

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FEB 22 APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

CARL AREA  
1. TYPE OF WORK  
DRILL ☒ DEEPEN ☐ PLUG BACK ☐  
2. TYPE OF WELL  
OIL WELL ☒ GAS WELL ☐ OTHER ☐  
SINGLE ZONE ☐ MULTIPLE ZONE ☐

5. LEASE DESIGNATION AND SERIAL NO.  
NM-54432  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT AGREEMENT NAME  
8. FARM OR LEASE NAME  
Mark Federal  
9. WELL NO.  
2  
10. FIELD AND POOL, OR WILDCAT  
Wildcat Quail Ridge-Dele.  
11. SEC., T., R., W., OR BLK.  
AND SURVEY OR AREA  
Sec 3-T20S-R34E  
12. COUNTY OR PARISH  
Lea  
13. STATE  
New Mexico

2. NAME OF OPERATOR  
Read & Stevens, Inc.  
3a. Area Code & Phone No.  
505/622-3770

3. ADDRESS OF OPERATOR  
P. O. Box 1518 Roswell, NM 88202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface 460' 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

16. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drilg. unit line, if any) 460'

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. 689'

19. PROPOSED DEPTH  
6600'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3639.6' GL Secretary's Potash

22. APPROX. DATE WORK WILL START\*  
February 18, 1991

PROPOSED CASING AND CEMENTING PROGRAM

Capitan Controlled Water Basin

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	11 3/4"	47#	J-55	STC	1600'	Circ 950 sx C
* 7 7/8"	5 1/2"	15.5#	J-55	STC	6600' *	Tieback 200sx H + 1000sx HL

Mud Program:

0' - 1600': Fresh water mud: mud wt. 10 ppg, Vis. 28-32, No W/L control.  
350' - 2150': Brine mud: mud wt. 10 ppg, Vis. 28-32, No W/L control.  
2100' - 4200': Brine mud: mud wt. 10 ppg, Vis. 28-32, W/L 15cc.

BOP Program:

A 10" 3000 psi wp Shaffer Type "E" BOP will installed on the 11 3/4" casing. Casing and BOP will be tested before drilling out with 7 7/8". BOP will be used as a 2000 psi wp system and will be tested daily.

\* If drilling conditions dictate: 4800' of 8 5/8" (24 & 32#) casing will be run with Two Stage DV tool cementing: Stage 1-200 sx HL + 200 sx "C"  
Stage 2-625 sx HL + 200 sx "C" to tie back 200'.  
The 5 1/2" will be cemented to tie back to the 8 5/8".

\* TO BE VERIFIED BY A TEMPERATURE SURVEY LOG AND WITNESSED BY BLM REP.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 George R. Smith Agent for: Read & Stevens, Inc. Feb. 1, 1991  
TITLE Read & Stevens, Inc. DATE Feb. 1, 1991  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_ DATE 3-4-91

GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS

\*See Instructions On Reverse Side

## OIL 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  
1000 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. 2
Unit Letter N	Section 3	Township 20 South	Range 34 East	County Lea	
Actual Footage Location of Well: 460 feet from the South line and 1650 feet from the West line					
Ground level Elev. 3639.6'		Producing Formation Delaware		Pool Undesignated Quail Ridge	Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

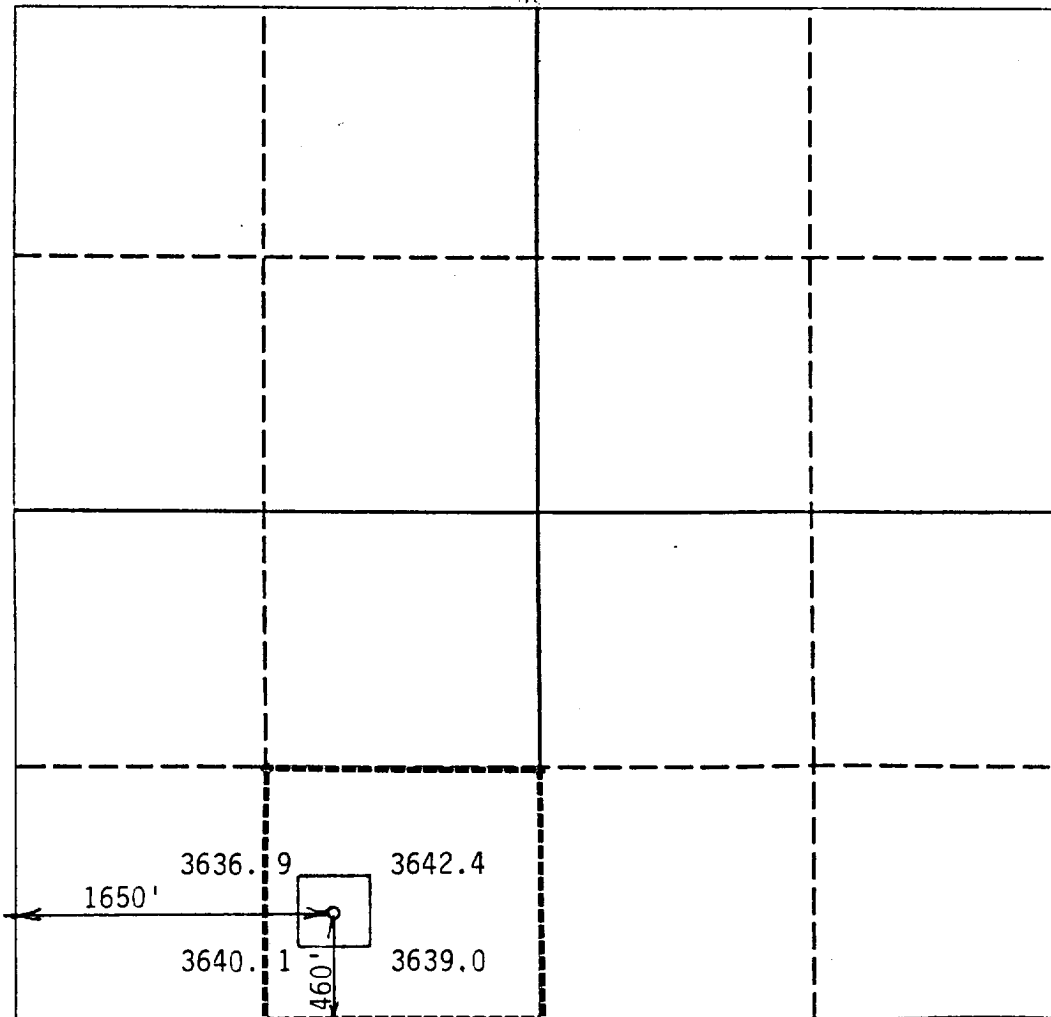
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. 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

*George R. Smith*

Printed Name

George R. Smith

Position

Agent for:

Company

Read & Stevens, Inc.

Date

October 10, 1990

#### 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

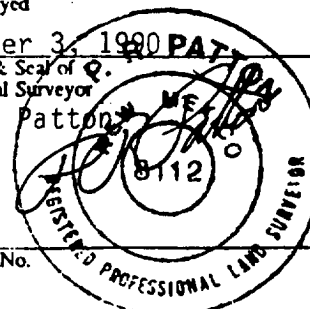
October 3, 1990

Signature & Seal of  
Professional Surveyor

P. R. Patton

Certificate No.

8112



# APPLICATION FOR DRILLING

READ & STEVENS, INC.  
Mark Federal, Well No. 2  
460' FSL & 1650' FWL, Sec. 3-T20S-R34E  
Lea County, New Mexico  
Lease No.: NM-54432  
(Exploratory 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	5600'
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 surface casing:

G/R, CNL-FDC, DLL, MLL

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.
10. Anticipated starting date: February 18, 1991.  
Anticipated completion of drilling operations: Approx. 3 weeks.



KEN REYNOLDS—PRESIDENT  
ARNIE NEWKIRK—VICE-PRESIDENT

DRILLING CO., INC. — OIL WELL DRILLING CONTRACTORS

P. O. BOX 1498 ROSWELL, NEW MEXICO 88202-1498  
805/623-5070 805/746-2719  
ROSWELL, NM ARTESIA, NM

RIG #3

## BLOWOUT PREVENTOR ARRANGEMENT

2M SYSTEM

10" SHAFFER TYPE "E", 3000 psi WP

80 GALLON, 4 STATION KOOMEY ACCUMULATOR

3000 psi WP CHOKE MANIFOLD

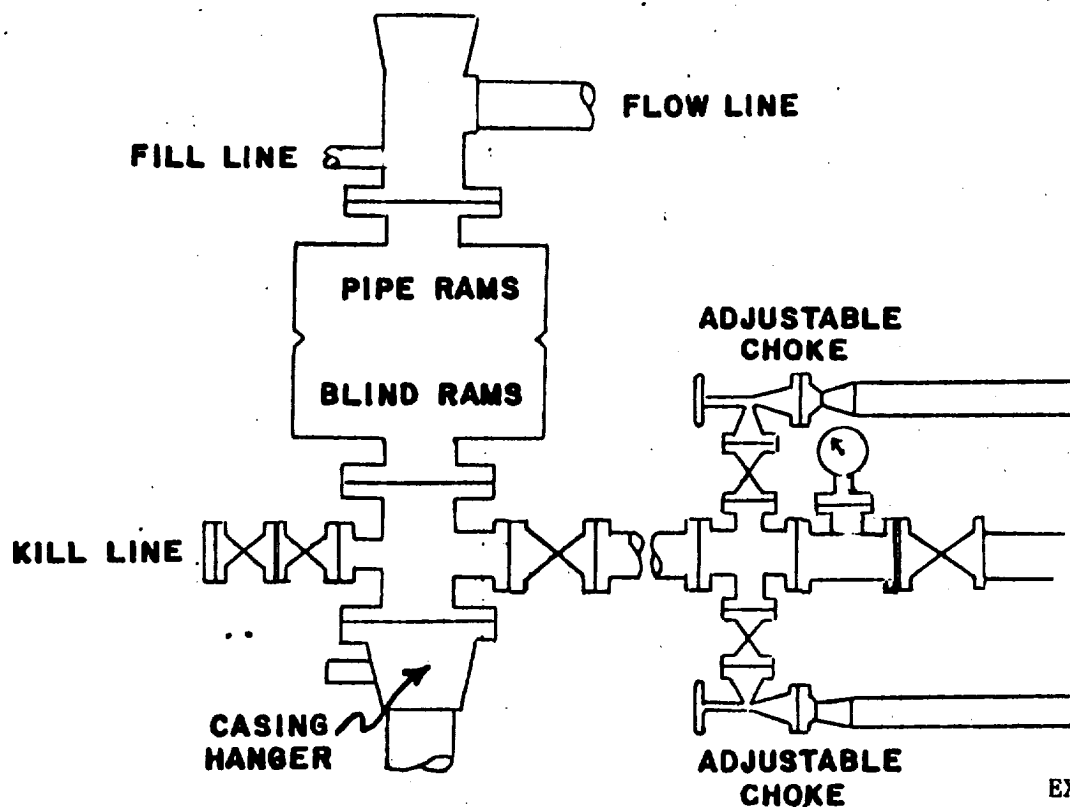


EXHIBIT "E"  
READ & STEVENS, INC.  
Mark Federal, Well No. 2  
BOP Specifications

16-41-9-2074

RECEIVED

MAR 5 1991

OCR  
HOBBS