 3,000 psi BOP
Stack Manifold & Closing System**

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 (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 Commencing Work for SONAT.

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

Minimum Requirements for a
3,000 psi BOP Stack Manifold

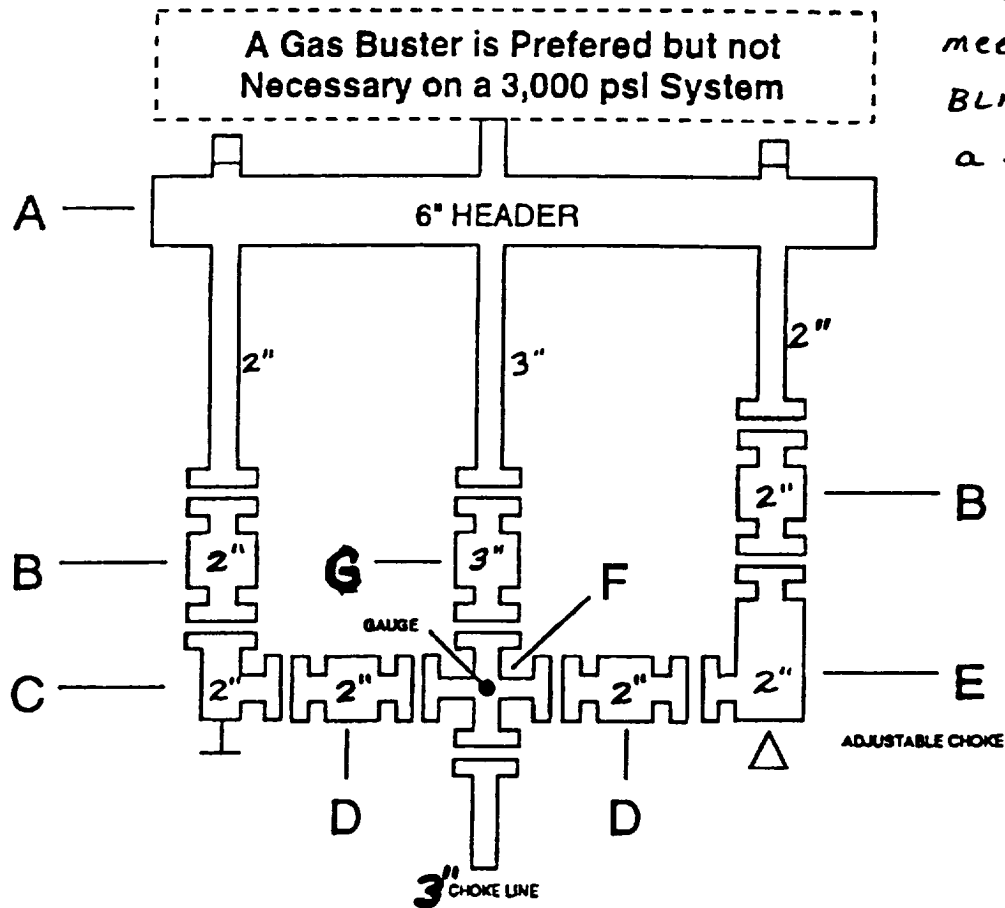


Diagram as shown
meets the minimum
BLM requirements +
a 3M stack.

- 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