Form 3160-3 (December 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN 'LICATE'
(Other Instructions on reverse side)

Form approved.

Budget Bu

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

## 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT LC-029342-H 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DRILL 🛛 DEEPEN b. TYPE OF WELL SINGLE ZONE MULTIPLE ZONE B. FARM OR LEASE NAME, WELL NO. OTHER 2. NAME OF OPERATOR Brigham H #3 **Mack Energy Corporation** 9. API WELL NO. 3. ADDRESS AND TELEPHONE NO. 30-015 – 30677 10. FIELD AND POOL, OR WILDCAT P.O. Box 960, Artesia, NM 88211-0960 Loco Hills Paddock 4, LOCATION OF WELL (Report location clearly and in accordance with any state ü 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 2600 FSL & 760 FWL 2 At proposed prod. zone Sec 21 T17S R30E 2290 FSL & 990 FWL 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* 12. COUNTY OR PARISH 13. STATE Eddy 1/10 mile North of Loco Hills **NM** DISTANCE FROM PROPOSED\* 16. NO. OF ACRES IN LEASE 17. NO OF ACRES IN LEASE TO THIS WELL LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 40' 40 40 (Also to nearest drig. unit line, if any) 18. DISTANCE FROM PROPOSED LOCATION\* 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS TO NEAREST WELL, DRILLING, COMPLETED 435 5000 Rotary

23. PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT SIZE OF HOLE GRADE, SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH Circ 17 1/2 K-55,13 3/8 48 425 1040 Circ 24 12 1/4 K-55, 8 5/8 7 7/8 J-55, 5 1/2 17 5025 Suff 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. Surveys
  - Exhibit #1- Well Location Plat
  - Exhibit #2- Vicinity Map

OR APPLIED FOR, ON THIS LEASE, FT.

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

3641

- Exhibit #3- Location Verification Map
- 2. Drilling Program
- 3. Surface Use & Operating Plan
  - Exhibit #4- One Mile Radius Map
  - **Exhibit #5- Production Facilities Layout**
  - **Exhibit #6- Location Layout**

4. Certification

7. Responsibility Statement

22. APPROX. DATE WORK WILL START\*

10/20/1999

5. Hydrogen Sulfide Drilling Operation Plan

Exhibit #7- H2S Warning Sign

Exhibit #8- H2S Safety Equipment

- 6. Blowout Preventers
  - 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.

IGNED Matt J. Brave	TITLE	Geological Engineer	DATE	06/22/99
This space for Federal or State office use)				· · ·
PERMIT NO.		APPROVAL DATE		

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

JN 30 '99

ROSWELL, NW