

OPER. CONNO. NO. 18917PROPERTY NO. 16990POOL CODE 37584EFFECT. DATE 3/19/97UNITED
DEPARTMENT OF

BUREAU OF LAND

APPLICATION FOR PERMITS NO. 3D-025-33884TE*
nFORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

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

2310' FNL & 990' FWL

At proposed prod. zone

Same

Unit E

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

30 miles SW of Hobbs, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. 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.

990'

19. PROPOSED DEPTH

8,400'

20. ROTARY OR CABLE TOOLS

Rotary

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

3647' GL

22. APPROX. DATE WORK WILL START*

March 15, 1997

23. SECRETARY'S POTASH, PROPOSED CASING AND CEMENT PROGRAM

CAPTAIN

WITNESS

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CASING
17 1/2"	13 3/8" J-55	54.5#	1600'	Circ 1000 sx 1200 + 200 "C"
11"	8 5/8" S-80	32.0#	5000'	Circ 1100 sx **See Note
7 7/8"	5 1/2" N-80	17.0#	8400'	Tieback w/500 or 975 sx*

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:

10.0 ppg

28-32

No W/L control

5000' - 8400': Fresh water mud w/starch:

8.8 ppg

32-40

W/L control 15 cc

BOP Program:

A 11" 5000 psi wp Shaffer Type LWS BOP, with a 5000 psi wp 11" GK Hydril, will be installed on the 13 3/8" casing. Casing and BOP will be tested before drilling out with 11". BOP will be tested daily as 3000 psi wp system.

* NOTE: If severe lost circulation is not encountered, hole will be reduced at 5000' to 7 7/8" and drill ahead WITHOUT setting the 8 5/8" casing.

** 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 "C". 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.

24.

Agent for:

SIGNED

Georges Smith

TITLE

Read & Stevens, Inc.

DATE

Jan. 31, 1997

(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. P. A. K. Splendoria

TITLE

Acting STATE Director

DATE

5.7.97

*See Instructions On Reverse Side

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 3D-025-33884	Pool Code 37584	Pool Name NE Lea Delaware
Property Code 16990	Property Name QUAIL FEDERAL	Well Number 4
GRID No. 18917	Operator Name READ & STEVENS, INC.	Elevation 3647

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	3	20 S	34 E		2310	NORTH	990	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 4.0	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>LOT 4 40.95 AC. LOT 3 40.85 AC. LOT 2 40.75 AC. LOT 1 40.65 AC.</p> <p>NM-84902 Read & Stevens, Inc.</p> <p>2310'</p> <p>990'</p> <p>3647.3' 3649.3'</p> <p>3648.7' 3652.7'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>George R. Smith</i> Signature George R. Smith, agent for: Printed Name Read & Stevens, Inc. Title January 31, 1997 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>JANUARY 20, 1997</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i> NEW MEXICO W.O. Num 97-1140104 Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239 GARY G. EIDSON, 12641</p>
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APPLICATION FOR DRILLING
READ & STEVENS, INC.
Quail Federal, Well No. 4
2310' FNL & 990' FWL, Sec. 3-T20S-R34E
Lea County, New Mexico
Lease No.: NM-84902
(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	1,580'	7 Rivers	8,250'
Top of Salt	1,770'	Delaware	5,200'
Base of Salt	3,120'	Bone Spring	8,200'
Yates	3,200'	T.D.	8,400'

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. H₂S: None expected. None in previously drilled wells, but a Drilling Operations Plan, Exhibit "F", is being submitted to cover this contingency.
11. Anticipated starting date: March 15, 1996.
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 88203-1498
808/623-8070 808/746-2719
ROSWELL, NM ARTESIA, NM

RIG #1

BLOWOUT PREVENTOR ARRANGEMENT

11" SHAFFER TYPE LWS, 5000 psi WP

11" GK HYDRIL, 5000 psi WP

80 GALLON, 4 STATION PAYNE ACCUMULATOR

3000 psi WP CHOKE MANIFOLD

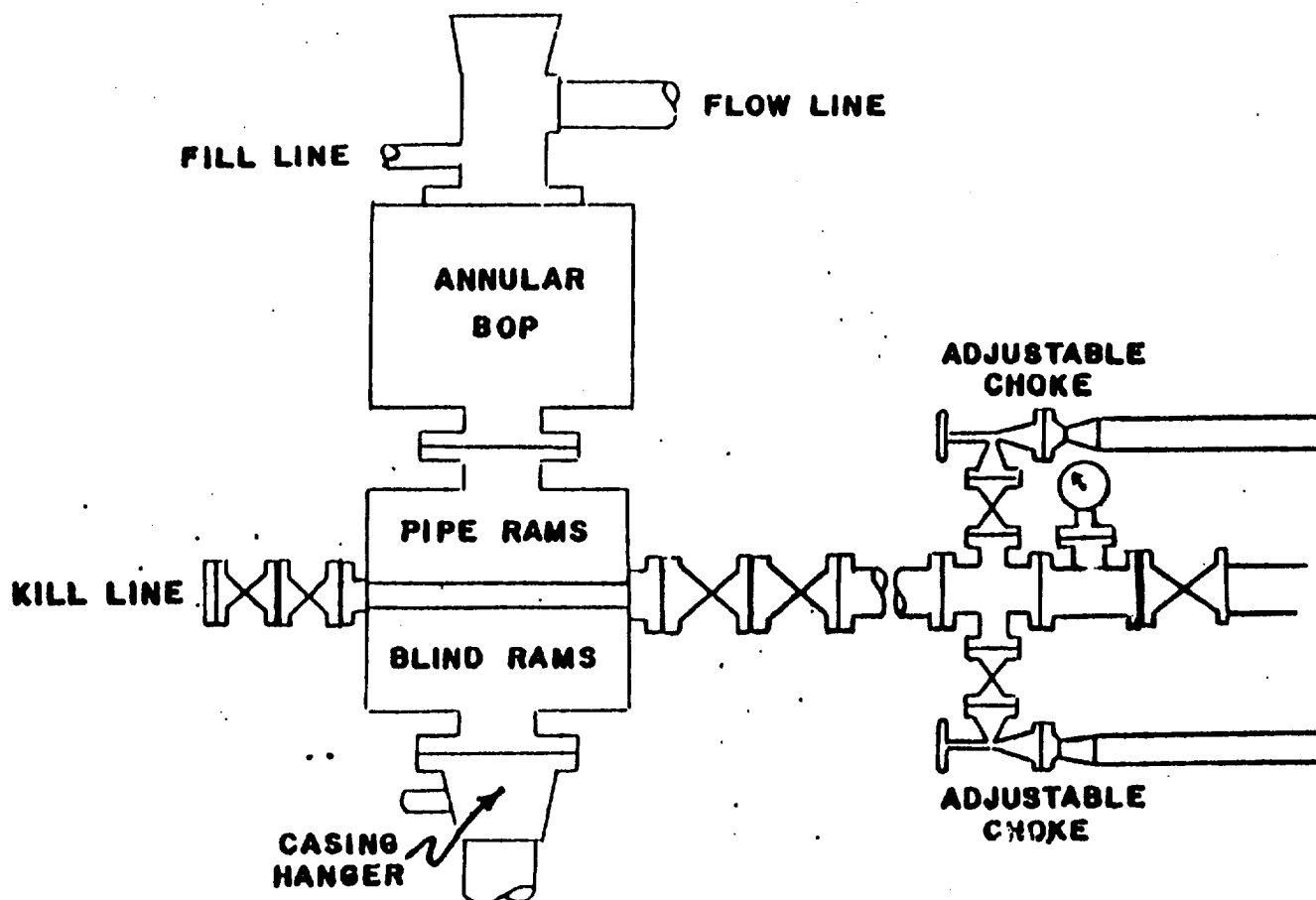


EXHIBIT "E"
READ & STEVENS, INC.
Quail Federal, Well No. 4
BOP Specifications