

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-29234
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 - Midland		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR 110 W. Louisiana, Su. 500, Midland, Texas 79701		8. FARM OR LEASE NAME Lotos "10" Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1980' FNL & 1860' FEL of Section 10 At proposed prod. zone Same		9. WELL NO. 2
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 20 miles east of Loving, New Mexico		10. FIELD AND POOL OR WILDCAT Wildcat: Big Sink, Wolfcamp
10. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 1860'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 10, T-24S, R31E
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 120'		12. COUNTY OR PARISH Eddy Co.
16. NO. OF ACRES IN LEASE 1280		13. STATE N.M.
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3484' Ground Level		22. APPROX. DATE WORK WILL START October 31, 1995

PROPOSED CASING AND CEMENTING PROGRAM

R-111-P Potash

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	11 3/4"	42# WC50	650' 670' Ad	Sufficient to circulate
11"	8 5/8"	24#J-55	4100' 4300' Ad	Sufficient to circulate
7 7/8"	5 1/2"	17# N-80, S-95	12550' 12,500' K&C	2400sx

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 - 3M & 5M BOP EQUIPMENT

Part ID-1  
12-15-95  
New loc & API  
Agree subject to  
General Requirements and  
Special Stipulations  
Attached

OCT 13 10 44 AM '95  
RECEIVED  
CARLSBAD AREA

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 10/09/95  
9/29/95

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY S/G. Robert Lucero TITLE Acting State Director DATE NOV 2 1995  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

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 Depart

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 <b>30-015-28745</b>	Pool Code <b>96430</b>	Pool Name <b>Wildcat Big Sink; Wolfcamp</b>
Property Code	Property Name <b>LOTOS "10" FEDERAL</b>	Well Number <b>2</b>
OGRID No. <b>109487</b>	Operator Name <b>SONAT EXPLORATION CO.</b>	Elevation <b>3484</b>

Surface Location

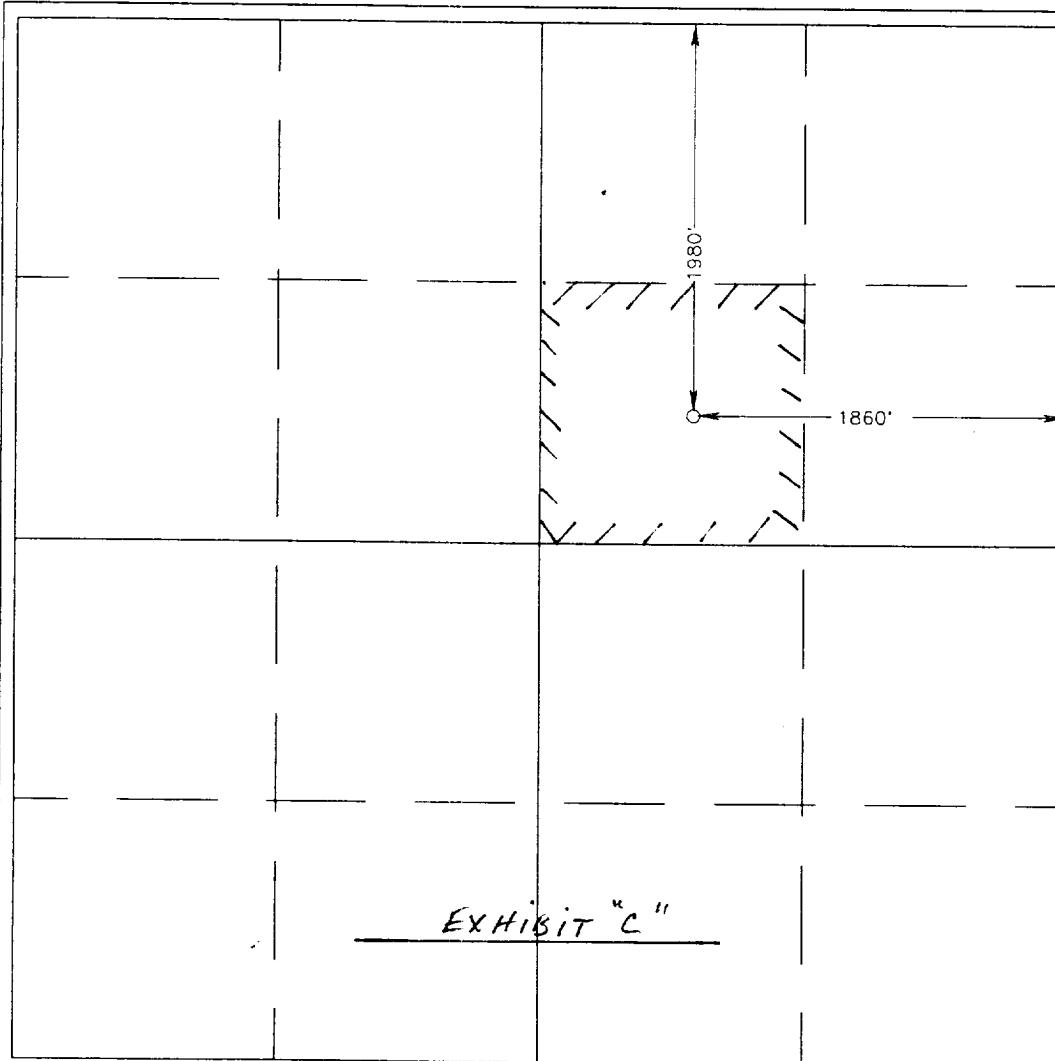
UL or lot No. <b>G</b>	Section <b>10</b>	Township <b>24 S</b>	Range <b>31 E</b>	Lot Idn	Feet from the <b>1980</b>	North/South line <b>NORTH</b>	Feet from the <b>1860</b>	East/West line <b>EAST</b>	County <b>EDDY</b>
---------------------------	----------------------	-------------------------	----------------------	---------	------------------------------	----------------------------------	------------------------------	-------------------------------	-----------------------

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 <b>40</b>	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

Sr. Drlg. & Prod. Eng.  
Title

9/26/95  
Date

9/26/95  
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.

SEPT. 12, 1995

Date Surveyed  
DMCC

Signature & Seal of  
Professional Surveyor

*Ronald J. Eidson*  
W.O. Num. 95-1393

9-19-95

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

**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.

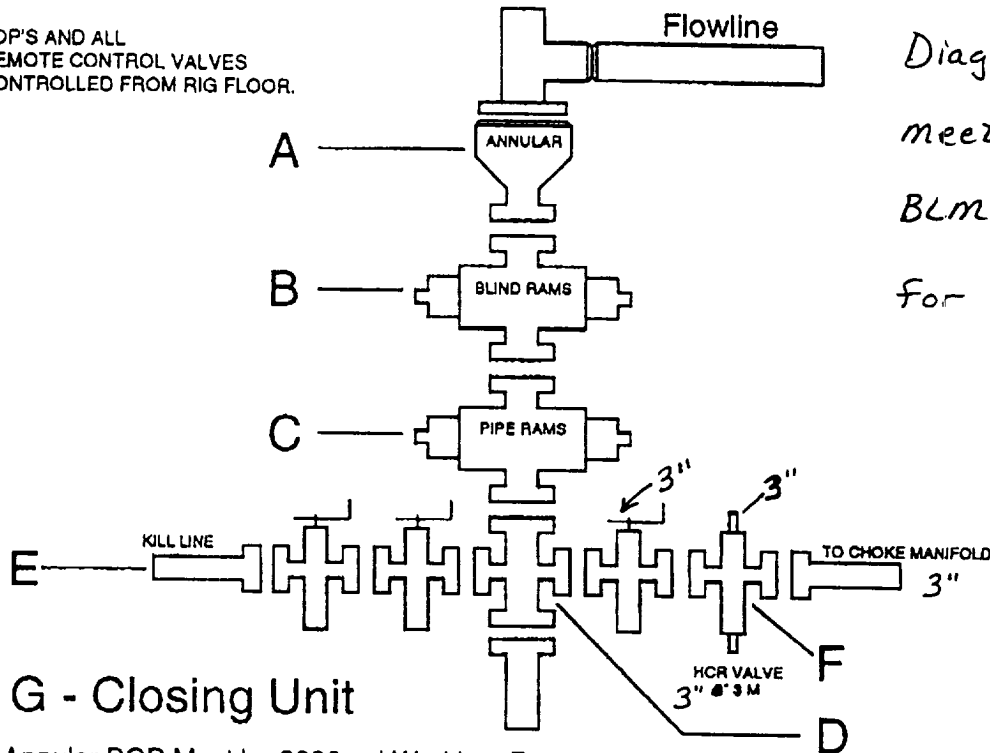


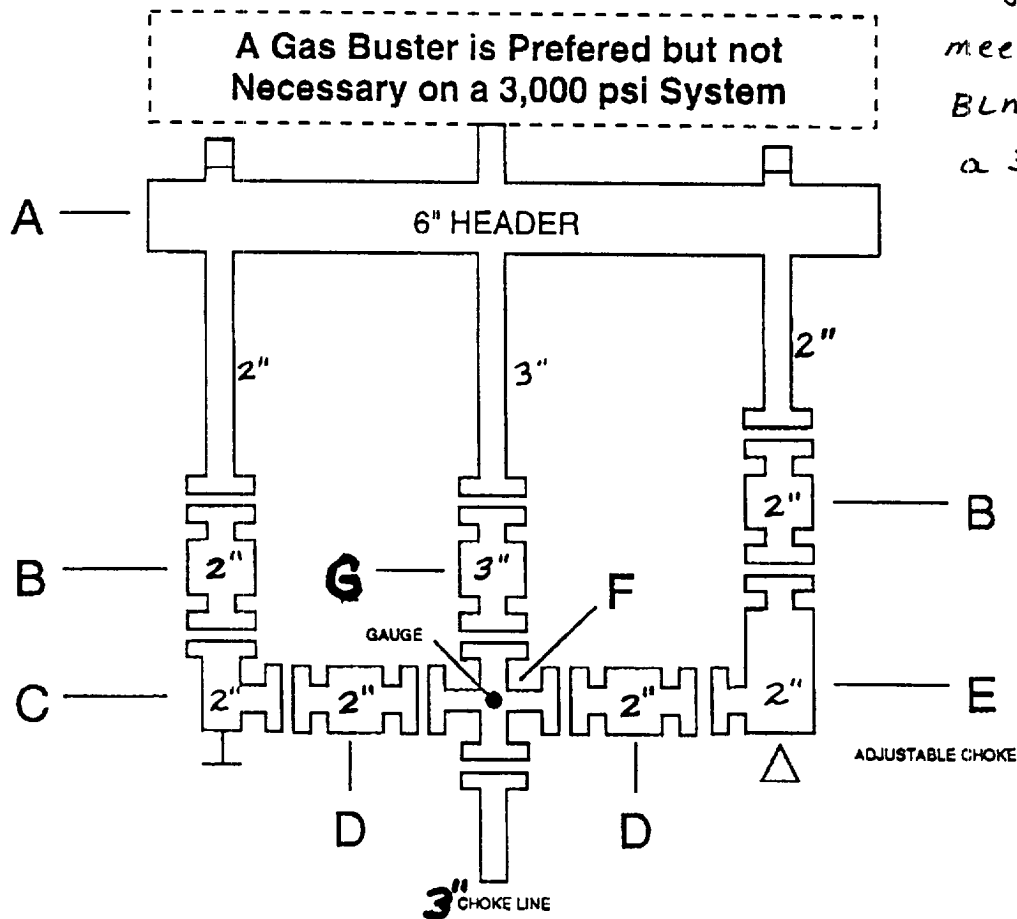
Diagram as shown  
meets the minimum  
BLM requirements  
for a 3M stack.

- G - Closing Unit**
- 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 (Koomey) 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 for  
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

# SONAT EXPLORATION

## West ~~TEXAS~~ TEXAS BUSINESS UNIT

### Minimum Requirements for a 5,000 psi BOP Stack Manifold & Closing System

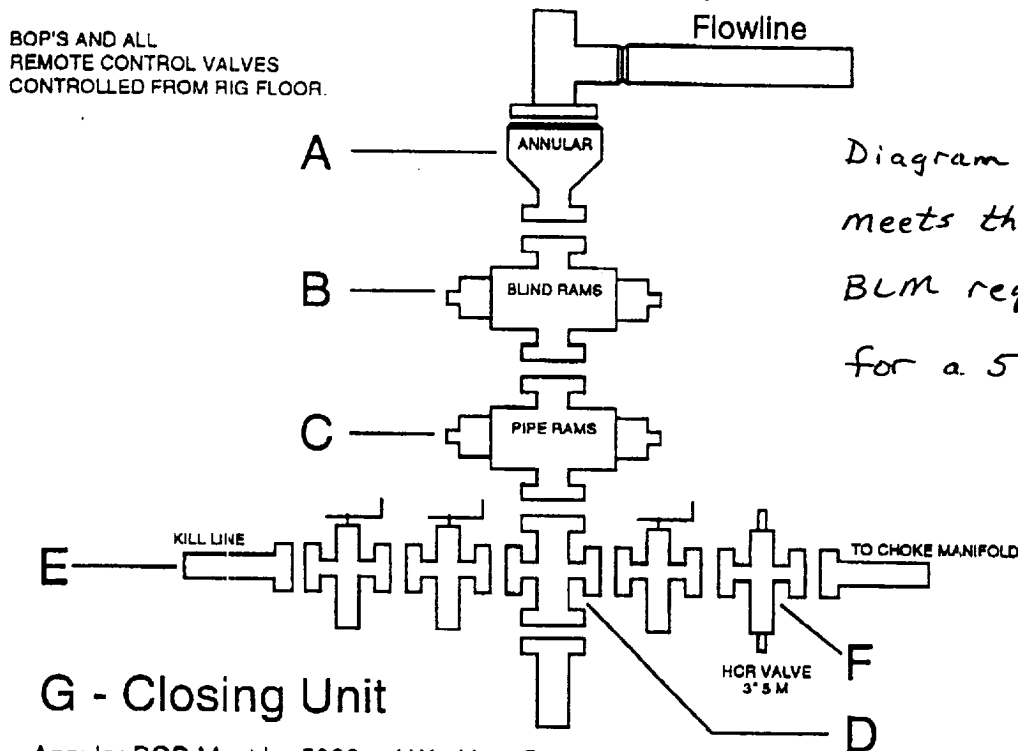


Diagram as shown  
meets the minimum  
BLM requirements  
for a 5M stack.

- 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 (Koomey) 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 Contractor Commencing Work for SONAT.

**SONAT EXPLORATION****West 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.**

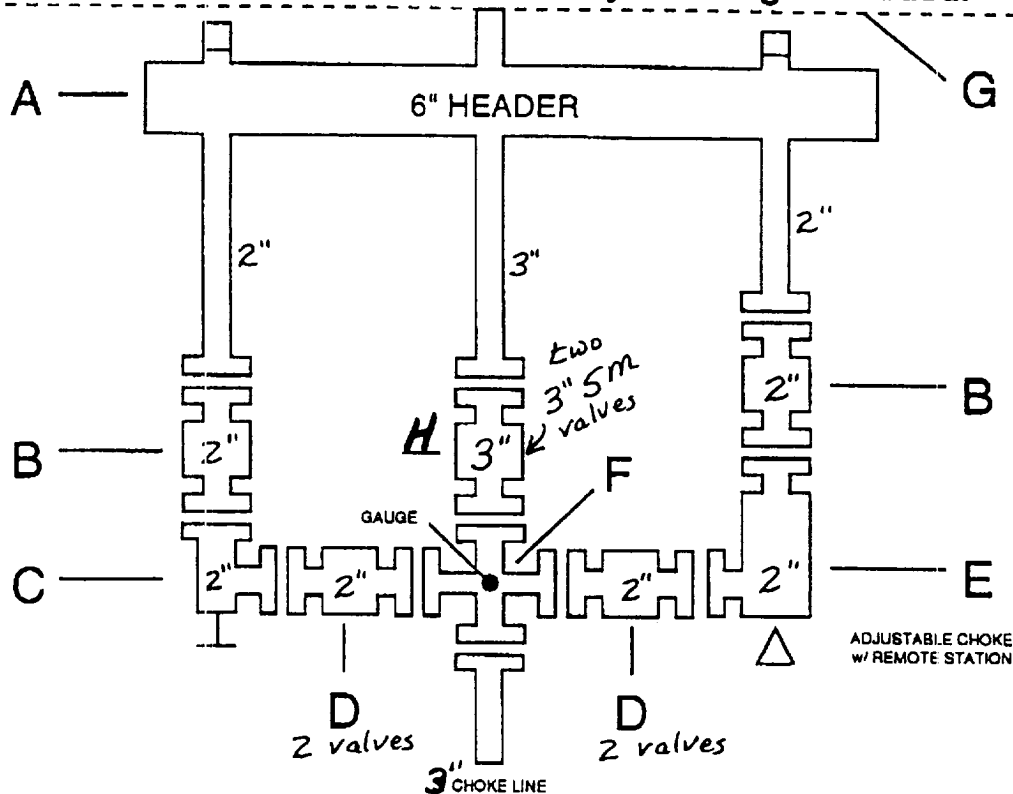


Diagram as  
shown meets  
the minimum  
BLM requirem:  
for a 5M sta

- 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