

N.M. OIL CO. COMMISSION
P.O. BOX 1980
HOBBS, NEW MEXICO 88240
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*
(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.
TWO WEST SECOND ST. TULSA, OK. 74103-3104 918-583-1791

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 330' FNL & 330' FWL SEC. 11 T20S-R34E LEA CO. NEW MEXICO
At proposed prod. zone SAME Unit D

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
32 MILES SW OF HOBBS NEW MEXICO

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 330'

18. NO. OF ACRES IN LEASE 320

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

13. 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. 3655

22. APPROX. DATE WORK WILL START* 8/1/94

5. LEASE DESIGNATION AND SERIAL NO.
NM-0631

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
FEDERAL 11-20-34 # 4

9. AP WELL NO.

10. FIELD AND POOL, OR WILDCAT
LEA DELAWARE, NORTHEAST

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC 11 T20S-R34E

12. COUNTY OR PARISH LEA

13. STATE NM

PROPOSED CASING AND CEMENTING PROGRAM				
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 95/8	36#	1600	Cement W/700Sx. Circulare to surface
7 7/8"	K-55 5 1/2	17#	6350	Cement W/850 Sx. - SEE STRIPS.

1. Drill 24" hole to 40' Set 40' of 20" Conductor pipe Cement to surface W/Redi-mix
2. Drill 12 1/4" hole to 1600' Run and set 1600' of 95/8" K-55 36# ST&C casing. Cement with 500Sx of light cementtail in with 200 Sx. Class "C" + 2% CaCl circulate to surface.
3. Drill 7 7/8" hole to 6350' Run and set 6350' of 5 1/2" K-55 17# LT&C casing. Cement W/650 Sx. light cement ,tail in with 200 Sx. class "H" cement.
4. Run temp. survey to verify top of cement.

Approved Subject to
Geological Investigations and
Special Investigations
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. SIGNED For T. James 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. Marcus TITLE Area Manager DATE 7-25-94

*See Instructions On Reverse Side

APPLICATION TO DRILL

Samson Resources Co.
Federal 11-20-34 #4
330' FNL & 330' FWL
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' FNL & 330'FWL Sec. 11 T20S-R34E Lea Co.
New Mexico
2. Elevation Above Sea Level: Gr. 3655'
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 # 4
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 "H" 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:

<u>Depth</u>	<u>Mud Wt.</u>	<u>Mud Visc.</u>	<u>Fluid Loss</u>	<u>Type Mud</u>
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.

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Federal 11-20-34 # 4
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 or 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 8-1-94 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 potentialized 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 30-025-326.8		Pool Code 37584	Pool Name LEA DELAWARE NORTHEAST
Property Code 9908	Property Name FEDERAL 11-20-34		Well Number 4
GRID No. 20165	Operator Name SAMSON RESOURCES		Elevation 3655'

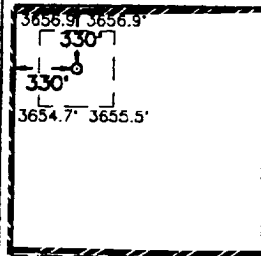
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	11	20 S	34 E		330	NORTH	330	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 40		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


OPERATOR CERTIFICATION

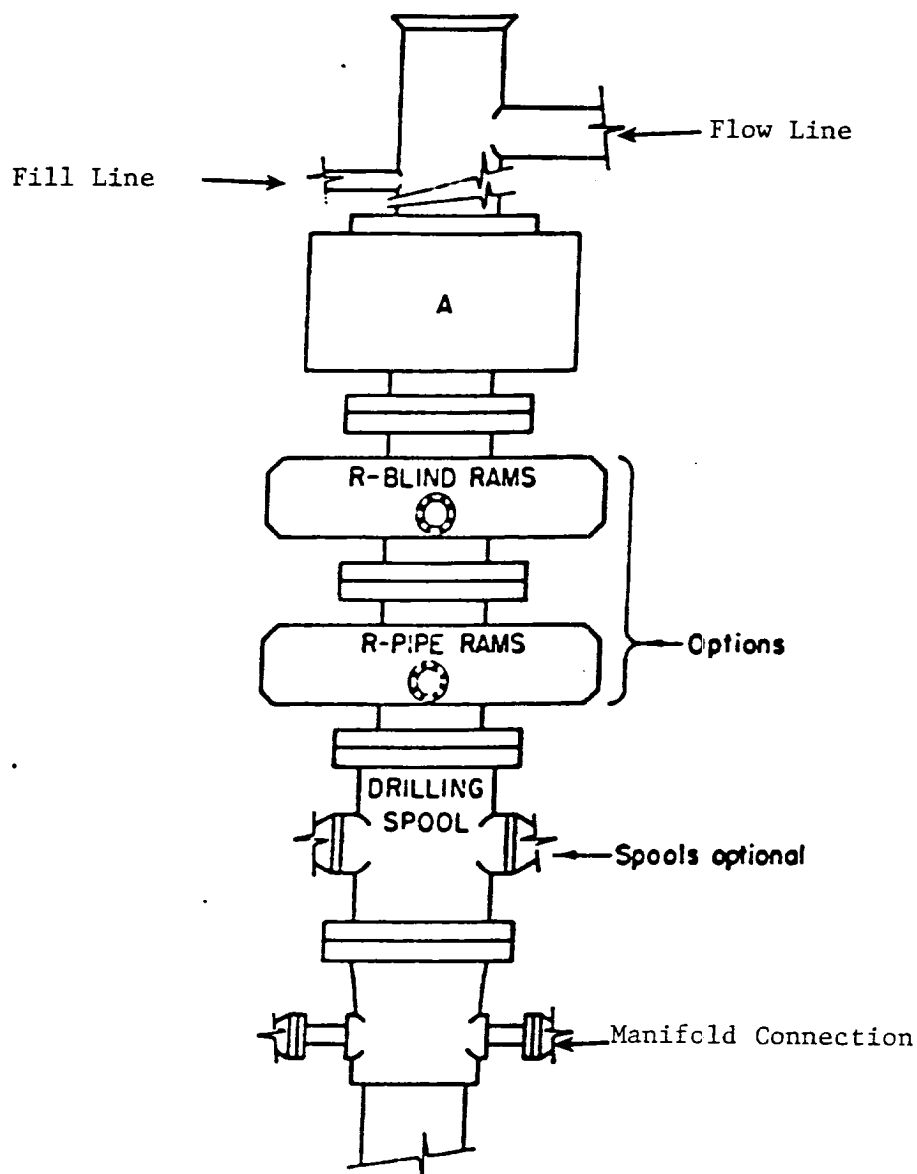
I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.


Signature
Joe T. Janica
Printed Name
Agent
Title
07/05/94
Date

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 belief.

DATE SURVEYED: JUNE 22, 1994
Signature: 
Professional Surveyor
REG. NO. 94-157-1073
CERTIFICATE: RONALD J. EIDSON, 676
GARY L. JONES, 7977



ARRANGEMENT SRRA

900 Series

3000 PSI WP

EXHIBIT "E"
 SAMSON RESOURCES CO.
 B.O.P. SKETCH TO BE USED ON
 FEDERAL 11-20-34 #4
 330' FNL & 330' FWL SEC. 11
 T20S-R34E LEA CO. NM