| 110  | 1 11                                   | A                                | TING STATE   | \ _                  | 4  | 0                                  |  |
|--|--|----------------------------------|--|----------------------|--|------------------------------------|--|
| Application approval does CONDITIONS OF APPROVA  |  | plicant holds legal or equitable | title to those rights in the subject               | lease which wo       | ATTACHED   | conduct operations thereon.        |  |
| PERMIT WALK  | ral or State office use)               | wey ]                            | APPROVAL DATE                                      |                      |  | UIREMENTS AND                      |  |
| algned He  | izyk Am                                | - /                              | Read & Steven:                                     | s. Inc               | DATE   |                                    |  |
|  |  | ns and measured and true ver     | Agent for:   |                      | if any.  | 10. 1995                           |  |
|  |  |                                  | 200 SX "U". Cement at a on present productive zone |                      |  | f proposal is to delli os          |  |
| 1st stage:   | Lead 200 sx lite                       | e, tail in w/200 :               |  | to our               | 300  |                                    |  |
|  | THOUT setting the<br>ement with DV too |                                  | starting at 3800':                                 |                      |  |                                    |  |
|  |  |                                  | ntered, hole will                                  | be reduc             | ed at 5000' to                                   | 7 7/8" and                         |  |
| 3/8" casing. Ca<br>a 3000 psi wp   | asing and BOP wil                      | l be tested befor                | re drilling out wi                                 | th 11".              | BOP will be tes                                  | sted daily as                      |  |
| BOP Program:<br>A 11" 5000 psi   | wp Shaffer Type                        | LWS BOP, with a                  | 5000 psi wp 11" G                                  | K Hydril             | . will installed                                 | i on the 13                        |  |
|  |  | starch: 8                        | .8 ppg 32-   | -40                  | W/L control                                      | 15cc                               |  |
| 1600' - 5000':   | Brine mud:                             | 10                               | ) ppg 28-  | -32                  | No W/L control                                   |                                    |  |
| <u>Mud Program:</u><br>0' - 1600':   | '<br>Fresh water nati                  |                                  | ud Wt. Vis<br>4 ppg 32                             |                      | W/L Contro                                       |                                    |  |
| 7 7/8"   | 5 1/2"N-80                             | 17#                              | 8400'  |                      | Circ 1100 sx** see not<br>Tieback w/500 or 975 s |                                    |  |
| 17 1/2"  | 13 3/8"J-55<br>8 5/8"S-80              | 54.5#<br>32.0#                   | 1600'  |                      | 1000 sx Li                                       |                                    |  |
| SIZE OF HOLE   | GRADE, SIZE OF CASING                  | WEIGHT PER FOOT                  | SETTING DEPTH                                      |                      | QUANTITY OF CEM                                  | IENT                               |  |
| 23.  |  |                                  | ND CEMENTING PROGRA                                | AM                   | December   | 10, 1995                           |  |
|  | nether DF, RT, GR, etc.)               | 3650' GL                         |  | 1                    | 22. APPROX. DATE                                 | WORK WILL START                    |  |
| 18. DISTANCE FROM PRO  | POSED LOCATION®                        | 164' P/A 19.                     | PROPOSED DEPTH 8,400'                              |                      | Rotary or cable tools                            |                                    |  |
| 15. DISTANCE FROM PROP<br>LOCATION TO NEARES<br>PROPERTY OR LEASE<br>(Also to Descreat dr) | LINE, FT.                              | 560'                             | NO. OF ACRES IN LEASE 322.3                        |                      | OF ACRES ASSIGNED THIS WELL 40                   |                                    |  |
| 30 miles S   | W of Hobbs, M                          | N M                              |  |                      | Lea  | New Mexico                         |  |
| 14. DISTANCE IN MILES  | Same And Direction From NEA            | BEST TOWN OR POST OF             | ICE.   |                      | Sec. 4-T20S-R34E                                 |                                    |  |
| 5 At proposed prod. so   | 60' FNL & 21;                          | 30' FEL                          | Unit B/2   | _)                   | 11. SEC., T., R., M., O<br>AND SURVEY OR         | R BLK.<br>Arba                     |  |
| 4. LOCATION OF WELL (I<br>At surface   | Report location clearly and            | in accordance with an            | State requirements.*)                              | Quail Ridge Delaware |  |                                    |  |
| 8. ADDRESS AND TELEPHONE NO. P. O. BOX   |  | Poswall                          | . NM 88202   |                      | 5  | O                                  |  |
| 2. NAME OF OPERATOR  Read & Ste  | evens, Inc.                            |                                  | 505/622-   | 3770                 | Hudson Fe  | ederal                             |  |
| WELL A   | WELL OTHER                             | -                                | SINGLE MULTI<br>ZONE ZONE                          | <u> </u>             | 8. FARM OR LEASE NAME, WELL NO.                  |                                    |  |
|  | RILL 🖾                                 | DEEPEN 🗌                         | ASE DEFENDED TOTAL                                 | - <del>-</del>       | 7. UNIT AGREEMENT                                | NAME                               |  |
|  | ICATION FOR P                          | ERMIT API NO                     | 30-025-33  | 3247 -               | 6. IF INDIAN, ALLOT                              |                                    |  |
|  | BUREAU OF                              | FIFT DATE                        | E///_/   | 96                   | 5. LEASE DESIGNATION LC-065607                   |                                    |  |
| (December 1990)  | UNI<br>DEPARTMEN                       | TED S' POOL CO                   | DE 3758  | 4                    | Expires: De                                      | u No. 1004-0136<br>cember 31, 1991 |  |
| Form 3160-3  | •                                      | PROPER                           | TY NO. 1639  | · E                  | * Over abbith 40                                 | <b>d.</b>                          |  |
| •  |  | OPER. O                          | GRID NO. 189                                       | 17                   | 1773/19  |                                    |  |

# State of New Mexico

Energy, Minerals and Natural Resources Department

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

ISTRICT II 0. Drawer DD, Artesia, NM 68211-0719

ISTRICT IV

ISTRICT III 100 Rio Brazos Rd., Axtec, NM 87410

0. BOX 2066, SANTA FE, N.M. 87504-2068

# OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

|                 |             |                              | WELL LO       | CATION  | N AND  | ACREA                              | AGE DEDICATI     | ON PLAT  |   |   |
|-----------------|-------------|------------------------------|---------------|---|--|------------------------------------|------------------|--|---|---|
|                 |             |                              |               | Pool Code 7584 Northeast Lea Pool Name Quail Ridge Delaware |  |                                    |                  |  |   |   |
| Property Code   |             | Property Name HUDSON FEDERAL |               |   |  | Well Number<br>5                   |                  |  |   |   |
| 0GRID No.       |             |                              |               | RI  | -  | ator Nan<br>STEVE                  | ENS, INC.        |  | Elevation 3650  | _   |
|                 |             |                              |               |   | Surfa  | ce Loc                             | ation            |  |   |   |
| UL or lot No.   | Section     | Township                     | 1 -           | Lot Idn   | Feet fro                                     |                                    | North/South line | Feet from the                                      | East/West line  | County                                      |
| 7 B             | 4           | 20 S                         |               |   | <u>.                                    </u> | 60                                 | NORTH            | 2130   | EAST  | LEA   |
|                 |             | ,                            |               |   |  |                                    | erent From Sur   |  |   |   |
| UL or lot No.   | Section     | Township                     | Range         | Lot Idn   | Feet fro                                     | om the                             | North/South line | Feet from the                                      | East/West line  | County                                      |
| Dedicated Acres | 1           | r Infill                     | Consolidation | Code 0  | order No.                                    | ·································· |                  |  |   |   |
|                 |             |                              |               |   |  |                                    | UNTIL ALL INTER  |  | EEN CONSOLIDA   | ATED  |
|                 |             |                              | OT 3          |   | LOT 2  | DEEN                               | LOT 1            | <del></del>  | D CDDWITTO  | 701   |
| LC-06           |             |                              |               | 3655.5  | 3649.0°                                      |                                    | -2130'           | f hereb<br>contained herei<br>best of my know      | OR CERTIFICAT  y certify the the in  n to true and completely  pledge and belief.                           | formation<br>ets to the                     |
| 40.21 A         | <u>c.</u> † | 40.4                         | 14 AC.        | 40.   | .66 AC.                                      |                                    | 40.89 AC.        | Signature J  | Smith, age  |   |
|                 |             |                              |               |   |  |                                    |                  | Read & St  |   | 101   |
|                 |             |                              |               |   |  |                                    |                  | October. Date                                      | 10, 1995  |   |
|                 |             |                              |               |   |  |                                    |                  | SURVEYO  | OR CERTIFICAT   | rion  |
|                 |             |                              |               |   |  |                                    |                  | on this plat w<br>actual surveys<br>supervison, an | y that the well locat<br>as plotted from fick<br>made by me or<br>at that the same (s<br>e best of my belia | i notes of<br>under my<br>true and          |
|                 | -           |                              |               | ***************************************                     |  |                                    | <del></del>      | Date Surveye<br>Signature A<br>Progrational        | Sear of ) '''   | ALZ   |
|                 |             |                              |               |   |  |                                    |                  | Corunia PRO  | O. JOHN W. WEST<br>O. JOHN W. WEST<br>POPES GARN SESSON   | 0 - 06-95<br>518<br>676<br>0N 3239<br>12641 |

# APPLICATION FOR DRILLING READ & STEVENS, INC.

# Hudson Federal, Well No. 5

# 560' FNL & 2130' FEL, Sec. 4-T20S-R34E

Lea County, New Mexico Lease No.: LC-065607 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Read & Stevens, 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:

| Rustler      | 1,480' | Bone Spring | 8,180' |
|--------------|--------|-------------|--------|
| Top of Salt  | 1,700' | T.D.        | 8,400' |
| Base of Salt | 3,080' |             |        |
| Yates        | 3,3301 | •           |        |
| Queen        | 3,600! |             |        |
| Delaware     | 5,480' |             |        |

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

Water: Surface water in the Triassic between 80' - 230'.

Oil: Possible in the Delaware below 5500'.

Gas: None expected.

- 4. Proposed Casing Program: See Form 3160-3.
- 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 Stem Tests: None unless warranted.

Logging: T.D. to 5000':

G/R, CNL-FDC, DLL, MSFL

T.D. to surface: G/R, neutron

Coring: None planned.

- 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 = 3300 psi (evac. hole) with temperature of 140°.
- 10. H<sub>2</sub>S: None expected. None in previously drilled wells, but a Drilling Operations Plan, Exhibit "F", is being submitted to cover this this contingency.
- Anticipated starting date: December 10, 1995.
   Anticipated completion of drilling operations: Approx. 3 weeks.

#### MULTI POINT SURFACE USE AND OPERATIONS PLAN

READ & STEVENS, INC.
Hudson Federal, Well No. 5
560' FNL & 2130' FEL, Sec. 4-T20S-R34E
Lea County, New Mexico
Lease No.: LC-065607
(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

#### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a USGS/BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 51 road miles northeast of Carlsbad, New Mexico or 30 road miles southwest of Hobbs, NM. Traveling east from Carlsbad there will be approximately 48 miles of paved highway and .3 mile of gravel ranch/oilfield road.
- B. Directions: Travel east from Carlsbad, NM on U.S. Highway 62/180 for approximately 42 miles; turn south .3 mile east of MM 78, at a Read & Stevens, Inc. sign, crossing a cattle guard with a steel unlocked gate. Continue south for .3 mile to the location, which is 250' west of the road.

#### 2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be constructed to a width of 12-18 feet and will be approximately 50 feet in length.
- B. Construction: The proposed and existing access roads will be constructed and repaired by grading and topping with compacted caliche and will be properly drained.
- C. Turnouts: None required.
- D. Culverts: None required.
- E. Cuts and Fills: None required.
- F. Gates, Cattleguards: None required.
- G. Off Lease R/W: The existing off lease R/W No. NM-70565, as amended, covers the off lease portion of the existing access road on Federal surface in Section 33-T19S-R34E.

### 3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two mile radius are shown on Exhibit "C".

Read & Stevens, Inc. Hudson Federal, Well No. 5 Page 2

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are oil production facilities on the lease at this time. There is a tank battery on the well pad of the Hudson Fed., Well No. 1.
- B. If the well proves to be commercial, the necessary production facilities, and gas production-process equipment will be installed on the drilling pad. A 2" Drisco Pipe line will be run on the surface 20 feet from center line of the access road back to the Hudson Fed., Well No. 1 tank battery, 1980' FNL & 660' FEL, Sec. 4-T20S-R34E.

#### 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing access roads.

### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the proposed access road and well site pad will be obtained from an approved Federal pit in the SW%SW% of Section 26-T19S-R34E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

#### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock and wildlife from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary land fill within 30 days after finishing drilling and/or completion operations.

### 8. ANCILLARY FACILITIES:

A. None required.

Read & Stevens, Inc. Hudson Federal, Well No. 5 Page 3

#### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 400' X 400'.
- B. Mat Size: 200' X 300', plus 75' X 100' reserve pits, which will be oriented to the southeast side of the pad to miss the large sand dune on the southwest corner.
- C. Cut & Fill: There will be a 3 to 6 foot cut of a small sand dune on the north and northwest with fill to the east.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

## 10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced and screened until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to work after abandonment.

#### 11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road is located in a relatively flat (disturbed old locations) area with sand dunes and deflation basins to the north and west side of the location. Much of the east side of the drill site will be on parts of two old extant drill pads. This area is part of the Querecho Plains. The location has a slight southwesterly slope of less than 1% from an elevation of 3650'.
- B. Soil: The topsoil at the well site is a light yellowish-brown fine of the Kermit soils and Dune land Series.
- C. Flora and Fauna: The vegetation cover is a sparse grass cover of three-awn, sand, mesa and spike dropseed, bluestem, grama and other miscellaneous native grasses along with plants of mesquite, yucca, shinnery oak brush, sage, sunflowers, broomweed, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in area.
- E. Residences and Other Structures: None in the immediate area, except oil production facilities.
- F. Land Use: Cattle grazing.

Read & Stevens, Inc. Hudson Federal, Well No. 5 Page 4

#### 11. OTHER INFORMATION;

cont.....

- G. Surface Ownership: The proposed well site and access road are on Federal surface.
- H. There is no visible evidence of archaeological, historical or cultural sites on the 400' X 400' area. An archaeological survey is being conducted by Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, and their report will be submitted to the appropriate government agencies.

### 12. OPERATOR'S REPRESENTATIVE:

A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Carl Little
Read & Stevens, Inc.
4810 Alabama
Hobbs, NM 88240
Office Phone: (505) 622-3770
Home Phone: (505) 392-8777

#### 13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Read & Stevens, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

October 10, 1995

George R. Smith

Agent for: Read & Stevens, Inc.



DRILLING CO., INC. - DIL WELL DRILLING CONTRACTORS

P. O. BOX 1498 ROSWELL, NEW MEXICO 88202-1498 505/523-5070 505/746-2719 ROSWELL, NM ARTESIA, NM

# RIG # I

# BLOWOUT PREVENTOR ARRANGEMENT

II" SHAFFER TYPE LWS, 5000 psi WP
II" GK HYDRIL, 5000 psi WP
80 GALLON, 4 STATION PAYNE ACCUMULATOR
3000 psi WP CHOKE MANIFOLD

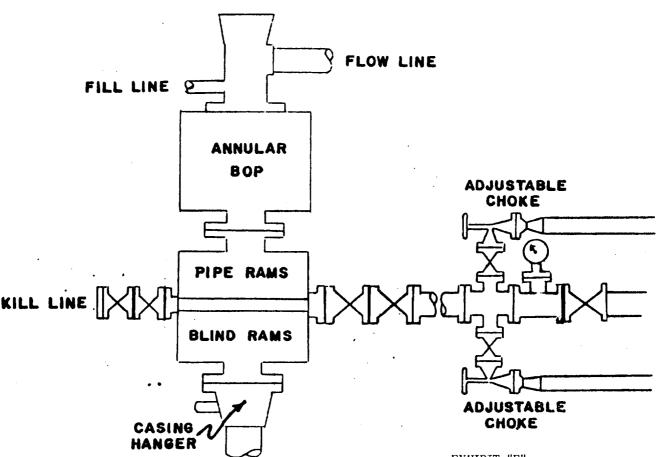


EXHIBIT "E"
READ & STEVENS, INC.
Hudson Federal, Well No. 5
BOP Specifications

3370/05