| | | N. 1 | | I Cons. Clivisi It sher m | Bh | | | | |
|--|--|--|---------------------------|---|----------------------------------|---|------------------------|--|--|
| Form 3160-3 (December 1990) | | ED STATES | ARTES | A. NA SUBBUIR (Other Ins., . reverse s | | * Form approved. Budget Bureau Expires: Decen | | | |
| | | | | | | 5. LEASE DESIGNATION | | | |
| | | LAND MANAG | | | | NM-148 | | | |
| | CATION FOR P | ERMIT TO D | DRILL | OR DEEPEN | | 6. IF INDIAN, ALLOTTEE | OR TRIBE NAME | | |
| 11. TYPE OF WORK DRI 5. TYPE OF WELL | LL 🛛 | DEEPEN | | | | 7. UNIT AGREEMENT NAME | | | |
| 2 NAME OF OPERATOR | Gas OTHER | | <u>zo</u> | NGLE MULTIP | | 8. FARM OR LEASE NAME, WEI White Star Fe | ederal #3 | | |
| Mack Energy Corp | | 138 | 3 | 7 | | 9. API WELL NO. | | | |
| 3. ADDRESS AND TELEPHONE NO P.O. Box 960, Arte | sia, NM 88211-0960 | (505) 74 | 8-1288 | ł | | 30-015-30 | RWILDCAT | | |
| 4. LOCATION OF WEL | L (Report location clearly : | and in accordance w | with any | state requirement.*) | | East Empire | e Yeso 9661 (| | |
| | | 2310 FSL 2310 | FEL | | | 11. SEC., T., R., M., OR I AND SURVEY OR AR | BLK. Ea | | |
| At proposed prod. zor | 10 | 2310 FSL 2310 | FEL | UnitJ | | Sec 29 T17S R29E | | | |
| 14. DISTANCE IN MILES A | ND DIRECTION FROM NEAR | | | | | 12. COUNTY OR PARISH | I 13. STATE | | |
| DISTANCE FROM PROP | | West of Loco H | | | | Eddy | NM | | |
| 15. LOCATION TO NEARES PROPERTY OR LEASE (Also to nearest drl | T LINE, FT. | 330 | 16. NO. | OF ACRES IN LEASE 280 | | 17. NO OF ACRES IN LEASE TO THIS WELL 40 | | | |
| 13. DISTANCE FROM PROP TO NEAREST WELL, DE OR APPLIED FOR, ON TH | NILLING, COMPLETED (IS LEASE, FT. | 660 | 19. PRC | POSED DEPTH 5800 | 20. ROTAR | ROTARY OR CABLE TOOLS Rotary | | | |
| 21. ELEVATIONS (Show v | vhether DF, RT, GR, et RO | SWET CON | TDA | LLED WATER B | | 22. APPROX. DATE WORK | | | |
| 23. | 5555 GK | | | | | 7/20/9 | 98 | | |
| | GRADE, SIZE OF CASING | T | | CEMENTING PROGRA | M | | | | |
| | K-55,13 3/8 | WEIGHT PER FO | от | <u>SETTING DEPTH /</u> 300 名ン | | QUANTITY OF CEMEN | ί Τ | | |
| 12 1/4 | K-55, 8 5/8 | 24 | | 800 | | Circ | | | |
| 7 7/8 | J-55, 5 1/2 | 17 | | 5800 | | Suff to Circ | | | |
| productive, 5 1/2" c | gy proposes to drill to asing will be cemented | d. If non-produc | ctive, tl | he well will be plugg | ed and ab | andoned in a mano | r consistent | | |
| | ion. Specific program | s as per Onshor AP PRO | re Oil a /AL S | nd Gas Order #1 ard UBJECT TO OUIREMENTS A | e outlined ND | in the following att | achments: | | |
| Drilling Program | | GENERI | al fic L STI | PULATIONS | | Post | TD-1 26-95 T+20c | | |
| Surface Use & Ope | erating Plan | ATTACH | | Exhibit #4 - One- Mi | le Radius | Мар 6 | 26-92 | | |
| Exhibit #1 & 1A - 1 | Blowout Preventer Ec | | | Exhibit #5 - Product | ion Facilit | ties Layout A. | It hec | | |
| Exhibit #2 - Locati | on and Elevation Plat | t |] | Exhibit #6 - Locatior | n Layout | | | | |
| Exhibit #3 - Planno | ed Access Road | | J | Exhibit #7 - H2S Dri | lling Ope | rations Plan | | | |
| IN ABOVE SPACE DESCRIE deepen directionally, give perti | BE PROPOSED PROGRAM: I nent data on subsurface location | f proposal is to deepen is and measured and tri | i, give dat ue vertica | a on present productive zone l depths. Give blowout prever | e and propose ater program, i | d new productive zone. If p. if any. | roposal is to drill or | | |
| signed_Matt | J. Brewer | | | Geological Eng | ineer | DATE5 | /13/98 | | |
| (This space for Feder | al or State office use) | | | | | | · | | |
| PERMIT NO. | | | А | PPROVAL 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:

| | 258143 | 1.1.16 |
|--|--------|--------|
| | | |

Lating Jorder's Mariers DATE_____

| A | PP | RO | VE | D | BY |
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| | | | | | |

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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 the United States any false.

| DISTRICT I P.O. Box 1960, Hobba, NM 88241-1980 DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719 DISTRICT III | | | | | State of ^{Minerals and Nat} SERVA | tural | Resources Department | | Revised Februar to Appropriate Dist State Lease - Fee Lease - | rict Office - 4 Copies |
|--|---------------|----------|---------------|---------------------------------------|--|------------|----------------------|-------------------------------|--|-----------------------------|
| 1000 Rio Brazos F | ld., Aztec, N | M 87410 | OIL | | PO Bo | v 9 | | HAP 11 199 | 38 | |
| DISTRICT IV P.O. BOX 2088, SANT | A FE, N.M. 87 | 504-2088 | | Santa F | e, New Me | exic | o 87504-2088 | TUEJOE | MENDED | REPORT |
| <u> </u> | · | | WELL LO | DCATION | AND AC | REA | GE DEDICATI | ON PLAT | ***** | |
| API | Number | | 0661 | Pool Code | | | East England | Pool Name | | |
| Property | Code | | 9661 | | Property | | | ieso | Well Num | ıber |
| 022546 | | | | WHI | TESTAR F | | | | 3 | |
| OGRID N 013837 | 0. | | | MACK E | Operator NERGY CI | | | | Elevatio 3595 | - |
| | | ł | | | Surface | Loca | ation | | | |
| UL or lot No. | Section | Township | | Lot Idn | Feet from t | the | North/South line | Feet from the | East/West line | County |
| J | 29 | 17 S | 29 E | | 2310 | | SOUTH | 2310 | EAST | EDDY |
| | | · | Bottom | | ····· | | rent From Sur | face | | |
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from t | the | North/South line | Feet from the | East/West line | County |
| Dedicated Acres | s Joint o | r Infill | Consolidation | Code Or | der No. | | <u> </u> | | | |
| | | | | | | | | | | |
| NO ALLO | WABLE W | TLL BE | ASSIGNED | TO THIS | COMPLETIO | N U | INTIL ALL INTER | ESTS HAVE BE | EEN CONSOLIDA | ATED |
| [| | OR A | NON-STAN | DARD UN | IT HAS BE | EN | APPROVED BY | THE DIVISION | | |
| | | | | | | | | OPERATO | OR CERTIFICAT | TION |
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| | I | | | | | ł | | Matt | J. Breuven | |
| | + | | | | | + | | Signature | 0 | |
| | | | | | | | | <u>Matt J.</u> Printed Nam | | |
| | , | | | | | 1 | | Geologi | cal Enginee | <u>r</u> |
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Attachment to Exhibit #1 NOTES REGARDING THE BLOWOUT PREVENTERS White Star Federal #3 Eddy County, New Mexico

- 1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
- 2. Wear ring to be properly installed in head.
- 3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.
- 4. All fittings to be flanged.
- 5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.
- 6. All choke and fill lines to be securely anchored especially ends of choke lines.
- 7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
- 8. Kelly cock on Kelly.
- 9. Extension wrenches and hands wheels to be properly installed.
- 10. Blow out preventer control to be located as close to driller's position as feasible.
- 11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

MINIMUM CHOKE MANIFOLD 3,000, 5,000 and 10,000 PSI Working Pressure, 2 M Will be used or greater 3 MWP - 5 MWP - 10 MWP



BEYOND SUBSTRUCTURE

| | | | MINI | NUM REQU | IREMENT | S | | | | |
|-----|--|----------|-----------|----------|----------|-----------|--------|----------|------------|--------|
| | [| | 3,000 MWP | | | 5,000 MWP | | | 10,000 MWF |) |
| Na. | | 1.D. | NOMINAL | RATING | I.D. | NOMINAL | RATING | 1.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 C Plug C(2) | 3-1/8* | | 3,000 | 3-1/8* | | 5,000 | 3-1/8" | | 10,000 |
| 4 | Valve Gate G Plug G(2) | 1-13/16* | | 3,000 | 1-13/18* | | 5,000 | 1-13/18* | | 10,000 |
| 48 | Valves(1) | 2-1/18* | | 3,000 | 2-1/16* | | 5,000 | 3-1/8* | | 10,000 |
| 5 | Pressure Gauge | | | 3,000 | | | 5,000 | | | 10,000 |
| 8 | Gale C Valves 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 Gale D Plug D(2) | 3-1/8* | | 3,000 | 3-1/8* | | 5,000 | 3-1/8* | | 10,000 |
| 12 | Unes | | 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 | 1 | 2'x5' | | | 2'x5' | | | 2'x5' | |
| 16 | Line | | 4* | 1,000 | | 4* | 1,000 | | 4* | 2,000 |
| 17 | Valves Gate C . Piug C(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

1. All connections in choke manifold shall be welded, studded, lianged or Cameron clamp of comparable rating.

- 2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. Choke manifold pressure and standplpe 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.

6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make ورورها المسجر والمراقل ويؤرد الأرابي الراب

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

2.,000 psi Working Pressure

2 MWP

MACK ENERGY CORPORATION

STACK REQUIREMENTS

| No. | ltem | | Min. I.D. | Min. Nominal |
|-----|---|--|--------------|-----------------|
| 1 | Flowline | | | |
| 2 | Fill up line | | | 2" |
| 3 | Drilling nipple | | | |
| 4 | Annular preventer | | | |
| 5 | Two single or one dual hy operated rams | | | |
| 6a | Drilling spool with 2" min. 3" min choke line outlets | | 2"Choks | |
| 6b | 2" min. kill line and 3" mi outlets in ram. (Alternate t | | | |
| 7 | Valve | Gate 🗆 Plug 🗆 | 3-1/8" | |
| 8 | Gate valve-power opera | 3-1/8" | | |
| 9 | Line to choke manifold | | | 3* |
| 10 | Valves | Gate 🗆 Plug 🗅 | 2-1/16" | |
| 11 | Check valve | | 2-1/16* | |
| 12 | Casing head | | | |
| 13 | Valve | Gale 🗆 Plug 💭 | 1-13/16* | |
| 14 | Pressure gauge with need | ile valve | | |
| 15 | Kill line to rig mud pump r | | | 2* |
| | | the second s | | |



| OP | TIONAL |
|------------------|----------|
| 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 2,000 psi, minimum.
- 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 prevventer 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 casinghead and side valves.

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 (auitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chore. Valves must be full opening and suitable for high pressure mud service.
- 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 datay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently focated for immediate use.
- 5. All valves to be equipped with handwheels or handles ready for immediate use.
- 6.Choke lines must be suitably anchored.

- 7.Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (ZOOD psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- 10.Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations.

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MACK ENERGY CORPORATION EXHIBIT #1-A