

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No. <b>23300</b>
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. LEE FEDERAL 11
2. Name of Operator MARBOB ENERGY CORPORATION Contact: DIANA CANNON E-Mail: production@marbob.com		9. API Well No. <b>30-015-32737</b>
3a. Address P O BOX 227 ARTESIA, NM 88211-0227 <b>14049</b>	3b. Phone No. (include area code) Ph: 505.748.3303 Fx: 505.746.2523	10. Field and Pool, or Exploratory LOCO HILLS-PADDOCK
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface <b>NWSE Lot J 2310FSL 1650FEL</b> At proposed prod. zone <b>NWSE Lot J 2310FSL 1650FEL</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>Sec 20 T17S R31E Mer NMP</b>
14. Distance in miles and direction from nearest town or post office* <b>EAST OF ARTESIA ON HWY 82 APPX 30.1 MILES</b>		12. County or Parish <b>EDDY</b>
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>1650'</b>	16. No. of Acres in Lease <b>1786.15</b>	13. State <b>NM</b>
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth <b>6000 MD</b>	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc.) <b>3698 GL</b>	22. Approximate date work will start <b>02/15/2003</b>	23. Estimated duration <b>21 DAYS</b>

24. Attachments

**Baswell Controlled Water Basin**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) <b>DIANA CANNON</b>	Date <b>01/20/2003</b>
Title <b>AUTHORIZED REPRESENTATIVE</b>		
Approved by (Signature) <b>/s/ LESLIE A. THEISS</b>	Name (Printed/Typed) <b>/s/ LESLIE A. THEISS</b>	Date <b>APR 08 2003</b>
Title <b>Field Manager</b>	Office <b>Carlsbad Field Office</b>	

Application approval does not warrant or certify 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, are attached.

**Approval for 1 year**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

Additional Operator Remarks (see next page)

Electronic Submission #17775 verified by the BLM Well Information System  
For MARBOB ENERGY CORPORATION, sent to the Carlsbad  
Committed to AFMSS for processing by Linda Askwig on 01/21/2003 (03LA0246AE)

Approval Subject to  
General Requirements and  
Special stipulations  
Attached

**Witness Surface Casing**

\*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\*

**Additional Operator Remarks:**

17 1/2" HOLE, 13 3/8" 48# H40 CSG SET @ 350', CMT W/ 400 SX  
12 1/4" HOLE, 8 5/8" 24# J55 CSG SET @ 1200', CMT W/ 300 SX  
7 7/8" HOLE, 5 1/2" 17# J55 CSG SET @ 6000', CMT SUFFICIENT TO COVER 200' ABOVE ALL KNOWN OIL & GAS HORIZONS.

PAY ZONE WILL BE SELECTIVELY PERFORATED AND STIMULATED AS NEEDED FOR OPTIMUM PRODUCTION.

**ATTACHMENT INCLUDES:**

1. WELL LOCATION AND ACREAGE DEDICATION PLAT
2. DRILLING PROGRAM
3. SURFACE USE AND OPERATING PLAN
4. HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
5. ADDITIONAL REQUIRED INFORMATION (EXHIBITS #1 - #4)

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

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

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

☐ AMENDED REPORT

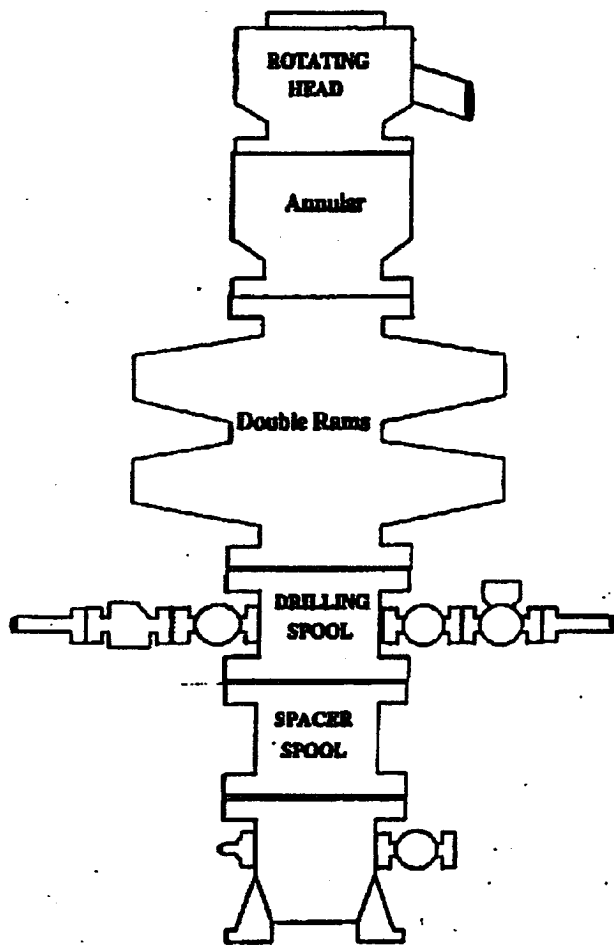
API Number		Pool Code	Pool Name
		96718	LOCO HILLS PADDOCK
Property Code	Property Name		Well Number
23300	LEE FEDERAL		11
OGRID No.	Operator Name		Elevation
14049	MARBOB ENERGY CORPORATION		3698

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	20	17 S	31 E		2310	SOUTH	1650	EAST	EDDY

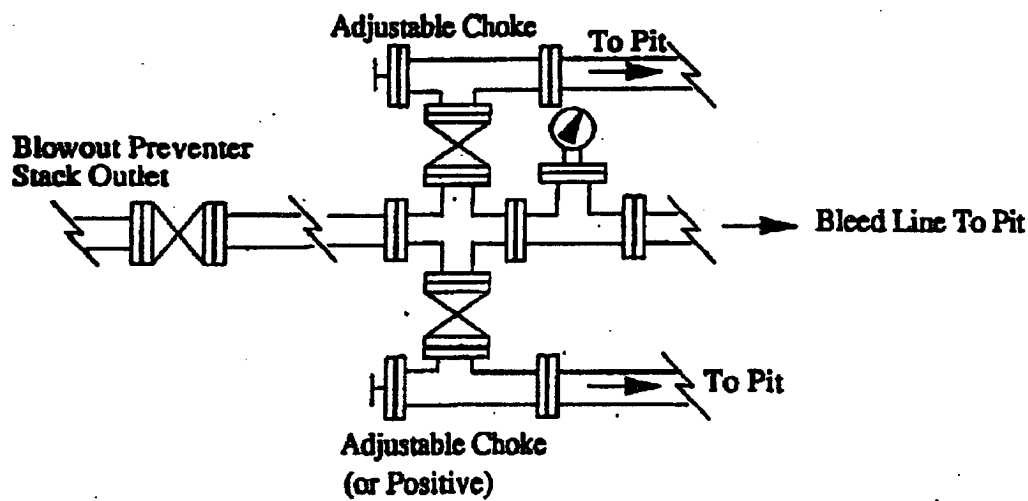
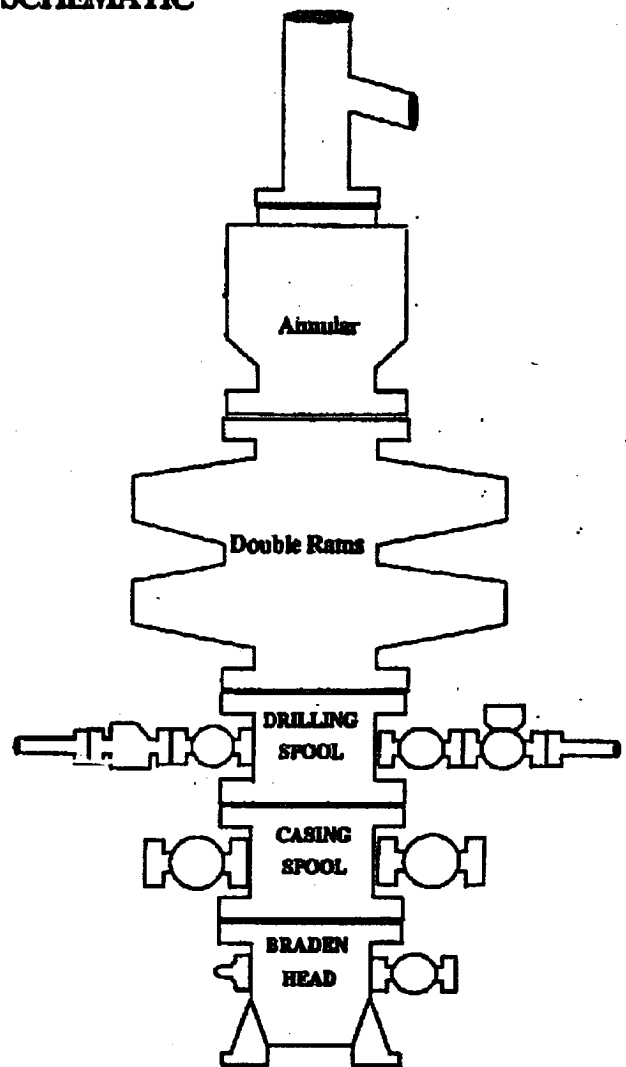
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

	<div style="border: 1px solid black; padding: 5px;"> <p align="center"><b>OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p align="right"><i>Diana J. Cannon</i></p> <hr/> <p align="center"><b>DIANA J. CANNON</b></p> <hr/> <p align="center"><b>PRODUCTION ANALYST</b></p> <hr/> <p align="center"><b>JANUARY 20, 2003</b></p> <hr/> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p align="center"><b>JULY 13, 1998</b></p> <hr/> <p>Date Surveyed _____ DMCC</p> <p>Signature &amp; Seal of Professional Surveyor</p> <div align="center"> </div> <hr/> <p>Certificate No. <b>RONALD S. EDSON</b> 3239  <b>NEW MEXICO</b> 12641  <b>REGISTERED PROFESSIONAL SURVEYOR</b> 12185</p> </div>
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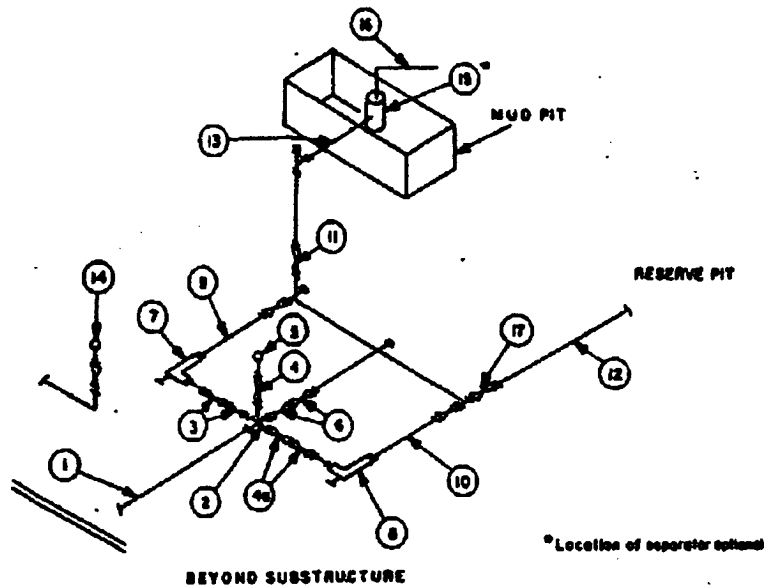
# BOPE SCHEMATIC



**Choke Manifold**



**MINIMUM CHOKE MANIFOLD**  
**3,000, 5,000 and 10,000 PSI Working Pressure**  
**3 MWP - 5 MWP - 10 MWP**



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves (1) Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate □ Plug □ (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

**EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.