

UNITED STATES NEW MEXICO
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1A. TYPE OF WORK

DRILL ☒

DEEPEN ☒

B. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER ☐

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Read & Stevens, Inc.

505/622-3770

3. ADDRESS AND TELEPHONE NO.

P. O. Box 1518

Roswell, NM 88202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1650' FSL & 1980' FEL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

33 miles southwest of Hobbs, NM

10. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

990'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

1322.4'

19. PROPOSED DEPTH

14,000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3651' GL

22. APPROX. DATE WORK WILL START*

August 2, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

Secretary's Review

| SIZE OF HOLE | GRADE SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------------|-----------------|---------------|-----------------------------|
| 17 1/2" | 13 3/8" J-55 | 54.5# | 1600' | Circ 1000 sx lite + 200 "C" |
| 11" | 8 5/8" S-80 | 32.0# | 5000' | Circ 1100 sx* |
| 7 7/8" | 5 1/2" J-55 | 17 & 20# | 14,000' | 500 sx "H" W/50/50 POZ |

Mud Program:

| | Mud Wt. | Vis. | W/L Control |
|------------------------------------|---------------|---------|---------------------|
| 0' - 1,600': Fresh water Gel/lime: | 8.7- 9.0 ppg | 34 - 36 | No W/L control. |
| 1,600' - 5,000': Brine water mud: | 10.0-10.3 ppg | 28 - 29 | No W/L control. |
| 5,000' - 10,900': Cut Brine: | 8.7- 9.2 ppg | 28 - 29 | No W/L control. |
| 10,900' - 12,000': Brine Water: | 9.8-10.2 ppg | 28 - 34 | No W/L control. |
| 12,000' - TD : Brine water mud: | 10.0-10.6 ppg | 32 - 50 | W/L control 3-10cc. |

BOP Program:

Capitan Controlled Water Basin

An 11" 5000 psi wp Shaffer Type "LWS" BOP will be installed on the 13 3/8" casing. Casing and BOP will be tested before drilling out with 11" and will be tested daily.

* 8 5/8": Cement with DV tool in two stages starting at 3800':

1st stage: Lead 200 sx lite, tail in w/200 sx "C".

2nd stage: Lead 500 sx lite cement, tail w/200 sx neat. Cement to surface.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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.

SIGNED Dee-Ann Smith TITLE Agent for: Read & Stevens, Inc. DATE June 15, 1993

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL 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:

APPROVED BY B/ Kathy Lator TITLE Acty State Director DATE 7-20-93

*See Instructions On Reverse Side

WELL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

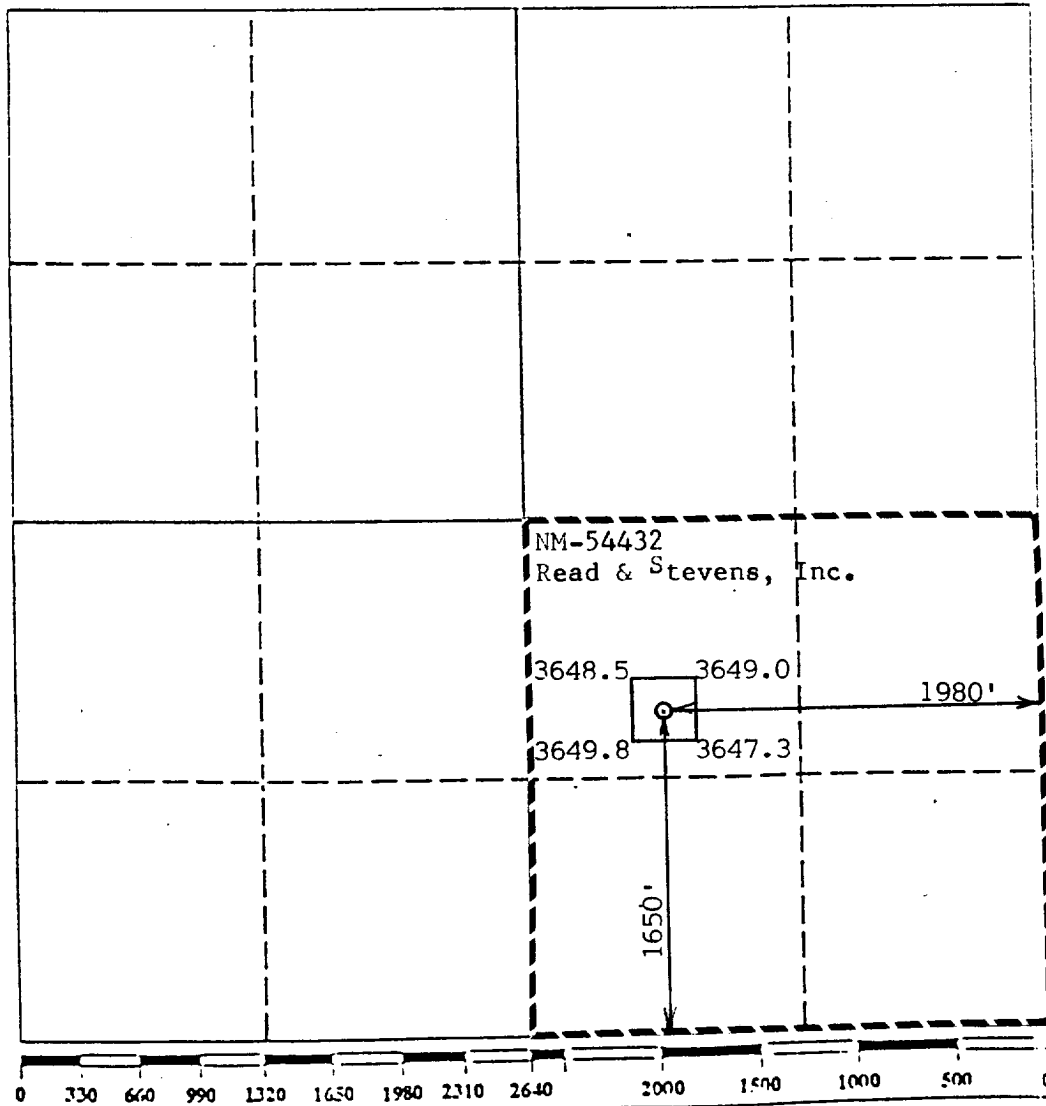
000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

| | | | | | |
|--|--------------------------------------|-------------------------------|------------------------------|--|----------------------|
| Operator Read & Stevens, Inc | | | Lease Mark Federal | | Well No. 7 |
| Ind Letter J | Section 3 | Township 20 South | Range 34 East | County Lea | |
| Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> 1650 feet from the South line and 1980 feet from the East line </div> | | | | | |
| Ground level Elev. 3651 | Producing Formation Morrow | Pool North Lea Penn | | Dedicated Acreage: 160 Acres | |

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, unitization, force-pooling, etc?
☐ Yes ☐ No If answer is "yes" type of consolidation _____
 If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary). _____
 No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

| |
|--|
| Signature <i>George R. Smith</i> |
| Printed Name George R. Smith |
| Position Agent for: |
| Company Read & Stevens, Inc. |
| Date June 15, 1993 |

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

| |
|---|
| Date Surveyed May 24, 1993 |
| Signature & Seal of Professional Surveyor <div style="text-align: center;"> P.R. PATTON 8112 </div> |
| Certificate No. 8112 |

APPLICATION FOR DRILLING

READ & STEVENS, INC.
Mark Federal, Well No. 7
1650' FSL & 1980' FEL, Sec. 3-T20S-R34E
Lea County, New Mexico
Lease No.: NM-54432
(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 | 1570' | Bone Spring | 8270' |
| Top of Salt | 1790' | Wolfcamp | 11,020' |
| Base of Salt | 3170' | Strawn | 12,130' |
| Yates | 3415' | Morrow | 13,010' |
| Queen | 3690' | Mississippi | 13,620' |
| Delaware | 5620 | T.D. | 14,000' |
| Bone Spring | 8270 | | |

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 5620' and Bone Spring below 8270'.

Gas: Possible in the Morrow Clastic below 13,010'.

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 = 5600 psi (evac. hole) with temperature of 178°.
10. H₂S: None expected. None in previously drilled wells.
11. Anticipated starting date: August 2, 1993.
Anticipated completion of drilling operations: Approx. 8 weeks.

RIG #2

BLOWOUT PREVENTOR ARRANGEMENT

11" SHAFFER TYPE LWS, 5000 psi WP

11" CAMERON SPHERICAL, 5000 psi WP

120 GALLON, 5 STATION KOOMEY ACCUMULATOR

5000 psi WP CHOKE MANIFOLD

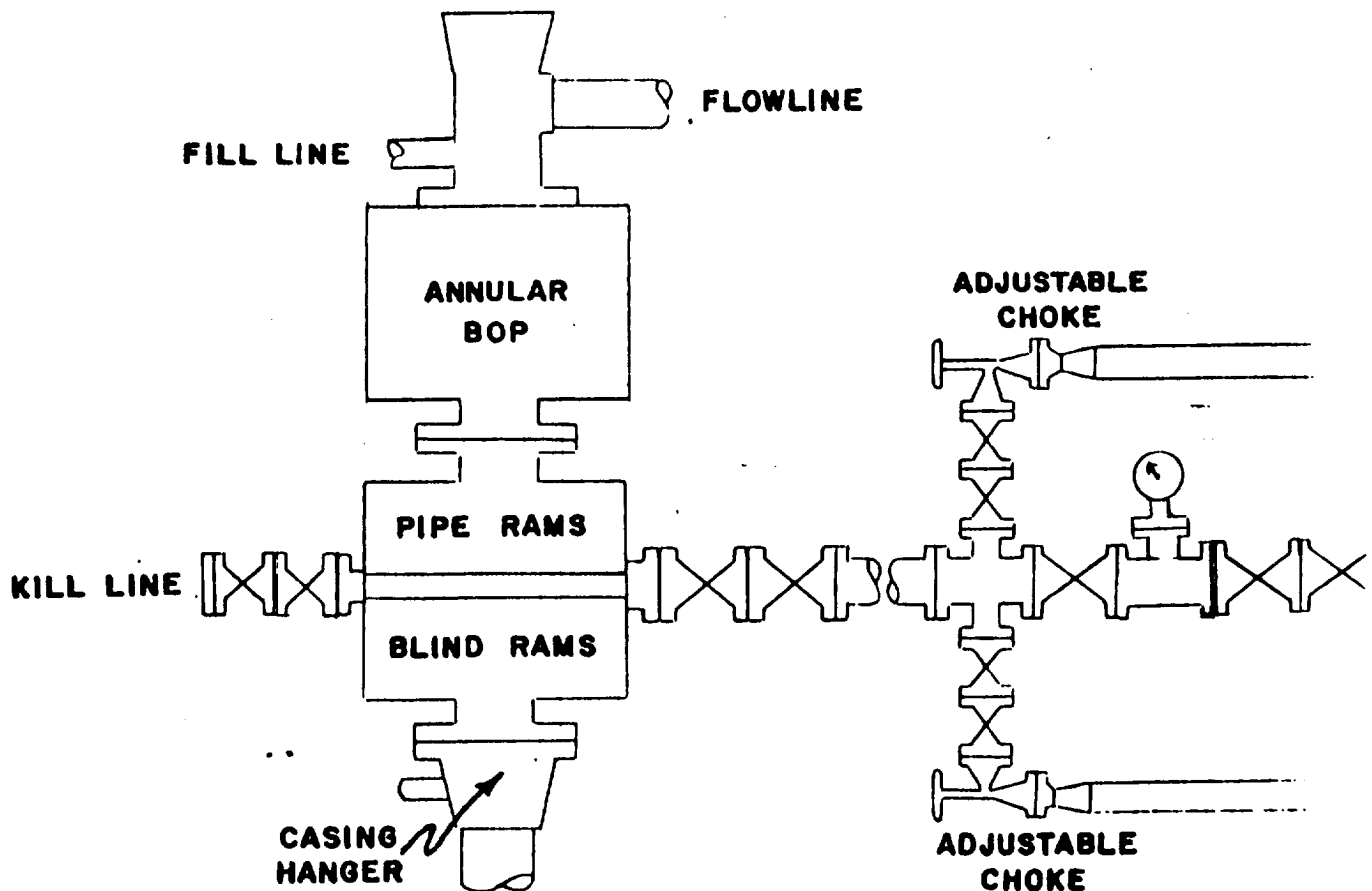


EXHIBIT "E"
READ & STEVENS, INC.
Mark Federal, Well No. 7
BOP Specifications