| Frm 3160-3<br>(December 1990)  | UNITEF<br>DEPARTMENT   |   | MOILUOOMSTOO  | mission                           | Form approved                          | . CISP              |
|--|--|---|---|-----------------------------------|--|---------------------|
| v  | BUREAU OF LA   |   | RTESIA, NM 88210  | 5. LEASE D                        | ESIGNATION AND SI<br>26-B              | ERIAL NO.           |
| ······································   | APPLICATION FOR PERM   | IT TO DRILL OR DEEPEN   |   |                                   | AN, ALLOTTEE OR :                      | TRIBE NAME          |
| la TYPE OF WORK:   | DRILL 🔀  | DEEPEN  | ·   | NA                                |  |                     |
| h TYPE OF WELL:  | OAS Other  | SINGLE ZONE   | MULTIPLE<br>ZONE  | 7.UNIT AG<br>NA                   | REEMENT NAME                           |                     |
| 2 NAME OF OPERA  |  |   | 134025  | 8. FARM OF<br>WEST "              | B"#85                                  | 110.<br>1110 16316  |
| 3. ADDRESS AND T   | TELEPHONE NO.<br>20 N. BROADWAY, SUIT  | TE 1500, OKC, OK 73102  | (405) 552-4560  | 9. API WEI                        | L NO.<br>VS-283                        | 87                  |
| At surface 261-  | ELL (Report location clearly and in a<br>4'FSL & 2621'FWL<br>Juit (K) Sto  | ccordance with any State requi  | · · · ·   | GRAYE                             | .,R.,M.,OR BLOCK                       | TRURS QU, GB SA     |
| At top proposed pro  |  | cation  | BY STATE  | SECTIO                            | N 3 -T17 S - R31                       | E                   |
|  | and direction from nearest town of loco Hills, N.M.  | DR FOST OFFICE*   |   | 12. COUNT<br>EDDY                 | TY OR PARISH                           | 13. STATE<br>NM     |
| 15. DISTANCE FROM PRO<br>LOCATION TO NEARE<br>PROPERTY OR LEASE<br>(Also to nearest drig, unit | ST<br>LINE, FT. 26'  | 16.NO. OF ACRES IN LEAR<br>1919.88  | 3eceive[  |                                   | 17.NO. OF ACRE.<br>TO THIS WELL<br>40  |                     |
| 18.DISTANCE FROM PRO   | POSED LOCATION*<br>DRILLING, COMPLETED,  | 19. PROPOSED DEPTH<br>4400  | MAR 1 6 1995  |                                   | 20. ROTARY OR C<br>Rotary              | ABLE TOOLS*         |
| 21.ELEVATIONS (Show w<br>3961' GR  | thether DF, RT, GR, etc.)  |   | DIL CON. DI   | V s Febr                          | IPPROX. DATE WORK<br>CUARY 1, 1995     |                     |
| 23.  |  | PROPOSED CASING AND   | CEMENTING ROGRAM  |                                   |  |                     |
| SIZE OF HOLE   | GRADE, SIZE OF CASING  | WEIGHT PER FOOT   | SETTING DEPTH   |                                   |  | Y OF CEMENT         |
| 12 1/4" •  | 8 5/8" J-55  | 24.0#   | 600'  |                                   | 00 sk RFC cmat + 2                     |                     |
| 7 7/8"   | 5 1/2" J-55  | 15.5#   | 4400'   |                                   | 00 sk Class "C" 3<br>C" + 1/4 lb/sk ce | 5/65 + 500 sk Class |
| the Grayburg-J<br>wellbore will be<br>outlined in the f<br><u>Drilling Progra</u>              | ulate cement to surface on a<br>fackson formation for common<br>plugged and abandoned pe<br>following exhibits and attach<br><u>m</u><br>= Blowout Prevention Equi<br>= Location and Elevation F | ercial quantities of oil.<br>r Federal Regulations. 1<br>ments.<br>The undo<br>pment terms, c | If the Grayburg-Jackson<br>Programs to adhere to ons<br>ersigned accepts all applic<br>ondition, stipulations and | is deemed<br>shore oil a<br>cable | non-commerce<br>nd gas regulat         | cial, the           |
|  | = Location and Elevation F   | lat restrictio  | ons concerning operations   |                                   |  |                     |

Exhibit #3/3-A= Road Map and Topo MapExhibit #4= Wells Within 1 Mile RadiusExhibit #5= Production Facilities PlatExhibit #6= Rotary Rig LayoutExhibit #7= Casing DesignH2S Operating Plan

terms, condition, stipulations and restrictions concerning operations conducted on the leased land or portions thereof, as described below: Lease No. LC029426-B Legal Description: Section 3-T17N-R31E Bond Coverage: Nationwide BLM Bond No.: CO1151

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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_                              | Panoy Jockson  | _ TITLE                 | RANDY JACKSON<br>DISTRICT ENGINEER        | DATE _         | 1/5/94                       |                       |
|--------------------------------------|--|-------------------------|---|----------------|------------------------------|-----------------------|
| *(This space for                     | Federal or State office use)   |                         |   |                | APPNDVAL SU                  | BJEET RU              |
| PERMIT NO.                           | · · · · · · · · · · · · · · · · · · ·  |                         | APPROVAL D                                | ATE            | CONTRAL OTIDI                | UIREMENTS AND         |
| Application approval<br>CONDITIONS O | l does not warrant or certify that the applicant hole<br>F APPROVAL, IF ANY: | is legal or equitable t | itle to those rights in the subject lease | which would en | title the applicant arconduc | t operations thereon. |
| APPROVED BY                          | <b>/s/ Yolanda Vega</b>  | TITLE                   |   | in.            | MAR -1                       | 1995                  |

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 its jurisdiction

| DISTRICT I   |                      |                            | St            | ate of N              | lew Mexico             | -                |                                 |   | orm C-102      |
|--|----------------------|----------------------------|---------------|-----------------------|------------------------|------------------|---------------------------------|---|----------------|
| P. O. Box 1980<br>Hobbs, NM 88241-1                          | 980                  | Energy, Mi                 | inerals,      | and Nat               | ural Resou             | rces Depa.cm     | ent                             |   | 02-10-94       |
| DISTRICT II<br>P. O. Drawer DD<br>Artesia, NM 88211-0        | 0719                 | OTT.                       | CONS          | ERVA                  | TION                   | DIVISION         |                                 | Submit to the<br>District Office<br>State Lease –<br>Fee Lease –  | 4 copies       |
| <u>DISTRICT III</u><br>1000 Rio Brazos Rd<br>Aztec, NM 87410 |                      |                            | I             | P. O. B               | or 2088                | 504-2088         | [                               | AMENDED   | REPORT         |
| DISTRICT IV<br>P. O. Box 2088<br>Santa Fe, NM 87507          | 7-2088               | ELL LOCA                   | TION A        | ND AC                 | RFAGE D                | EDICATION        | ріат                            |   |                |
| <sup>1</sup> API Number                                      |                      | <sup>2</sup> Pool Code     |               | 3 Pool                | Name                   |                  |                                 |   |                |
| 30-015-28<br>* Property Code                                 | 387<br>Property N    | 2850                       | 25            | Gr                    | ayburg - J             | achson · 7Ru     | rs, QU, GI                      | SA<br>Vell Number   | •              |
| K  |                      |                            | V             |                       | FEDER4                 |                  |                                 | 85  |                |
| 'OGRID No.   | • Operator N         |                            | /ON EN        | ERGY C                | IPERATIN               | G COMPANY        |                                 | * Elevation<br>3961   | •              |
|  |                      |                            | " SUF         | RFACE                 | LOCATION               | [                |                                 |   |                |
| UL or lot no. Section  | Township<br>17 SOUTH | Rang<br>31 EAST,           |               | Lot Ida I             | Feet from the<br>2614' | North/South line | Feet from the<br>2621'          | East/West line<br>WEST  | County<br>EDDY |
|  | "BOTTO               | M HOLE                     | LOCATI        | ON IF                 | DIFFERE                | NT FROM S        | URFACE                          |   |                |
| UL or lot no. Section  | Township             | Rang                       | e             | Lot Ida               | fect from the          | North/South line | Feet from the                   | East/West line  | County         |
| 12 Dedicated Acres 13 Joi                                    | nt or Infill         | <sup>14</sup> Consolidatio | on Code       | <sup>15</sup> Order N | 0.                     |                  |                                 |   |                |
| TU ALL   | OWABLE WI            | ELL BE ASS                 | IGNED TO      | D THIS (              | OMPLETION              | I UNTIL ALL II   | NTERESTS HA                     | VE BEEN   |                |
|  |                      |                            |               |                       |                        | N APPROVED B     |                                 |   |                |
|  |                      | <i>-</i>                   | 1<br> <br>    |                       |                        |                  |                                 | R CERTIFIC  |                |
|  |                      |                            | <br> <br>     |                       |                        |                  | contained here                  | ify that th <del>e</del> inf<br>ein is true and<br>my knowledge a | complete       |
|  |                      |                            |               |                       |                        |                  | Signature                       |   |                |
|  |                      |                            | 1             |                       |                        |                  | Printed Name                    |   |                |
|  |                      |                            | ;<br>+        |                       |                        |                  | Randy Jac<br>Title              | ckson   |                |
|  |                      |                            | *             |                       |                        |                  | District<br>Date                | Engineer  |                |
|  |                      |                            | 1             |                       |                        |                  | 1/5/95                          |   |                |
|  | 1<br>1<br>1<br>1     |                            |               |                       |                        |                  | SURVEYOR                        | R CERTIFIC  | ATION          |
|  |                      |                            | )<br>(<br>)   |                       |                        |                  | location sho                    | ertify that th<br>wn on this p                                    | lat was        |
|  | 2621'                |                            | 1             |                       | +                      |                  | surveys ma                      | field notes of<br>de by me or                                     | under          |
|  |                      |                            | 1             |                       |                        |                  | same is true<br>best of my      | ision, and th<br>e and correct<br>belief                          | to the         |
|  |                      |                            |               |                       |                        |                  | Desi Or my                      | Dener.  |                |
|  |                      |                            | •<br> <br>    |                       |                        |                  |                                 | BER 10, 199   | 4              |
|  |                      | 2614"                      | ;<br><b>;</b> |                       |                        |                  | Signature and<br>Professional S | Soult of Mr.  |                |
|  |                      |                            | <br> <br>     |                       | 5<br> -<br>  <br>      |                  | STA                             | TICO  | Ø              |
|  |                      |                            | !<br>!        |                       | 1                      |                  |                                 | EZNER   | Ŗ              |
|  |                      | \                          | i .<br>I      |                       |                        |                  | NC                              | 0.7970 To   | A.             |
|  |                      | Ι                          | 1             |                       |                        |                  | Certury Wer Nor<br>V. J. D. Zhi | ERAND R.P.S.  | <b>#</b> 7920  |
|  | i                    |                            | k             |                       | i                      |                  | JOB #35908                      | 16  | / V.H.B.       |

# MINIMUM BLOWOUT PREVENTER REQUIREMENTS

#### 3,000 psi Working Pressure

#### 3 MWP

# EXHIBIT #1

|     | STACK R  | EQUIREME         | NTS          |                 |
|-----|--|------------------|--------------|-----------------|
| No. | item   |                  | Min.<br>I.D. | Min.<br>Nominal |
| 1   | Flowline   |                  |              |                 |
| 2   | Fill up line   |                  |              | 2*              |
| З   | Drilling nipple  |                  |              |                 |
| 4   | Annular preventer  |                  |              | -               |
| 5   | Two single or one dual hydroperated rams                       | raulically       |              |                 |
| 6a  | Drilling spool with 2" min. I<br>3" min choke line oullets     | uil line and     |              |                 |
| 6b  | 2" min. kill line and 3" min.<br>outlets in ram. (Alternate to |                  |              |                 |
| 7   | Valve  | Gate 🗆<br>Plug 🗖 | 3-1/8"       |                 |
| 8   | Gate valve-power operate                                       | d                | 3-1/8*       |                 |
| 9   | Line to choke manifold   |                  |              | 3*              |
| 10  | Valves   | Gate 🖸<br>Plug 🖸 | 2-1/16*      |                 |
| 11  | Check valve  |                  | 2-1/16*      |                 |
| 12  | Casing head  |                  |              |                 |
| 13  | Valve  | Gate D<br>Plug D | 1-13/16"     |                 |
| 14  | Pressure gauge with need                                       | le valve         |              |                 |
| 15  | Kill line to rig mud pump m                                    |                  |              | 2"              |

CONFIGURATION



|    |               | 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 3,000 psi, minimum.
- 2.Automatic accumulator (80 gailon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- 3.80P 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.
- 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 cho''e. 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, 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 (3000 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.

# Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTORS Grayburg-Jackson Field Eddy County, New Mexico

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOPE bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 psi W.P. with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventor will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

#### MINIMUM CHOKE MANIFOLD 3,000, 5,000 and 10,000 PSI Working Pressure

EXHIBIT #1-A



|           |  |          | MINI      | NUM REQU | IREMENTS | S         |        |            |         |        |  |
|-----------|--|----------|-----------|----------|----------|-----------|--------|------------|---------|--------|--|
|           |  |          | 3,000 MWP |          |          | 5,000 MWP |        | 10,000 MWP |         |        |  |
| No.       |  | I.D.     | NOMINAL   | RATING   | 1.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 []<br>Plug [](2)                      | 1-13/16* |           | 3,000    | 1-13/16* |           | 5,000  | 1-13/16"   |         | 10,000 |  |
| <b>4a</b> | Valves(1)  | 2-1/16*  |           | 3,000    | 2-1/16*  |           | 5,000  | 3-1/8*     |         | 10,000 |  |
| 5         | Pressure Gauge                                   |          |           | 3,000    |          | 1         | 5,000  |            |         | 10,000 |  |
| 6         | Valves Gate C<br>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 C<br>Plug C(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    |          | 1         | 5,000  | •          |         | 10,000 |  |
| 15        | Gas Separator                                    |          | 2'x5'     |          |          | 2'x5'     |        |            | 2'x5'   |        |  |
| 16        | Line   |          | 4*        | 1,000    | 1        | 4*        | 1,000  |            | 4"      | 2,000  |  |
| 17        | Valves Gete C<br>Plug 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, flanged 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 lungsten carbide seats and needles, and replacements shall be available.
- 5. 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.
- 6. 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.

7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.