

3160(067)
NM-56264

JAN 13 1993

CERTIFIED--RETURN RECEIPT REQUESTED
P 319 323 856

Read & Stevens, Inc.
Attention: George R. Smith
P.O. Box 1518
Roswell, NM 88202

RE: North Lea Federal Well No. 8
NM-56264
1650' FNL & 2310' FWL, Sec. 10, T20S, R34E
Lea County, New Mexico

Dear Mr. Smith:

On September 15, 1992, Read & Stevens, Inc. filed an Application for Permit to Drill (APD) at the above referenced location. I am pleased to approve your APD at the present location. Your copy of the APD, with attached stipulations, is enclosed.

Through our analysis of the APD, we have determined that the well site is located a sufficient distance from the ore zones that potash resources should not be impacted.

If you need any additional information, please contact Tony Herrell in the Carlsbad Resource Area at (505) 887-6544.

Sincerely,

15/ Kathy Eaton

for Larry L. Woodard
State Director

2 Enclosures

bcc:

NM (910, L. Woodard)
NM (920, R. Smith)
NM (060, L. Cone)
NM (060, A. Lopez) ✓
NM (067, T. Herrell)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OFFICE OF THE DIRECTOR
OF COPIES REQUIRED
(Other instructions on
reverse side)

BLM Roswell District
Modified Form No.
NMD60-3160-2

30-025-31886

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-56264
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Read & Stevens, Inc.		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Box 1518 Roswell, NM 88202		8. FARM OR LEASE NAME North Lea Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1650' FNL & 2310' FWL At proposed prod. zone Same F		9. WELL NO. 8
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 33 miles southwest of Hobbs, NM		10. FIELD AND POOL, OR WILDCAT Quail Ridge Delaware
10. 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 480	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 10-T20S-R34E
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 402'	19. PROPOSED DEPTH 6600'	12. COUNTY OR PARISH 13. STATE Lea New Mexico
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3641' GL		17. NO. OF ACRES ASSIGNED TO THIS WELL 40
22. APPROX. DATE WORK WILL START* January 15, 1992		20. ROTARY OR CABLE TOOLS Rotary

PROPOSED CASING AND CEMENTING PROGRAM						Potash	
HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT	
17 1/2"	13 3/8"	54.5#	J-55	STC	1600'	circ 1200 sx*	
11"	8 5/8"	32.0#	S-80	LTC	5000'	Circ 1100 sx*	
7 7/8"	5 1/2"	15.5#	J-55	STC tie back 2000' into 8 5/8" cas.	6600'	tie w/300 sx "H"	

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' - 6600':	Cut brine mud w/starch:	8.8 ppg	32-40	W/L control 15cc

1600' - 6600': Gel & lost circulation material will be added as needed.

BOP Program:

A 10" 3000 psi wp Shaffer Series 900 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 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. Agent for:
Read & Stevens, Inc. Sept. 11, 1992
SIGNED: [Signature] TITLE: DATE:

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

ATTACHED

*See Instructions On Reverse Side

GIL 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 North Lea Federal		Well No. 8
Unit Letter F	Section 10	Township 20 South	Range 34 East	County Lea	
Actual Footage Location of Well: 1650 feet from the North line and 2310 feet from the West line					
Ground level Elev. 3641	Producing Formation Delaware		Pool Quail Ridge Delaware	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 communization, unitization, force-pooling, etc.?

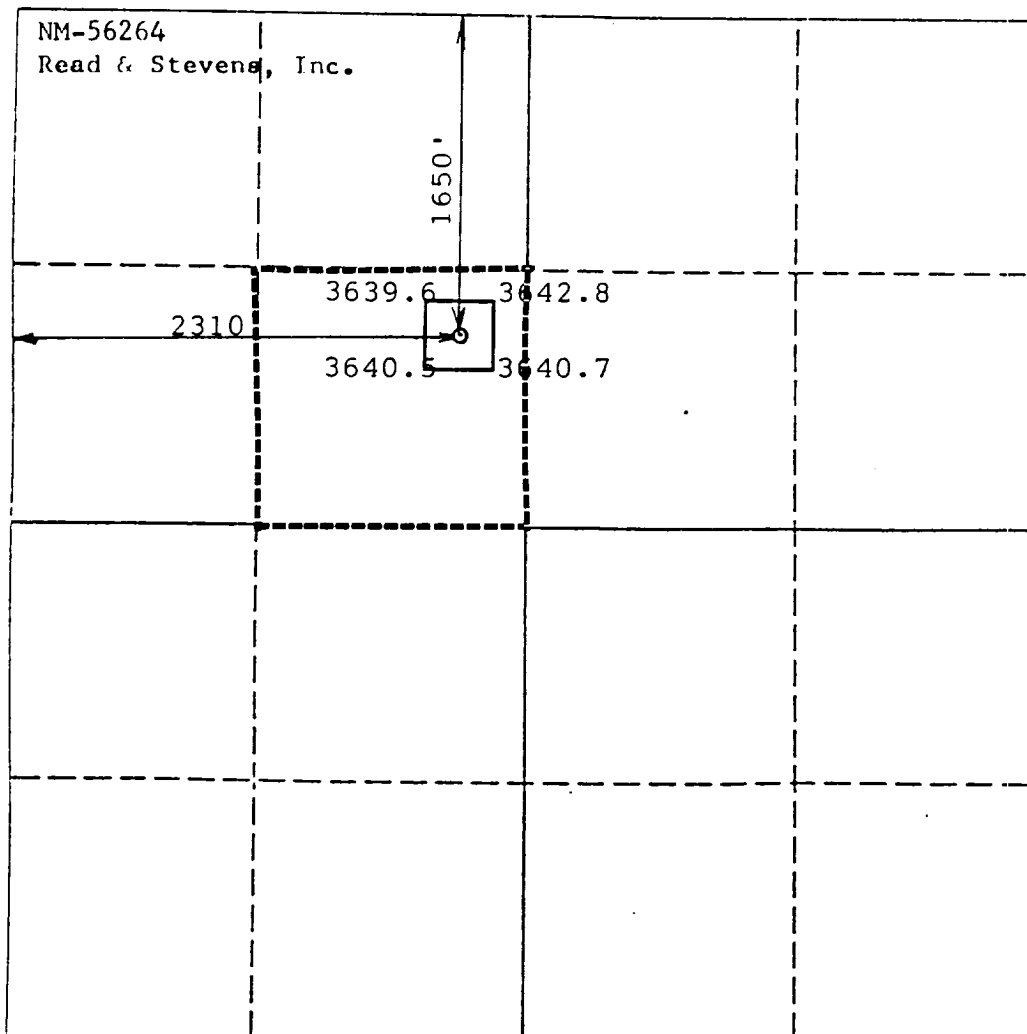
☐ Yes

☐ 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 allowance 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

Printed Name

George R. Smith

Position

Agent for:

Company

Read & Stevens, Inc.

Date

September 12, 1992

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

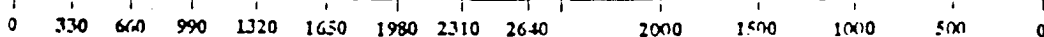
August 26, 1992

Signature & Seal of Professional Surveyor

P.R. Patton

Certificate No.

8112



APPLICATION FOR DRILLING

READ & STEVENS, INC.
North Lea Federal, Well No. 8
1650' FNL & 2310' FWL, Sec. 10-T20S-R34E
Lea County, New Mexico
Lease No.: NM-56264
(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'	Seven Rivers	3870'
Top of Salt	1720'	Delaware	5620'
Base of Salt	3170'	T.D.	6600'
Yates	3415'		
Queen	3690'		

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'

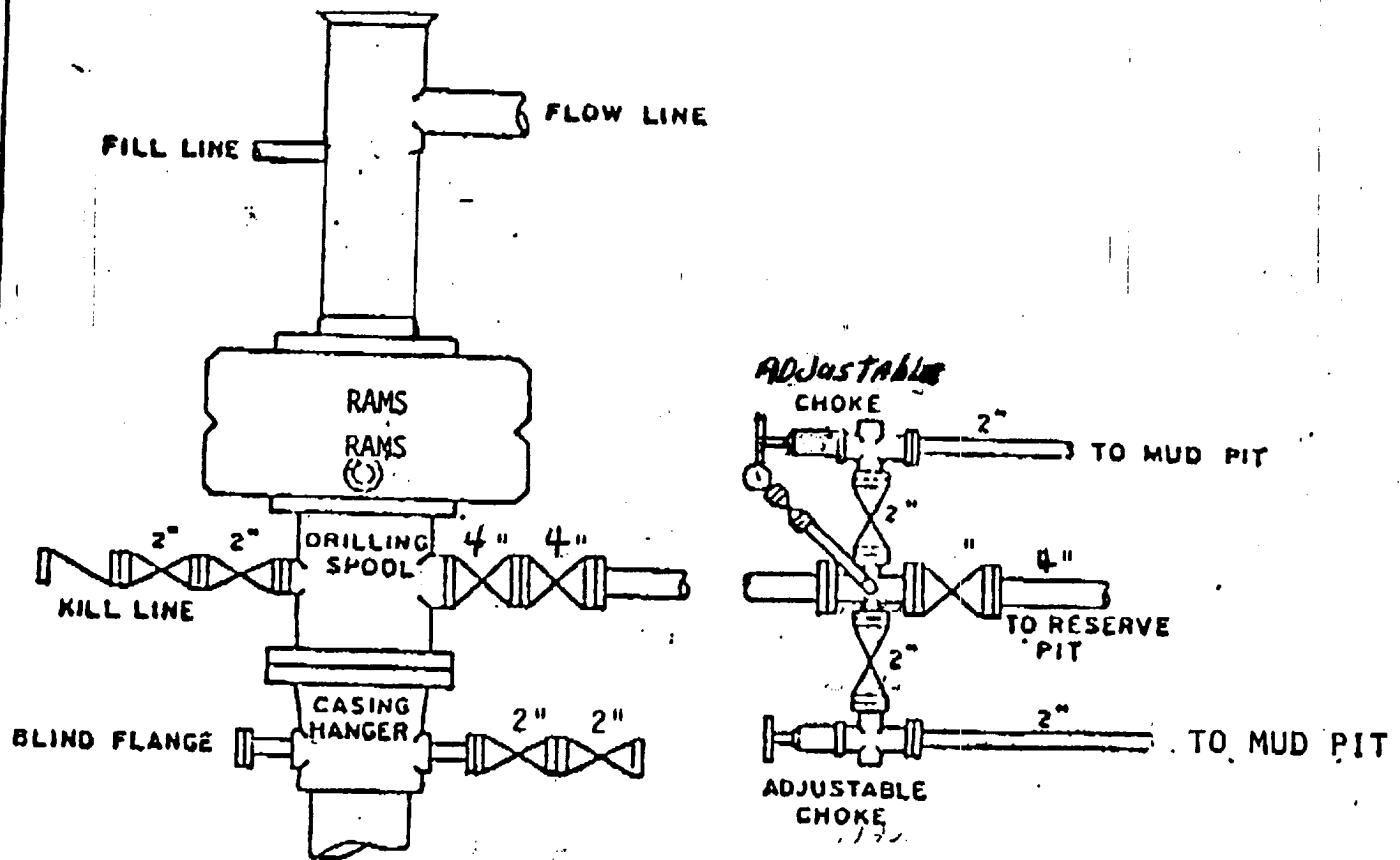
Gas: None expected.

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, CNL

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. Previously drilled wells in the area have shown there is no H₂S problem.
10. Anticipated starting date: January 15, 1993.
Anticipated completion of drilling operations: Approx. 3 weeks.



BOP STACK

3000 PSI WORKING PRESSURE

Will be used as a 2,000 psi wp system

EXHIBIT "E"
 READ & STEVENS, INC.
 North Lea Federal, Well No. 8
 BOP Specifications

RIG # 4
 JSM Drilling Co.
 BOP ARRANGEMENT

C 8L 1008
4-29-93

1008 3-25-93

ELF

1008 3-25-93

1008 3-25-93

1008 3-25-93