

**N.M. OIL CO. COMMISSION**  
**P.O. BOX 194 UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**HOBBS, NEW MEXICO 88240**  
**BUREAU OF LAND MANAGEMENT**

SUBMIT IN 'PLICATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires: December 31, 1991

**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**

SAMSON RESOURCES CO.

**3. ADDRESS AND TELEPHONE NO.**

Zip 74103-3104

TWO WEST SECOND ST. TULSA OK. 918-583-1791

**4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\***

At surface

330' FWL & 2310' FNL SEC 11 T20S-R34E LEA CO. NEW MEXICO

At proposed prod. zone SAME

Unit E

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

32 MILES SOUTHWEST OF HOBBS NEW MEXICO

**15. DISTANCE FROM PROPOSED\***

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

330

**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.

1250'

**19. PROPOSED DEPTH**

6350

**20. ROTARY OR CABLE TOOLS**

ROTARY

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

Gr. 3651

**22. APPROX. DATE WORK WILL START\***

8/15/94

**23.**

**PROPOSED CASING AND CEMENTING PROGRAM**

Controlled Water Basin

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
24"	20"	.3 Wall thick.	40'	Cement to surface W/Redi-mix
12 1/4"	K-55 9 5/8"	36#	1600	Cement W/700 Sx. Circulate to surf
7 7/8"	K-55 5 1/2"	17#	6350	Cement W/850 Sx. - SEE STIPS.

1. Drill 24" hole to 40'. Set 40' of conductor pipe Cement to surface W/Redi-mix.
2. Drill 12 1/4" hole to 1600'. Set 1600' of 9 5/8" K-55 36# ST&C casing. Cement with 500 Sx. of light cement tail in with 200 Sx. Class "C" + 2% CaCl. Circulate cement to surface.
3. Drill 7 7/8" hole to 6350'. Run 6350' of 5 1/2" K-55 17# LT&C casing. Cement with 650 Sx. light cement, tail in with 200 Sx. Class "H" cement.
4. Run temp. survey to verify top of cement.

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.**

SIGNED

*Joe T. Janica*

TITLE

AGENT

DATE

07/04/94

(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

*Richard L. Hobbs*

TITLE

*Area Manager*

DATE

7-25-94

\*See Instructions On Reverse Side

## APPLICATION TO DRILL

Samson Resources Co.  
Federal 11-20-34 # 5  
330' FWL & 2310' FNL  
Sec. 11 T20S-R34E  
Lea co. New Mexico

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1. Location: 330' FWL & 2310' FNL Sec. 11 T20S-R34E Lea Co.  
New Mexico
2. Elevation Above Sea Level: Gr. 3651
3. Geologic Name of Surface Formation: Quaternary Aeolian Deposits
4. Drilling Tools and Associated Equipment: Conventional rotary  
drilling rig using mud for the circulation medium.
5. Proposed Drilling Depth: 6350'
6. Estimated Geological Marker Tops:

Rustler Anhydrite	1550	Top Delaware	5530
Top Salt	1670	Delaware Sand	5880
Base of Salt	3160		

7. Possible Mineral Bearing Formation:

Oil bearing Delaware

8. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight Thread Grade Condition</u>
24"	0-40'	20"	.3 Wall Thickness New
12 1/4"	0-1600	9 5/8"	36# K-55 8R ST&C New
7 7/8"	0-6350	5 1/2"	17# K-55 8R LT&C New

# APPLICATION TO DRILL

Samson Resources Co.  
Federal 11-20-34 #5  
Sec. 11 T20S-R34E  
Lea Co. New Mexico

## 9. Cementing and Setting Depth:

20"	Conductor	Set 40' of 20" csg. cement to surface with Redi-mix
9 5/8"	Surface Casing	Set 1600' of 9 5/8 csg. Cement with 500 Sx. of light cement Tail in with 200 Sx. Class "C" + 2% CaCl circulate to surface.
5½"	Production	Set 6350' of 5½" csg. cement with 650 Sx. light cement Tail in with 200 Sx. Class "C" cement

10. Pressure Control Equipment: Exhibit "E". A Blow-out Preventer (no less than 900 series 3000 psi working pressure) consisting of double ram type preventer with annular type preventor, all units will be hydraulically operated. Exhibit "E-1" Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be nipped up on 9 5/8 casing and remain on well until casing is run and cemented. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling and blind ram will be worked on trips when no drill pipe is in hole. Flow sensor PVT, full opening stabbing valve and upper kelley cock will be utilized.

## 11. Proposed Mud Circulating System:

Depth	Mud Wt.	Mud Visc.	Fluid Loss	Type Mud
0-1600	8.8-9.5	30-38	NC	Fresh water spud mud use paper for seepage
1600-4600	10-11	29-35	NC	Brine Water and use paper for seepage control.
4600-6350	10-11.5	30-38	12-15	Brine Water with starch for water loss control.

In order to run casing viscosity may have to be raised and water loss may be required to be lowered to 8cc or less depending on hole conditions.

APPLICATION TO DRILL

Samson Resources Co.  
Federal 11-20-34 #5  
Sec. 11 T20S-R34E  
Lea Co. New Mexico

**12. Testing, Logging and Coring Programs:**

- (A) Possible MSCT-Rotary Coring Tool 10 cores
- (B) No DST'S planned
- (C) CNL, Gamma Ray Caliper TD-Surface DLL, MSFL  
Gamma Ray, Litho Density TS-4350

**13. Potential Hazards:**

No abnormal pressures of temperature zones expected (nothing abnormal in offset wells or other wells in the area). Hydrogen sulfide gas is not anticipated however, precautions for detection will be observed. No major lost circulation is expected (none reported in this area). H2S contingency attached "13-A".

- 14. Anticipated Starting Date and Duration of Operation:** Road and location construction will begin after BLM approval of APD. Anticipated date 8-15-94 Drilling expected to take 10 to 12 days. If production casing is run an additional 30 days to complete and construct surface facility and place well on production.

- 15. Other Facets of Operations:** After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Delaware pay will be perforated and stimulated. The well will be swab tested and potential as Oil well.

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Instruction on back  
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 <b>30-025-32619</b>	Pool Code <b>37584</b>	Pool Name <b>LEA DELAWARE NORHTEAST</b>
Property Code <b>9908</b>	Property Name <b>FEDERAL 11-20-34</b>	Well Number <b>5</b>
OGRID No. <b>20165</b>	Operator Name <b>SAMSON RESOURCES</b>	Elevation <b>3651'</b>

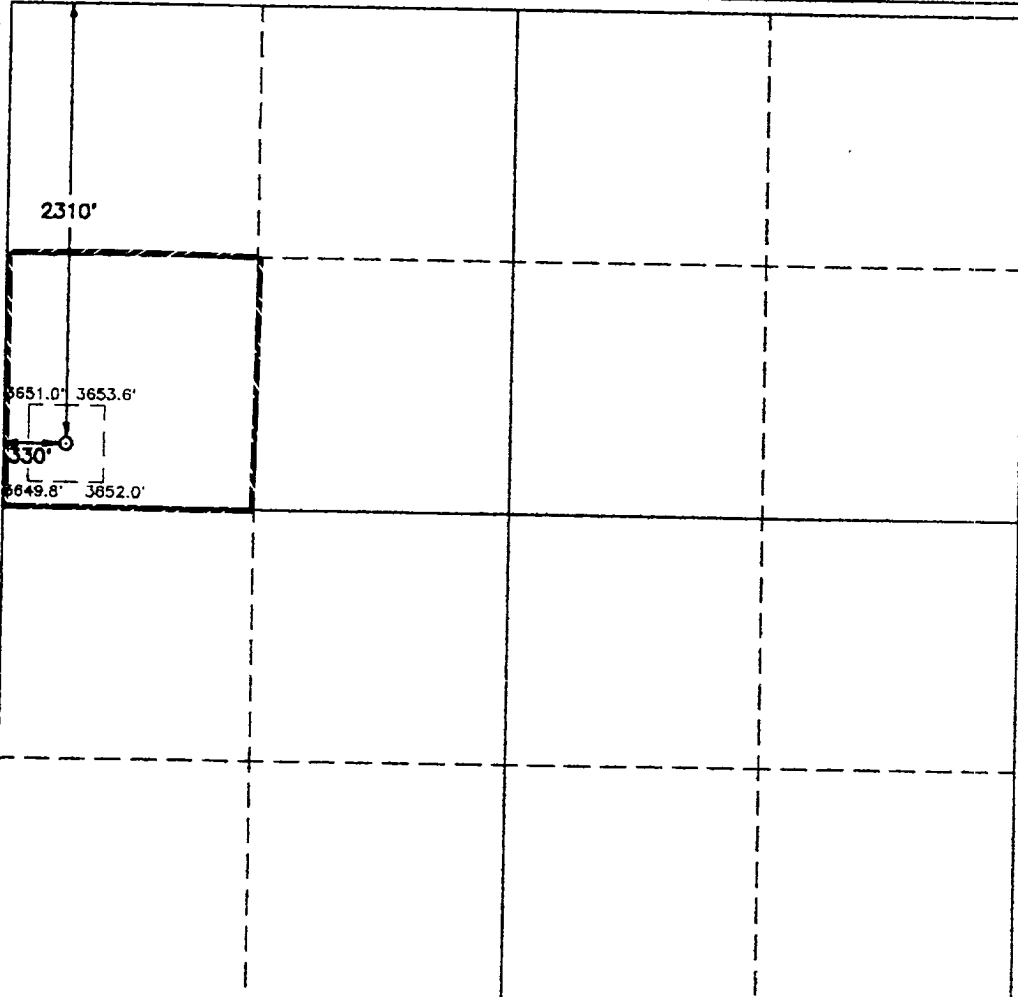

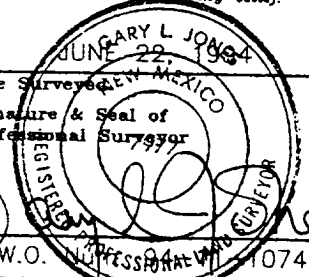
#### Surface Location

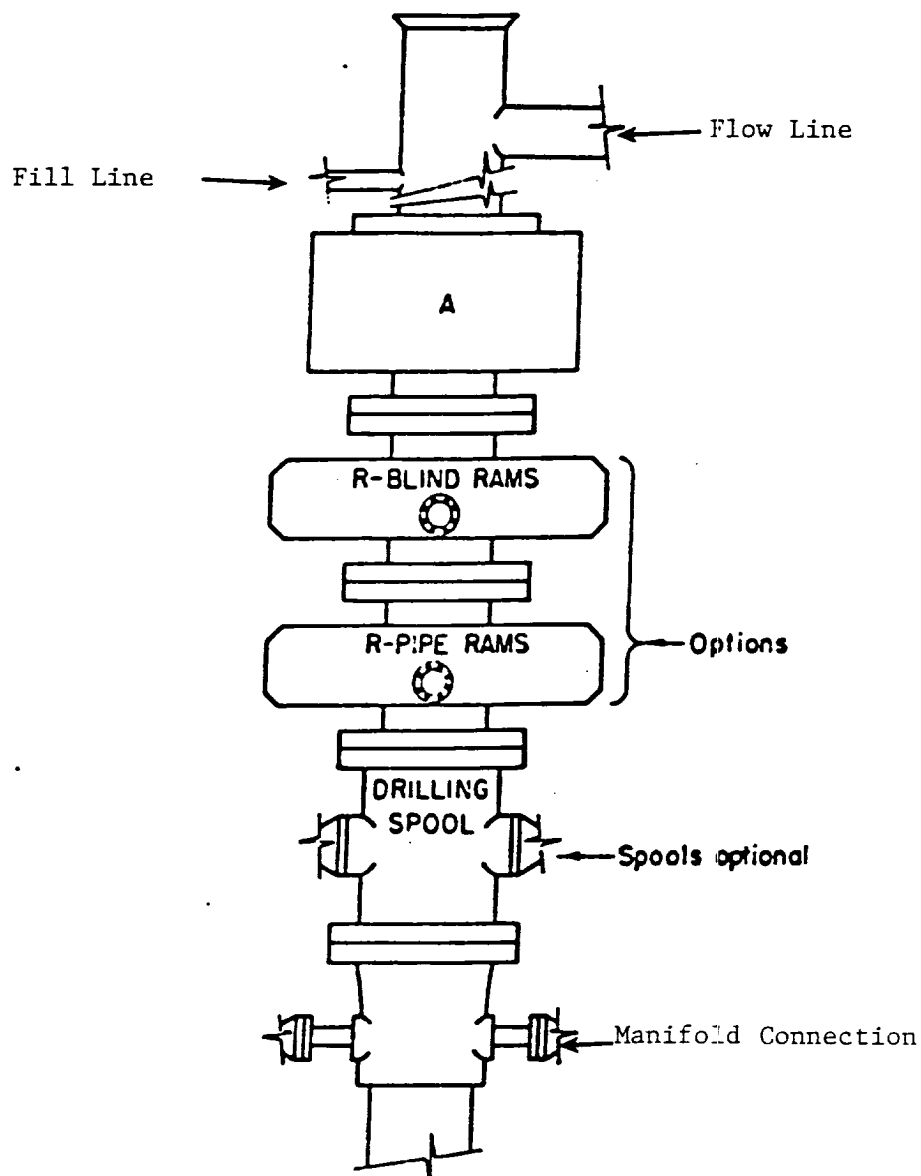
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>E</b>	<b>11</b>	<b>20 S</b>	<b>34 E</b>		<b>2310</b>	<b>NORTH</b>	<b>330</b>	<b>WEST</b>	<b>LEA</b>

#### 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 <b>40</b>	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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.   Signature <b>Joe T. Janica</b> Printed Name Agent  Title <b>07/05/94</b> Date
	<b>SURVEYOR CERTIFICATION</b>  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.   Date Surveyed Signature & Seal of Professional Surveyor <b>W.O. PROFESSIONAL 1074</b> Certificate No. <b>JOHN W. WEST, 676</b> <b>RONALD J. EIDSON, 3239</b> <b>GARY L. JONES, 7977</b>



# **ARRANGEMENT SRRA**

900 Series  
3000 PSI WP

EXHIBIT "E"  
SAMSON RESOURCES CO.  
B.O.P. SKETCH TO BE USED ON  
FEDERAL 11-20-34 #5  
330' FWL & 2310' FSL SEC. 11  
T20S-R34E LEA CO. NM