

UNITED STATES  
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 & 1650' FWL

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

40

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

1190'

19. PROPOSED DEPTH

6600'

20. ROTARY OR CABLE TOOLS

Rotary

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

3645' GL

22. APPROX. DATE WORK WILL START\*

May 10, 1993

23.

PROPOSED CASING AND CEMENTING PROGRAM

| 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'         | CIRCULATE 1000 sx lite + 200 "C"*    |
| 11"          | 8 5/8" S-80           | 32.0#           | 5000'         | CIRCULATE 500 sx*                    |
| 7 7/8"       | 5 1/2" J-55           | 15.5#           | 6600'         | tieback w/350 sx "H" see stipulation |

Mud Program:

0' - 1600': Fresh water native mud:

Mud Wt.

8.4 ppg

Vis.

32

W/L Control

No W/L control

1600' - 5000': Brine mud:

10 ppg

28-32

No W/L control

5000' - 6900': Cut brine mud w/starch:

8.8 ppg

32-40

W/L control 15cc

1600' - 6900': Gel & lost circulation material will be added as needed.

BOP Program:

A 10" 3000 psi wp Shaffer Type E BOP will installed on the 13 3/8" casing. Casing and BOP will be tested before drilling out with 11". BOP will used as a 2000 psi wp system and will be tested daily.

\* 13 3/8": Circulate 1000 sx lite, tail in with 200 sx "C" w/2% CaCl

\* 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.

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 deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*George R. Smith*

Agent for:

TITLE Read & Stevens, Inc.

DATE Mar 23, 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

*/s/ Kathy Eaton*

TITLE

*Acty State Director*

DATE

*7-27-93*

\*See Instructions On Reverse Side

# **JIL 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**

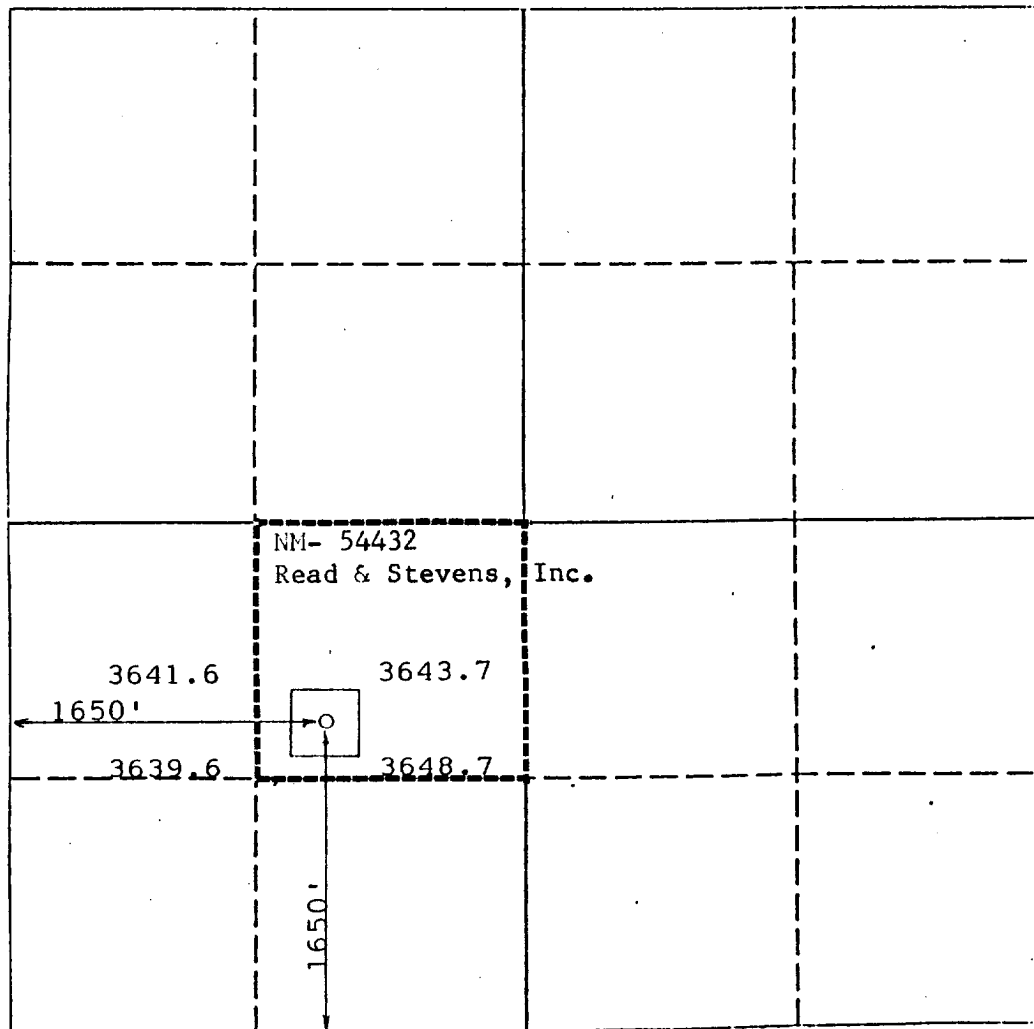
000 Rio Brazos Rd., Aztec, NM 87410

## **WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

|  |  |                             |                                     |                      |                                       |
|--|--|-----------------------------|-------------------------------------|----------------------|---------------------------------------|
| Operator<br><b>Read &amp; Stevens, Inc.</b>  |  |                             | Lease<br><b>Mark Federal</b>        |                      | Well No.<br><b>5</b>                  |
| Unit Letter<br><b>K</b>  | Section<br><b>3</b>                    | Township<br><b>20 South</b> | Range<br><b>34 East</b>             | County<br><b>Lea</b> |                                       |
| Actual Footage Location of Well:<br><b>1650</b> feet from the <b>South</b> line and <b>1650</b> feet from the <b>West</b> line |  |                             |                                     |                      |                                       |
| Ground level Elev.<br><b>3645</b>  | Producing Formation<br><b>Delaware</b> |                             | Pool<br><b>Quail Ridge Delaware</b> |                      | Dedicated Acreage:<br><b>40</b> 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 communitization, 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 communitization, 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.

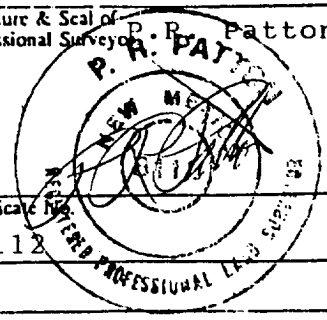
Signature \_\_\_\_\_  
Printed Name **George R. Smith**  
Position **Agent**  
Company **Read & Stevens, Inc.**  
Date **March 23, 1993**

### **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 **March 3, 1993**  
Signature & Seal of Professional Surveyor **P. R. Patton**

Certificate No. **8112**



## APPLICATION FOR DRILLING

READ & STEVENS, INC.  
Mark Federal, Well No. 5  
1650' FSL & 1650' FWL, 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      | 1550' | Seven Rivers | 3850' |
| Top of Salt  | 1770' | Delaware     | 5620' |
| Base of Salt | 3150' | T.D.         | 6600' |
| Yates        | 3395' |              |       |
| Queen        | 3670' |              |       |
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 5600'

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 = 3000 psi with temperature of 110°.
10. H<sub>2</sub>S: None expected. None in previously drilled wells.
11. Anticipated starting date: May 10, 1993.  
Anticipated completion of drilling operations: Approx. 3 weeks.

**RIG #301**

**BLOWOUT PREVENTOR ARRANGEMENT**

**10" SHAFFER TYPE "E", 3000 psi WP**

**80 GALLON, 4 STATION KOOMEY ACCUMULATOR**

**3000 psi WP CHOKE MANIFOLD**

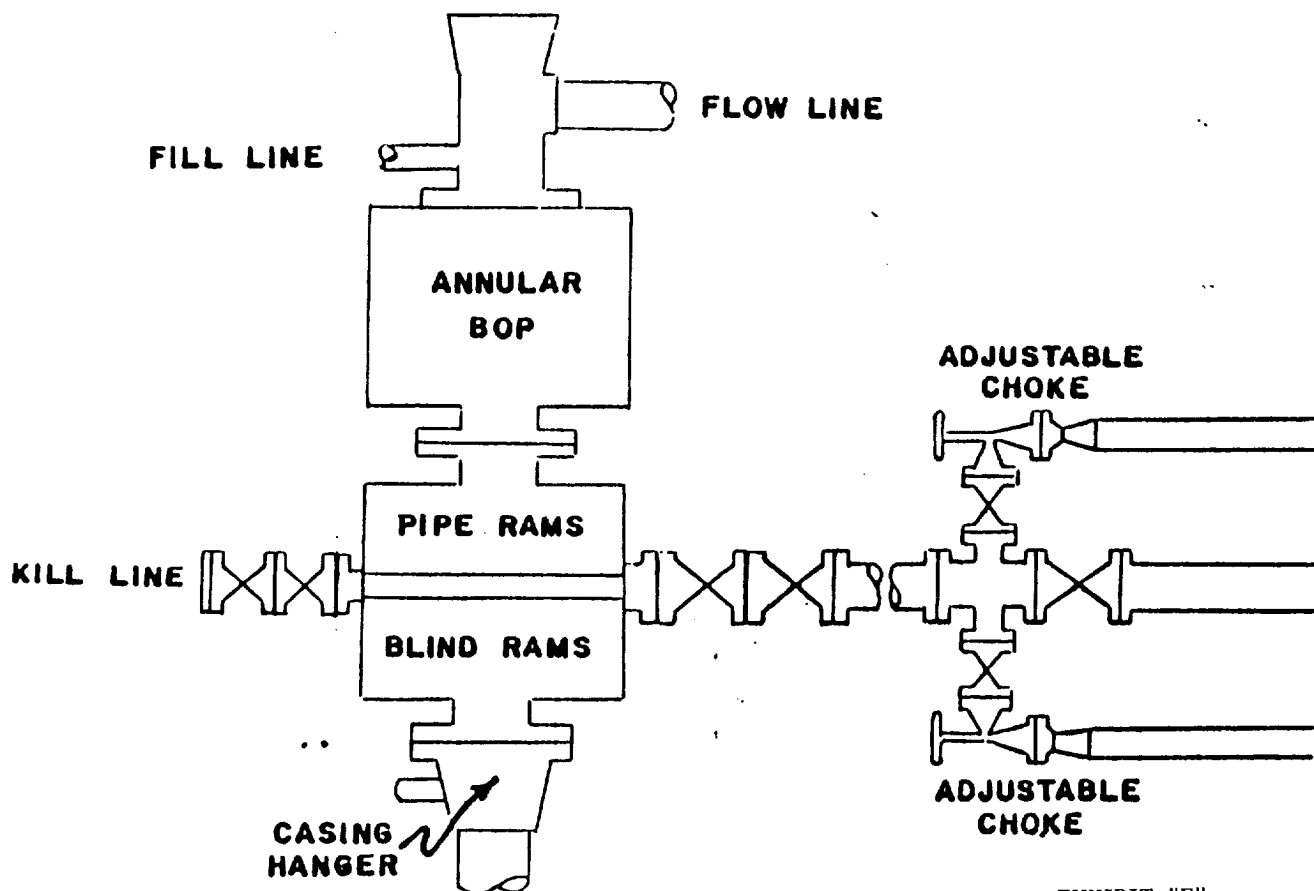


EXHIBIT "E"  
READ & STEVENS, INC.  
Mark Federal, Well No. 5  
BOP Specifications

100-44232-5  
JAN 19 1963  
FBI  
TSC-100-44232-5