|  |   | OPER  | OGRID NO.   | 2160                        | <u></u>                       |   |  |  |
|--|---|---|---|-----------------------------|-------------------------------|---|--|--|
| Form 3160-3                                  | N.M. OILCOP   | COM   |   | . 0                         | .TE*                          | E* Form approved.   |  |  |
| (December 1990)                              | P.O. BOX 19   | LITER.  | PHOPEHTY NO. $13735$ n  |                             |                               | Budget Bureau No. 1004-0136<br>Expires: December 31, 1991 |  |  |
|  | HOBBS, NEW<br>DEPARTME                                | NT OF POOL  | CODE <u>8</u>   | 2160                        |                               | 5. LEASE DESIGNATIO                                       |  |  |
|  | BUREAU  | OF LAN EFF. D   | ATE 3   | 19196                       | ,                             | NM-89873  | um ard usrial no.                              |  |
| AD7  | PLICATION FOR   |   | 20.1  | 0-11-37                     | TE -                          | 6. IF INDIAN, ALLOT                                       | TER OR TRIRE NAME                              |  |
| 477<br>18. TYPE OF WORK                      | LICATION FUR  | PERM  | ·   | 119 11                      | 570                           | ·   |  |  |
|  | Drill 🗵   | DEEPEN  | JAN .   | J) LI 49 17                 |                               | 7. UNIT AGREEMENT   | XAMB   |  |
| b. TYPE OF WELL                              | 948 <b>5</b> . tv                                     |   | SINGLE A  |                             |                               | ·   |  |  |
| WELL   | WELL X OTHER  | L   | ZONE  | A SONE                      | ' <b>'''</b> []               | 8. CALL OF LEASE HAME                                     | WELLNO.<br>Federal Com                         |  |
|  | & Tull, Inc.  |   |   | 915/699-3                   | 1410                          | 9. AN WELL NO.  | rederal Com                                    |  |
| . ADDRESS AND TELEVION                       |   |   |   |                             |                               | 1   |  |  |
| P. O. Bo                                     |   |   |   | nd, TX 79                   | 9702                          | 10. FIBLD AND POOL  | , OR WILDCAT                                   |  |
| At surface                                   | (Report location clearly<br>1650' FNL &               |   | th any State req  | guirements.*)               | -                             | <u>Asudo</u> Mo   | rrow, North                                    |  |
| At prepared and                              |   | 1000 FWL  | •   |                             |                               | 11. ABC., T., R., M., C<br>AND SURVEY OR                  | me Bilk.<br>Arba                               |  |
| At proposed prod.                            | Same  |   |   |                             |                               | Sec. 21-  | T20S-R36E                                      |  |
|  | SE AND DIRECTION FROM                                 | NEAREST TOWN OR POI                                     | T OFFICE  | ····                        |                               | 12. COUNTY OR PARI  | BE 18. STATE                                   |  |
|  | of Hobbs, NM  |   |   |                             |                               | Lea   | New Mexico                                     |  |
|  | REST<br>SE LINE, FT.<br>drig. unit line, if any)      | 330'  |   | THES IN LEASE               | TO TH                         | ACRES ASSIGNED<br>IS WALL<br>ATMOUL = 440                 | Com.<br>(640)                                  |  |
|  | L, DRILLING, COMPLETED,                               | N/A .   | 19. гкоровер<br>1 1   | <b>Дертн</b><br>, 400 '     | 20. ROTAR                     | Rotary  | . <u>, , , , , , , , , , , , , , , , , , ,</u> |  |
| OR APPLIED FOR, ON<br>21. ELEVATIONS (Show   | whether DF, RT, GR, etc.                              |   |   | , 400                       | 1                             |   | WORE WILL START                                |  |
|  |   | 3602'G  | L   |                             |                               |   | 21, 1996                                       |  |
| 3.   | · · · · · · · · · · · · · · · · · · ·                 | PROPOSED CAS  | ING AND CEME  | NTING PROGRA                | M Los Cr                      | unty Controllo  | Water Boole                                    |  |
| SISE OF HOLE                                 | ORADE, SIZE OF CASING                                 |   |   | TTING DEPTH                 |                               | QUANTITY OF CE  |  |  |
| 17 1/2"                                      | 13 3/8"K-5  | 55 54.5#  |   | 1,365'                      | Circ                          |   | " C "  |  |
| 12 1/4"                                      | 9 5/8"K-5   | 55 36 & 4   | 0#N-80  | 5,505'                      | Circ                          | . 1730 sx   | "С"  |  |
| 8 3/4"<br>6 1/2"                             | 7" S-95   | 26.0#   | 1   | 0,800'                      |                               | ack w/1045  |  |  |
|  | 4 1/2"N−8   | 30' 11.6#   | ' 1   | 1,400'                      |                               | ack w/165   |  |  |
| Mud Program<br>O'-                           | <u>.</u><br>1,365': Fresh                             | water Gel snu   | d mud·  | <u>Mud Wt</u><br>8.6- 9.3 j |                               |   | W/L Control<br>D W/L control.                  |  |
|  | 5,505': Brinew  |   |   | 10.0-10.1                   |                               |   | W/L control.                                   |  |
|  | 10,000 : Fresh  | water:  | $\{(\mathbf{r}_1,\dots,(\mathbf{r}_{k-1}^{(n)}),\mathbf{f}_{k-1}^{(n)}\}=0$ | 8.4-8.5                     | ppg                           | 28 - 29 N   | W/L control.                                   |  |
|  | 10,800': Brinew                                       |   |   | 9.2-9.5                     |                               |   | /L cont. 10-12c                                |  |
| 10,800' -                                    | 11,400': Brinew                                       | ater:   |   | 9.8-12.0                    | ppg 3                         | 32 - 48 W,  | /L cont. <6-8 c                                |  |
| BOP Program                                  | m:  |   |   |                             |                               |   |  |  |
| A 3000 psi                                   | wp 12" Shaffer  |   |   |                             |                               |   |  |  |
|  | a depth 5,505   |   |   |                             |                               |   |  |  |
|  | /8" casing. Ca  |   | will be to  | ested befor                 | re drill                      | ing out and   | will be  |  |
| tested dai                                   |   | waval Subject to  | nto o mail  |                             |                               |   |  |  |
| Gas not d                                    |   | teral Requirements<br>In the stipulations               |   |                             |                               |   |  |  |
|  | Atta<br>RIBE PROPOSED PROGRAM                         |   |   |                             |                               |   | e  |  |
| epen directionally, give                     | pertinent data on subsurface lo                       | A: It proposal is to deepen<br>cations and measured and | give data on prese<br>true vertical depths.                                 | Give blowout preven         | and proposed inter program, i | new productive zone. I<br>f any.                          | t proposal is to drill or                      |  |
| <b>i</b> .                                   | ······································                | · · · · · · · · · · · · · · · · · · ·                   | Agent   | for:                        |                               |   |  |  |
| BIGNED                                       | Cequit - N  | muth II   |   |                             | l. Inc.                       | DATE Jan  |  |  |
| (This space for I                            | Federal or State office use                           | )   |   |                             |                               |   |  |  |
|  |   |   |   |                             |                               |   |  |  |
| PERMIT NO.                                   |   |   |   | AL DATE                     | lana                          |   | analysis anothing the                          |  |
|  |   |   |   |                             | I CHERE WORCD WO              | un conne rue sobresur re                                  | WARDER CORRECTED CORRECTL                      |  |
| •• ••  | ices not warrant or certify that the<br>OVAL. IF ANY: | he applicant holds legal or e                           | difference arte to more   | e rights in the subject     |                               |   | •  |  |
| Application approval c<br>CONDITIONS OF APPR |   | he applicant holds legal or e                           |   |                             | GER                           |   |  |  |
| CONDITIONS OF APPR                           |   | he applicant holds legal or o                           | ASSISTANT   | AREA MANA(                  | GER                           | date  |  |  |

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.

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)ISTRICT I ?.0. Box 1980, Bobbs, NK 88241-1980 James -

DISTRICT II 20. Drawer DD, Artesia, NM 88211-0719

DISTRICT III .000 Rio Brazos Rd., Axtec, NM 87410

)ISTRICT IV 10. BOX 2088, SANTA FE, N.M. 87504-2088 State of New Mexico 🦟

Energy, Minerals and Natural Resources Departments

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

|                           |                  | Ĩ          | WELL LO       | CATION                               | AND ACREA      | AGE DEDICATI     | ON PLAT   |   |  |  |
|---------------------------|------------------|------------|---------------|--------------------------------------|----------------|------------------|---|---|--|--|
| API<br>30 825             | Number<br>- 33-2 | 342        | 821           | Pool Code                            |                |                  |   |   |  |  |
| Property Code             |                  |            |               | Property Name                        |                |                  |   | Well Number   |  |  |
| <u>/8/38</u><br>OGRID No. |                  |            |               | OSUDO "21" FEDERAL COM               |                |                  |   | 1   |  |  |
| 2160                      | ,2               |            |               | operator Name<br>STEVENS & TULL      |                |                  |   | Blevetion<br>3602   |  |  |
|                           |                  |            |               |                                      | Surface Loc    | ation            |   |   |  |  |
| UL or lot No.             | Section          | Township   | Range         | Lot Idn                              | Feet from the  | North/South line | Feet from the   | East/West line  | County   |  |
| F                         | 21               | 20 S       | 36 E          |                                      | 1650           | NORTH            | 1650  | WEST  | LEA  |  |
|                           |                  |            | Bottom        | Hole Loo                             | cation If Diff | erent From Sur   | face  | •   | <b></b>  |  |
| UL or lot No.             | Section          | Township   | Range         | Lot Idn                              | Feet from the  | North/South line | Feet from the   | East/West line  | County   |  |
| Dedicated Acres           |                  | TILL BE AS | nsolidation ( | TO THIS                              | der No.        | UNTIL ALL INTER  | ESTS HAVE BI  | EEN CONSOLIDA   | ATED   |  |
| <u> </u>                  |                  | OR A N     | ON-STAN       | IDARD UN                             | IT HAS BEEN    | APPROVED BY      | THE DIVISION  |   |  |  |
|                           | 36               |            |               | NM-182<br>Warrio<br>NM-898<br>Conoco | r, Inc. Eta    | 1                | I hereb<br>contained herei<br>best of my know<br><u>U.C.</u><br>Signature<br>George R.<br>Printed Nam<br><u>Stevens &amp;</u><br>Title<br>January<br>Date | Tull, Inc.  | formation<br>ete to the<br><u>WZZZ</u>   |  |
|                           |                  |            | <br>          |                                      | -              |                  | on this plat w<br>actual surveys<br>supervison, an<br>correct to th   | A that the same is<br>a best of my belief<br>JARY 18, 1996<br>Beat of My<br>Beat of My<br>METYOYOUT | t notes of<br>under my<br>true and<br>r.<br>DMCC<br><u>29-96</u><br>078<br>676 |  |



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## APPLICATION FOR DRILLING

STEVENS & TULL. INC. Asudo "21" Federal Com., Well No. 1 1650' FNL & 1650 FWL, Sec. 21-T20S-R36E Lea County, New Mexico Lease No.: NM-89873 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Stevens & Tull, Inc. submits the following items of pertinent information in accordance with BLM requirements:

- 1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

| Anhydrite          | 1725' | Wolfcamp | 9.800'  |
|--------------------|-------|----------|---------|
| Base/Salt          | 3250' | Strawn   | 10.452' |
| Delaware           | 5510' | Atoka    |         |
| Top Bone Spring    | 6920' | Morrow   | 10,650' |
| 1st B. Spring Sand | 8020' |          | 11,050' |
| 2nd B. Spring Sand |       | T.D.     | 11,400' |
| end b. Spring Sand | 8655' |          |         |

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 350'.
Oil: Possible in the Delaware and Bone Spring.
Gas: Possible in Atoka and Morrow.

- 4. Proposed Casing Program: See Form 3160-3 and page 2.
- 5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
- 6. Mud Program: See Form 3160-3.

- ...

- 7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.
- 8. Testing, Logging, and Coring Program:

| Drill Ste | em Tests: Possible in the Devonian. |                      |
|-----------|-------------------------------------|----------------------|
|           | Gamma Ray:                          | Surf. Csg. to T.D.   |
|           | CNL-LDT, DLL-MFL                    | Below 8 5/8" to T.D. |
| Coring:   | None planned.                       | berow 6 5/8 to 1.D.  |

- 9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated BHP = 4560 psi (Evc. Hole), Temp. = 182°.
- 9a.  $H_2S$ : None expected, based on wells drilled in the area.
- Anticipated starting date: February 20, 1996.
   Anticipated completion of drilling operations: Approximately 8 weeks.

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Asudo "21" Federal Com., Well No. 1 BOP Specifications

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