

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. OIL & GAS
1301 W. ...
Artesia, NM 88211

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN			5. LEASE DESIGNATION AND SERIAL NO. LC-057634	
1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			7. UNIT AGREEMENT NAME 18384	
2. NAME OF OPERATOR Mack Energy Corporation 13837			8. FARM OR LEASE NAME, WELL NO. McIntyre A #18	
3. ADDRESS AND TELEPHONE NO. P.O. Box 960, Artesia, NM 88211-0960 (505) 748-1288			9. API WELL NO. 30-015-32188	
4. LOCATION OF WELL (Report location clearly and in accordance with any state requirement.)* At surface 990 FSL & 2310 FEL At proposed prod. zone Ut. D			10. FIELD AND POOL, OR WILDCAT Loco Hills Paddock	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 1/10 mile South of Loco Hills			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 20 T17S R30E	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 330		16. NO. OF ACRES IN LEASE 80		17. NO. OF ACRES IN LEASE TO THIS WELL 40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT. 660		19. PROPOSED DEPTH 5000		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3608				22. APPROX. DATE WORK WILL START* 12/10/01

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	K-55, 13 3/8	48	425	Circ
12 1/4	K-55, 8 5/8	24	1200	Sufficient to Circ
7 7/8	J-55, 5 1/2	17	5000	Sufficient to Circ

Mack Energy proposes to drill to a depth sufficient to test the Paddock and San Andres formation for oil. If productive, 5 1/2" casing will be cemented. If non-productive, the well will be plugged and abandoned in a manor consistent with federal regulation. Specific programs as per Onshore Oil and Gas Order #1 are outlined in the following attachments:

- | | | |
|--|--|------------------------------------|
| 1. <u>Surveys</u>
Exhibit #1- Well Location Plat
Exhibit #2- Vicinity Map
Exhibit #3- Location Verification Map | 4. <u>Certification</u> | 7. <u>Responsibility Statement</u> |
| 2. <u>Drilling Program</u> | 5. <u>Hydrogen Sulfide Drilling Operation Plan</u>
Exhibit #7- H2S Warning Sign
Exhibit #8- H2S Safety Equipment | |
| 3. <u>Surface Use & Operating Plan</u>
Exhibit #4- One Mile Radius Map
Exhibit #5- Production Facilities Layout
Exhibit #6- Location Layout | 6. <u>Blowout Preventers</u>
Exhibit #9- BOPE Schematic
Exhibit #10- Blowout Preventer Requirements
Exhibit #11- Choke Manifold | |

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 Chris D. Cat TITLE Production Analyst DATE 10/25/01

(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 /s/ LESLIE A. THEISS TITLE PROD. ANALYST DATE JAN 30 2002
***See Instructions On Reverse Side** **APPROVAL FOR 1 YEAR**

DISTRICT I
P.O. Box 1988, Hobbs, NM 88241-1988

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

OIL CONSERVATION DIVISION

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 96718	Pool Name Loco Hills Paddock
Property Code 018384	Property Name McINTYRE A	Well Number 18
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION	Elevation 3608'

Surface Location

UL or lot No. 0	Section 20	Township 17-S	Range 30-E	Lot Idn	Feet from the 990	North/South line SOUTH	Feet from the 2310	East/West line EAST	County 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

OPERATOR CERTIFICATION

I hereby certify the the information
contained herein is true and complete to the
best of my knowledge and belief.


Signature

Crissa D. Carter
Printed Name

Production Analyst
Title

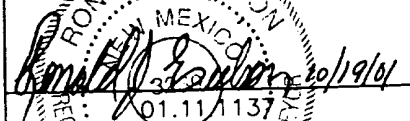
10/26/2001
Date

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.

OCTOBER 16, 2001

Date Surveyed
Signature of Seal of
Professional Surveyor

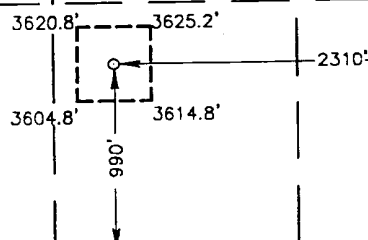

RONALD J. EDSON
01.11.1137

Certificate No. RONALD J. EDSON 3239
GARY EDSON 12641

GEODETIC COORDINATE
SPC NME
NAD 1927

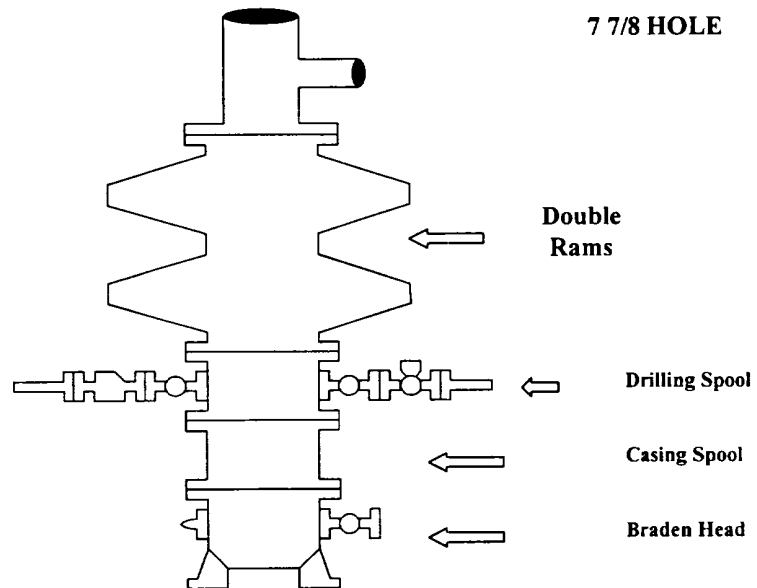
Y=660515.2
X=604691.0

LAT. 32°48'55.37"N
LONG. 103°59'33.24"W

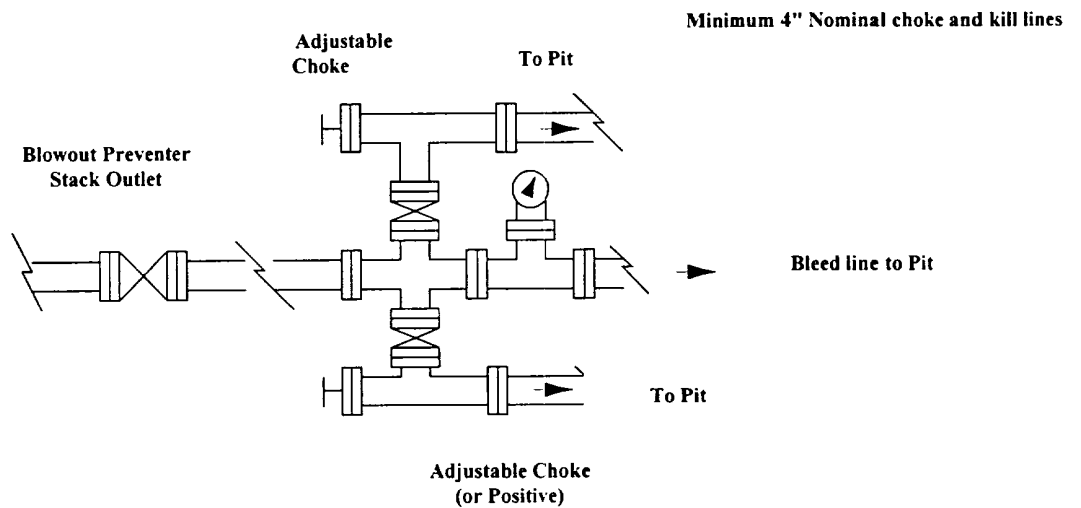


Mack Energy Corporation

Exhibit #9 BOPE Schematic



Choke Manifold Requirement (2000 psi WP)
No Annular Required



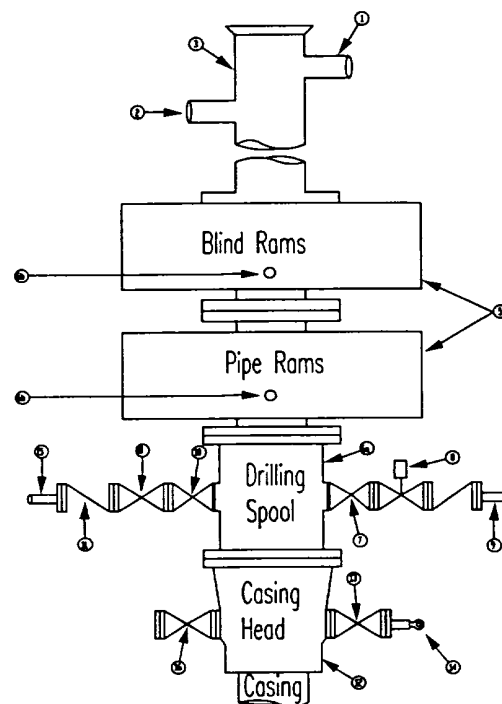
Mack Energy Corporation
Minimum Blowout Preventer Requirements
 2000 psi Working Pressure
 2 MWP
 EXHIBIT #10

Stack Requirements

NO.	Items	Min. I.D.	Min. Nominal
1	Flowline		2"
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		2" Choke
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above)		
7	Valve Gate Plug	3 1/8	
8	Gate valve-power operated	3 1/8	
9	Line to choke manifold		3"
10	Valve Gate Plug	2 1/16	
11	Check valve	2 1/16	
12	Casing head		
13	Valve Gate Plug	1 13/16	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL

16	Flanged Valve	1 13/16	
----	---------------	---------	--



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2000-psi minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers' position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casing head and side valves.
2. Wear bushing. If required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, or bean

5. sizes, retainers, and choke wrenches to be conveniently located for immediate use.
6. All valves to be equipped with hand-wheels or handles ready for immediate use.
7. Choke lines must be suitably anchored.
8. Handwheels and extensions to be connected and ready for use.
9. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
10. All seamless steel control piping (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
11. Casinghead connections shall not be used except in case of emergency.
12. Do not use kill line for routine fill up operations.

70-015-32188

6-28-02

PE/AZ-LL/MCFR/NGT

1214-4832

PE/3D-LD/CN/NGT

200-4822