Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAR 12 2010
NMOCD ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

5 Lease Serial No: NMLC-029406B

6. If Indian, Allottee or Tribe Name:

7. If Unit of CA/Agreement, Name and/or No.:

1. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

8 Well Name and No.: Pintail Federal #1

2. Name of Operator: Mack Energy Corporation

9. API Well No.: 30-025-39527

3a. Address: P.O. Box 960 Artesia, NM 88210-0960

3b. Phone No *(include area code)*: (575) 748-1288

10. Field and Pool or Exploratory Area: Maljamar; Yeso, West

4. Location of Well *(Footage, Sec., T,R,M, or Survey Description)*: 1650 FSL & 2310 FWL Sec. 8 T17S R32E

11 Country or Parish, State: Lea, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation. Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Mack Energy proposes to change the casing strings as follows:
Surface casing: Drill 12 1/4 hole, set 8 5/8 J-55 24# ST&C set @ 950', cmt w/585sx Class C, 14.8ppg, 1.34 yld. Safety factors C/B/T 2.950/5.570/5.9.
Production casing: Drill a 7 7/8 hole to 7000', log well. Set 5 1/2" L-80 17# @ 7000', cmt lead 668sx Class C, 14.8ppg, 1.19 yld, tail 400sx Class C, 12ppg, 2.157 yld. Safety factors C/B/T 1.571/2.726/2.580.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*: Jerry W. Sherrell

Title: Production Clerk

Signature: Jerry W. Sherrell

Date: 2/26/10

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title: PETROLEUM ENGINEER

Date: MAR 15 2010

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

APPROVED
/s/ Roger Hall
MAR - 8 2010
Petroleum Engineer
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U S C Section 1212, make it a crime for my 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.

(Instructions on page 2)

8 5/8	surface csg in a	12 1/4	inch hole.		Design Factors		SURFACE	
Segment	**#/ft**	**Grade**	**Coupling**	**Joint**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	24.00	J 55	ST&C	10.7	3.05	0.81	950	22,800
"B"							**0**	**0**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500			Tail Cmt	does	circ to sfc.	Totals:	950	22,800

Comparison of Proposed to Minimum Required Cement Volumes

Hole	Annular	Proposed	CuFt Cmt	Min	Excess	Drilling	Calc	Req'd	Min Dist
Size	Volume	**Sx Cmt**	Proposed	**Cu Ft**	% Cmt	**Mud Wt**	MASP	**BOPE**	Hole-Cplg
12 1/4	0.4127	**585**	784	**453**	73	**8.50**	2096	**3M**	1.31

Frac gradient is 3.11 - Burst OK

5 1/2	casing inside the	8 5/8	casing.	_	Design Factors		PRODUCTION	
Segment	**#/ft**	**Grade**	**Coupling**	**Joint**	**Collapse**	**Burst**	**Length**	**Weight**
"A"	17.00	L 80	LT&C	2.84	1.73	2.13	7,000	119,000
"B"							**0**	**0**
"C"							**0**	**0**
"D"							**0**	**0**
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,540						Totals:	7,000	119,000

The cement volume(s) proposed may achieve a top **0** **feet from surface.**

Hole	Annular	Proposed	CuFt Cmt	Min	Excess	Drilling	Calc	Req'd	Min Dist
Size	Volume	**Sx Cmt**	Proposed	**Cu Ft**	% Cmt	**Mud Wt**	MASP	**BOPE**	Hole-Cplg
7 7/8	0.1733	**1068**	1658	**1237**	34	**10.00**			0.91

Sundry to change from a 3-string design to a 2-string.

#VALUE!

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Mack Energy Corporation**
LEASE NO.:	**NMLC-029406B**
WELL NAME & NO.:	**Pintail Federal #1**
SURFACE HOLE FOOTAGE:	**1650' FSL & 2310' FWL**
BOTTOM HOLE FOOTAGE LOCATION:	**1650' FSL & 2310' FWL** **Section 08, T. 17 S., R 32 E., NMPM**
COUNTY:	**Lea County, New Mexico**

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Lea County**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible brine and water flows in the Salado and Artesia Groups.
Possible loss of circulation in the Grayburg and San Andres formations.

1. The **8-5/8** inch surface casing shall be set at approximately **950** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If the salt is penetrated, set casing 25 feet above the top of salt.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. Casing cut-off and BOP installation will not be initiated until the cement has had a minimum of 8 hours setup time for a water basin. The casing shall remain stationary and under pressure for at least eight hours after the operator places the cement. In the potash area, the minimum time is 12 hours and the casing shall remain stationary and under pressure during this time period. Casing shall be under pressure if the operator uses some acceptable means of holding pressure or if the operator employs one or more float valves to hold the cement in place. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.

   b. The tests shall be done by an independent service company using a test plug.

   c. The results of the test shall be reported to the appropriate BLM office.

   d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

f. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

RGH 030510