

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

30-025-26859

5A. Indicate Type of Lease
STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
5. State Oil & Gas Lease No.
OG-2001

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		7. Unit Agreement Name	
b. Type of Well		8. Farm or Lease Name	
DRILL <input checked="" type="checkbox"/>	DEEPEN <input type="checkbox"/>	Quail State	
OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	9. Well No.	
OTHER <input type="checkbox"/>		6	
2. Name of Operator		10. Field and Pool, or Wildcat	
Read & Stevens, Inc.		Quail Queen	
3. Address of Operator		12. County	
P. O. Box 1518, Roswell, New Mexico 88201		Lea	
4. Location of Well		13. Proposed Depth	
UNIT LETTER <u>N</u> LOCATED <u>660</u> FEET FROM THE <u>South</u> LINE		6200'	
AND <u>1980</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>11</u> TWP. <u>19-S</u> RGE. <u>34-E</u> NMPM		19A. Formation	
		Queen	
		20. Rotary or C.T.	
		Rotary	
21. Elevations (Show whether L.P., R.L., etc.)		21B. Drilling Contractor	
3975.3 GR - 3987.3 RKB		Kenai Drilling of Texas	
21A. Kind & Station Plug, Bond		22. Approx. Date Work will start	
Statewide		June 15, 1980	

## PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	24#	1900'	575 sx.	Circulated
7 7/8"	4 1/2"	10.5#	6200'	785 sx.	3200'

See attached well prognosis for drilling program and blowout preventer data.

Casinghead gas acreage is not dedicated.

APPROVAL VALID  
FOR 90 DAYS UNLESS  
DRILLING COMMENCED,

EXPIRES 9/6/80

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed Shari Hamilton Title Authorized Agent Date 6-4-80

(This space for State Use)

SUPERVISOR DISTRICT 1

APPROVED BY [Signature] TITLE [Signature] DATE JUN 6 1980

CONDITIONS OF APPROVAL, IF ANY:

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

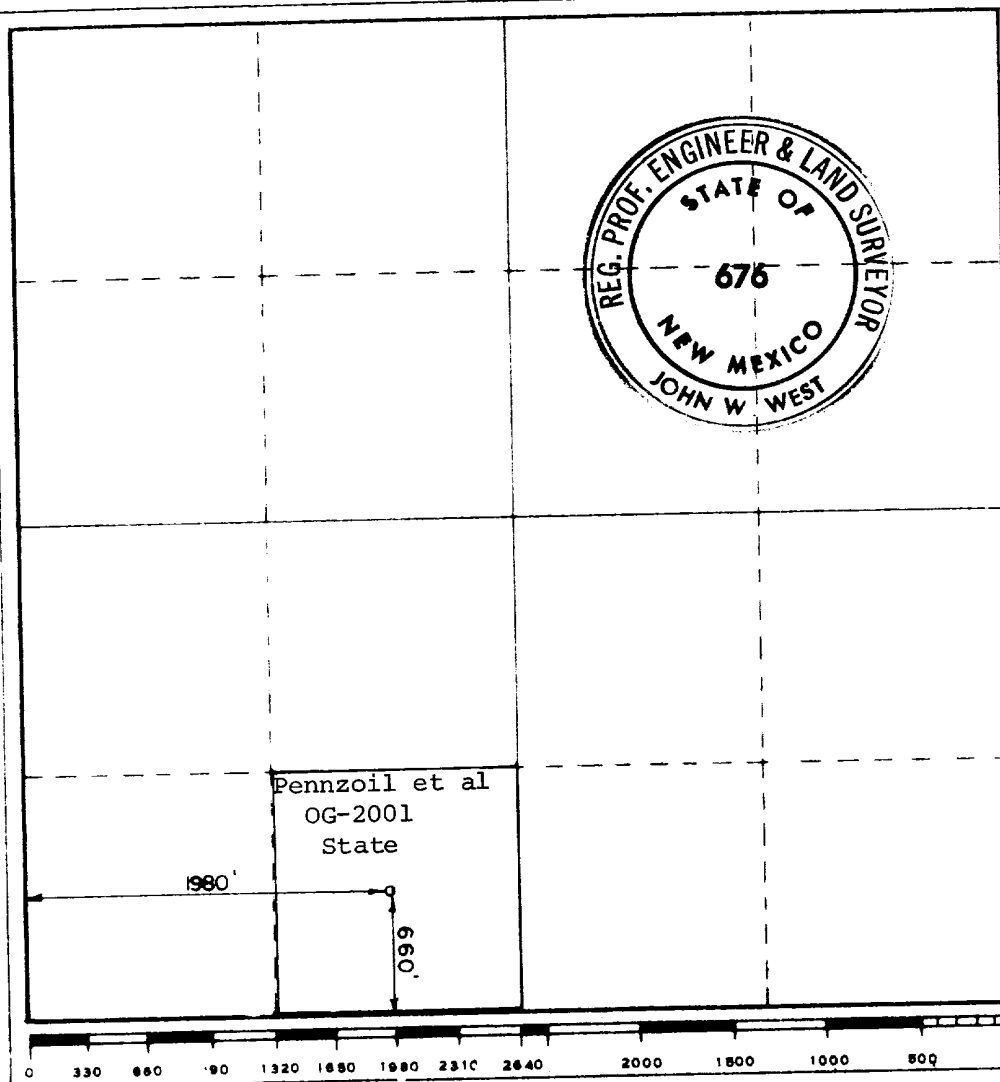
Operator <b>Read &amp; Stevens, Inc.</b>			Lease <b>Quail State</b>		Well No. <b>6</b>
Section <b>N</b>	Section <b>11</b>	Township <b>19 South</b>	Range <b>34 East</b>	County <b>Lea</b>	
Acreage Dedication North and West <b>660</b> feet from the <b>South</b> line and <b>1980</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3975.3</b>	Producing Formation <b>Queen</b>		Pool <b>Quail Queen</b>		Dedicated Acreage: <b>40</b> 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 interests 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 interests, has been approved by the Commission.



**CERTIFICATION**

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

*Shari Hamilton*

Name  
**Shari Hamilton**

Position  
**Authorized Agent**

Company  
**Read & Stevens, Inc.**

Date  
**6-4-80**

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

**6-3-1980**

Registered Professional Engineer  
and Land Surveyor

*John W. West*

Certificate No.	<b>JOHN W. WEST</b>	<b>676</b>
	<b>PATRICK A. ROMERO</b>	<b>6663</b>
	<b>Ronald J. Eldon</b>	<b>3239</b>

## WELL PROGNOSIS

OPERATOR: READ & STEVENS, INC.  
WELL: #6 Quail State  
FIELD & DEPTH: Quail Queen - 6200'  
LOCATION: 660' FSL & 1980' FWL Sec. 11, T-19-S, R-34-E, Lea County, N. M.  
CONTRACTOR: Kenai Drilling Company of Texas, Rig #19  
ELEVATION: 3975.3 GR - 3987.3 RKB

---

### ESTIMATED FORMATION TOPS

T/Anhydrite	1857'	(+2130)
T/Salt	1982'	(+2005)
B/Salt	3326'	(+ 661)
T/Yates	3586'	(+ 401)
T/Queen Sand	4762'	(- 775)
T/Penrose Sands	5040'	(-1053)
T/Grayburg	5431'	(-1444)
T/San Andres	5969'	(-1982)
T/Delaware	6219'	(-2232)

### CASING PROGRAM

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt. Per Foot</u>	<u>Setting Depth</u>	<u>Cement</u>
11"	8 5/8"	24#	1900'	575 sx. circ.
7 7/8"	4 1/2"	10.5#	6200'	785 sx.

### MUD PROGRAM

0' - 1,850' Spud mud with gel/lime slurry. Mud wt. 9.0#-9.5#, Vis. 32-34, WL no control.

1,850' - 4,600' Clear water and native mud. Mud wt. 10.0#-10.2#, Vis. 28-32, WL no control.

4,600' - 6,200' Salt gel mud system. Mud wt. 9.5#-10.2#, Vis. 36-38, WL 20.

### DRILLING AND CEMENTING PROGRAM

1. Drill 11" hole to 1,900' and set 8 5/8", 24#, S.T. & C. casing at 1,900' cemented with 575 sx. Class C Cement with 2% CaCl<sub>2</sub> and 8# salt per sx. Cement will be circulated.
2. Drill 7 7/8" hole to 6,200' and, if production is indicated, set 4 1/2" casing to total depth. Cement from total depth to 3,200' with 785 sx. Class C pozmix with 1/4# floseal and 6# salt per sx. with .5 of 1% CFR-2.

### EVALUATION PROGRAM

Start salt gel mud system at 4,600' for increased sample quality. Drill to total depth and run logs. Take selected sidewall cores for additional formation evaluation.

### LOGGING PROGRAM

Run Simultaneous Gamma Ray-Caliper, Compensated Neutron Formation Density as porosity tool with Dual laterolog as Resistivity tool. Detail from 3,400' to total depth. Mud logging from 4,000' to total depth.

### BLOWOUT PREVENTER SYSTEM

Drilling rig will be equipped with a 10" Shaffer Type 48-E Double Hydraulic Series 900 blowout preventer with closing unit and accumulator, flanged kill line and valves, flanged 4" valves and lines with double 2" choke manifold, upper and lower Kelly Cocks and drill pipe dart valve (see attached plat).

### WELL SUPERVISION

Well site supervision will be maintained from surface to total depth. Samples will be caught, washed and sacked from below surface string to 1,900' to total depth at 10 foot intervals. Mechanically recorded drilling time will be maintained from surface to total depth. Blowout preventer stack and casing head will be independently pressure tested before drilling into the Queen formation. A daily check of the blowout preventer system will be made from 4,600' to total depth.



## MAJOR ITEMS of EQUIPMENT

Rig No. 19

Recommended Depth for Drilling 9,000' - 11,000'

### DRAWWORKS:

Emsco Model GA 500 w/Parkersburg 36" Hydromatic Brake, and  
2 - Model D-353 TA (400 HP) Caterpillar Engines

### MAST:

L. C. Moore 127' 480,000# Capacity w/11' Substructure

### MUD SYSTEM:

Emsco Model D-500 Pump (Forged Steel Fluid End)  
Emsco Model D-175 w/Caterpillar D-342 Engine Pump Unit  
Link Belt Vibrating 4 x 5 Shale Shaker  
3 - 5 x 8 x 30 Steel Mud Pits with guns and jets

### OVER-HEAD EQUIPMENT:

McKissick 4-36 200 Ton Traveling Block  
Ideco SS 250 - 250 Ton Capacity Swivel  
B. J. Model 4200 200 Ton Triplex Hook

### ROTARY EQUIPMENT:

Emsco Model JCS 20-1/2" 250 Ton Rotary Table

### WELL CONTROL EQUIPMENT:

Shaffer 10" Series 900 Type 48-E Double Hydraulic B.O.P.  
Closing Unit and Accumulator  
Flanged Kill Line and Valves  
Flanged 4" Valves and Lines with Double 2" Choke Manifold  
Upper and Lower Kelly Cocks  
Drill Pipe Dart Valve

### OPERATIONAL INSTRUMENTS:

Bell Automatic Driller, Martin Decker 3 Pen Recordergraph,  
Martin-Decker Torque Gauge, A-1 Sureshot 14"

### ELECTRICAL SYSTEM:

1 - Waukesha VRD 283 30 KW Electric Set  
1 - String of Rig-O-Lite Vapor Proof Lights

### WATER STORAGE:

500 bbl. Horizontal Water Tank

### DRILLING STRING:

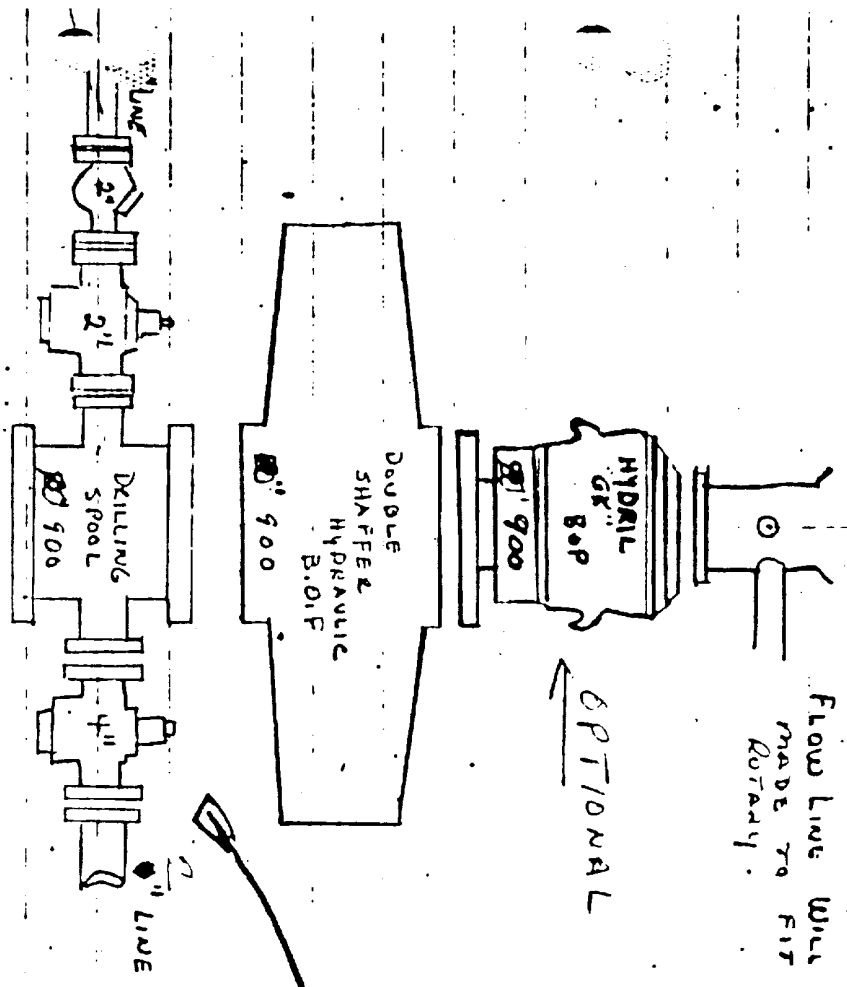
4" O. D. Grade E Drill Pipe (11,000')  
Size and number required of Drill Collars and Subs

### MISCELLANEOUS EQUIPMENT:

30' Trailer House with beds, kitchen and bath  
Other equipment available from yard as job requires



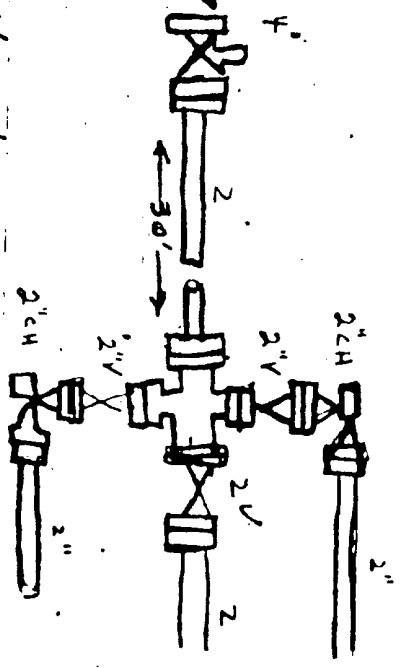
ie Rotary Table



Flow line will have to be made to fit under Rotary.

OPTIONAL

KILL LINE MANIFOLD



2" 1500  
4" 900

100-10

11-1-1971

173