

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

30-015-22811

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X], DEEPEN [], PLUG BACK []
b. TYPE OF WELL: OIL WELL [], GAS WELL [X], OTHER []
FEB 2 1978

2. NAME OF OPERATOR: Phoenix Resources Company
3. ADDRESS OF OPERATOR: O.C.C. ARTESIA, OFFICE

4. LOCATION OF WELL: 290 One Marienfeld Place - Midland, Texas 79701

10. FIELD AND POOL, OR WILDCAT: Gardner Draw Unit
11. SEC. T., R., M. OR BLM. AND SURVEY OR AREA: Sec. 17, T-19-S, R-21-E

12. COUNTY OR PARISH: Eddy
13. STATE: New Mexico

16. NO. OF ACRES IN LEASE: 18,868
17. NO. OF ACRES ASSIGNED TO THIS WELL: 320
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 660'
19. PROPOSED DEPTH: 7,500
20. ROTARY OR CABLE TOOLS: rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): GR 4373.85

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 17 1/2" hole with 13 3/8" casing, 12 1/4" hole with 8 5/8" casing, and 7 7/8" hole with 4 1/2" casing.

Propose to drill a Morrow well using rotary tools to approximately 7500'. Cement will be circulated on the 13 3/8" and 8 5/8" casing strings. Plan to test significant shows and evaluate with adequate logging program. Completion or abandonment will be performed in accordance with prudent practices and regulatory body requirements. Double ram series 900 BOP and choke manifold will be used from 8578 casing to total depth.

Gas sales are not dedicated

RECEIVED JAN 18 1979 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

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.

SIGNED: [Signature] TITLE: Agent DATE: 12-7-78

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE: 2-1-79

APPROVED BY: [Signature] TITLE: DATE: 10-2-78

CONDITIONS OF APPROVAL, IF ANY:


 United States Department of the Interior **RECEIVED**

 GEOLOGICAL SURVEY
 P. O. Drawer U
 Artesia, New Mexico 88210

FEB 2 1979

O. C. C.
ARTESIA, OFFICE
 February 1, 1979

 Phoenix Resources Company
 290 One Marienfeld Place
 Midland, Texas 79701

 PHOENIX RESOURCES COMPANY
 Gardner Draw Unit Well No. 9
 1980 FSL 1980 FEL Sec. 17, T19S, R21E
 Eddy County Lease No. NM-7794

Above Data Required on Well Sign

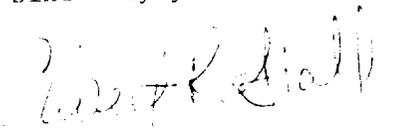
Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 7,500 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should be not less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate sandstone brown (Federal Standard Color No. 595A, color 20318 or 30318).
5. Before drilling below the 8-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
6. A kelly cock will be installed and maintained in operable condition.
7. After setting the 8-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
- (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
9. Notify the Survey in sufficient time to witness the cementing of the 8-5/8" casing.
10. Cement behind the 13-3/8" and 8-5/8" casing must be circulated.

Sincerely yours,



Albert R. Stall
Acting District Engineer

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 Phoenix Resources, Inc. | | Lease Carner Draw Unit | | | Well No. 9 |
| Grid Letter J | Section 17 | Township 19 South | Range 21 East | County Eddy | |
| Approximate Location of Well: 1900 feet from the South line and 1700 feet from the East line | | | | | |
| Ground Level Elev. 4373.9 | Producing Formation NORROW | | Pool WILBERT Lind Marrow | Dedicated Acreage: 330 Acres | |

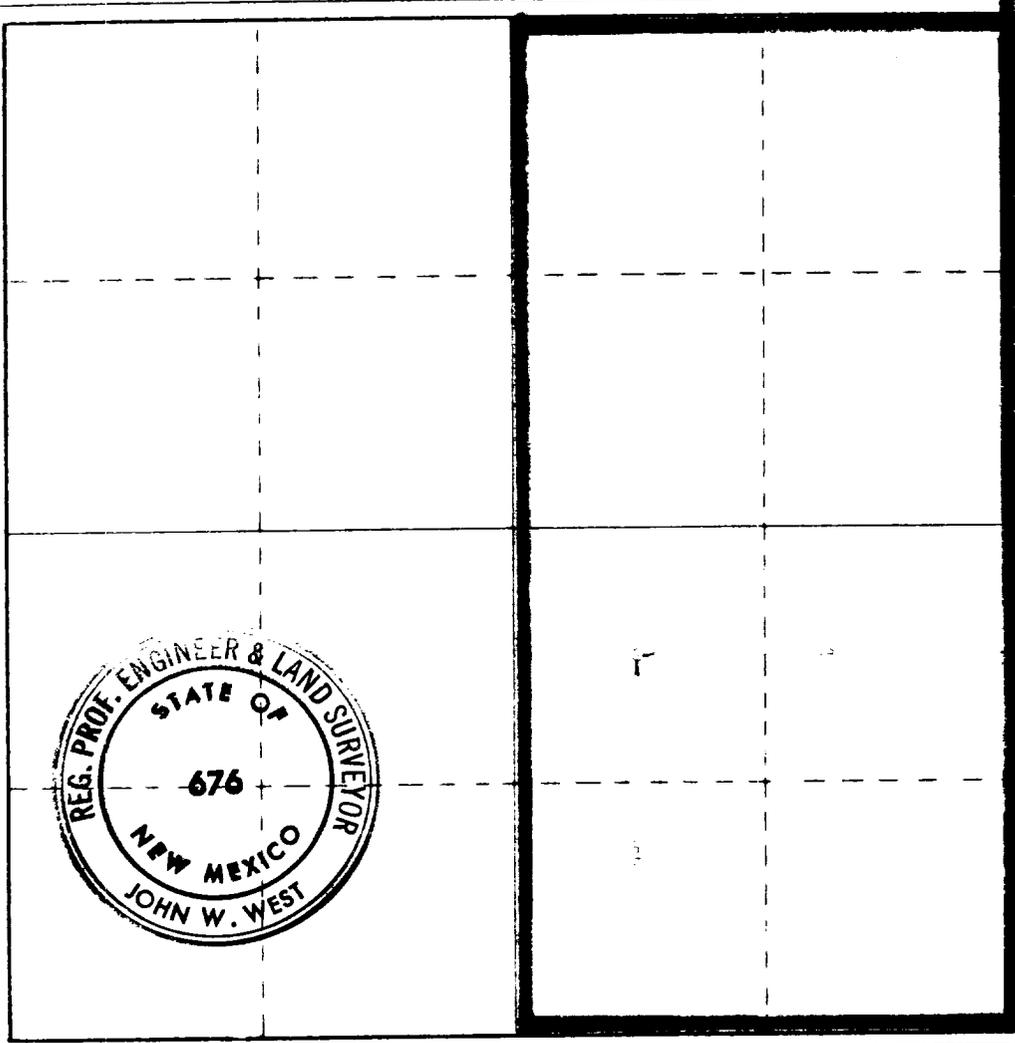
- Outline the acreage dedicated to the subject well by colored pencil or hachure marks of _____ at _____
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests _____ by communitization, unitization, force-pooling, etc?

RECEIVED
JAN 18 1979
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Case 6129

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

[Signature]
Owml. Mouth

Agent:
Phoenix Resources Company
12-7-78

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:
December 11, 1978
Registered Professional Engineer and Land Surveyor

[Signature]
Certificate No. John W. West

Ronald J. Eidson 676 3239



Application For Drilling
Phoenix Resources Company
Gardner Draw Unit Well No. 9
Eddy County, New Mexico

In conjunction with permitting the subject well for drilling in Section 17, Township 19 South, Range 21 East, Eddy County, New Mexico, Phoenix Resources Company submits the following points of pertinent information in accordance with U.S.G.S. letter of July 1, 1976.

1. The geologic surface formation is San Andres.
2. The estimated tops of geologic markers are as follows:

| | |
|-----------|--------|
| Glorieta | 1,791' |
| Clearfork | 2,250' |
| Tubb | 2,780' |
| Wolfcamp | 4,410' |
| Cisco | 6,000' |
| Canyon | 6,430' |
| Strawn | 6,725' |
| Morrow | 7,250' |

3. The depth at which water, oil or gas is expected to be encountered is:

7,250'

4. Casing program:

13 3/8", 48#, H-40 New Casing run to 350', cemented with 500 sacks.
8 5/8", 24#, K-55 New Casing run to 1,800', cemented with 1,200 sacks.
4 1/2", 11.60#, K-55 New Casing run to 7,500', cemented with 500 sacks.

5. Blowout Preventers:

Ram type Series 900 with double hydraulic rams. This is a Schaeffer blowout preventer (working pressure 3,000#, test pressure 6,000#). The fill, kill and choke lines are indicated on the BOP specification sheet.

6. Circulating Medium:

Steel and earthen pits will be used to hold mud and cuttings and the drilling fluid as follows:

Air and mist drill as far as possible, probably to 6,500', mud up with KCL brine water, weight 9.8#-10.1# per gallon, Viscosity 34-38, Water Loss 10cc or less.

Application For Drilling

Phoenix Resources Company - Gardner Draw Unit Well No. 9

Page 2.

7. The rig will be equipped with safety devices such as kelly cock, drill pipe float, full opening stabbing valve, inside drill pipe BOP, etc. Operational tests will be run weekly and results noted on tour sheets.
8. One Density Laterolog and one Density Neutron Log will be run at total depth.
9. No abnormal pressures or temperatures or potential hazards are expected to be encountered.
10. Anticipated starting date is February 1, 1979 with completion of operations expected to be on or about March 7, 1979.

Multipoint Surface Use & Operations Plan

Phoenix Resources Company

Gardner Draw Unit Well No. 9

1980 FSL, 1980 FEL, Section 17, T-19-S, R-21-E

Eddy County, New Mexico

New Mexico Lease 7794

RECEIVED

JAN 18 1979

**U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO**

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbances involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. Existing Roads:

- A. Existing roads in the vicinity of planned well are shown on the attached Exhibit "A". The well is located approximately 12 miles Southwest of Hope, New Mexico. To reach the location, go South of Hope 6 miles to a "Y" in the road, take the right fork. Continue on where pavement ends until you reach the next "Y" in the road. Take the right fork to the proposed location. This route is marked with BLUE on Exhibit "A".
- B. An existing road runs within 800' of the proposed well. Some garding will be required on this road.

2. Planned Access Roads:

- A. Since an existing road is close by, it will be utilized with a new road being built as indicated in RED in Exhibit "A" approximately 800' long.

No new gates or cattleguards are required.

3. Location of Exisiting Wells:

- A. Existing wells within a one-mile radius are shown on Exhibit "B".

4. Location of Exisiting and/or Proposed Facilities:

- A. There is no production equipment on this lease at present. If production is established, a tank battery will be built on the drilling pad and no additional surface disturbance will occur.

5. Location and type of Water Supply:

- A. Water will be purchased and trucked to the wellsite over existing roads shown on Exhibit "A".

6. Source of Construction Materials:

- A. A bulldozer is used to level existing soil. No caliche is used. Area is rocky enough for sturdy foundation for drilling rig.

7. Methods of Handling Waste Disposal:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in the tests tanks until sold.
- D. Sewage will be collected in a pit at least 6' deep below an outside latrine. Suitable chemical will be added to aid decomposition of the waste material and then back filled following completion of the well.
- E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown on Exhibit "C".
- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities:

- A. None required.

9. Wellsite Layout:

- A. Exhibit "C" shows the relative location and dimension of the well pad, mud pits, reserve pit, trash pit and location of major rig components.
- B. The West side of the location will have to be cut and the dirt moved to the East side in order to level the location site.

9. Wellsite Layout: (cont'd)

- C. The reserve pit will be plastic lined.
- D. The pad and pit area has been staked and flagged.

10. Plans for restoration of the surface:

- A. After completion of drilling and/or completion operations all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave wellsite in an aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and the location will be cleaned. Rehabilitation should be accomplished within 90 days after abandonment.

11. Other Information:

A. Topography:

Land surface is rolling and hilly. From an elevation of 4373.85' at the wellsite, the land surface slopes toward the East.

B. Soil:

Soil is dirt and very rocky.

C. Flora and Fauna:

The vegetative cover is generally sparse and consist of shinnery oak, yucca and perenial native range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.

D. Ponds and Streams:

There are no rivers, streams, lakes or ponds in the area.

11. Other Information: (cont'd)

E. The nearest occupied dwellings are ranch houses occupied by Mr. Frank Runyon, 2 miles South and Mr. Tulk 3 miles West of the proposed location.

F. Archeological, Historical & Cultural Sites:

None observed in the area.

G. Land Use:

Grazing and hunting in season.

H. Surface Ownership:

Well is on leased land.

12. Operators Representative:

The field representative responsible for assuring compliance with the approved surface use and operations plan are as follows:

John W. Mulloy
290 One Marienfeld Place
Midland, Texas 79701
Office Phone: 915/684-7877
Home Phone: 915/682-9642

O. H. Routh
290 One Marienfeld Place
Midland, Texas 79701
Office Phone: 915/684-7877
Home Phone: 915/683-6455

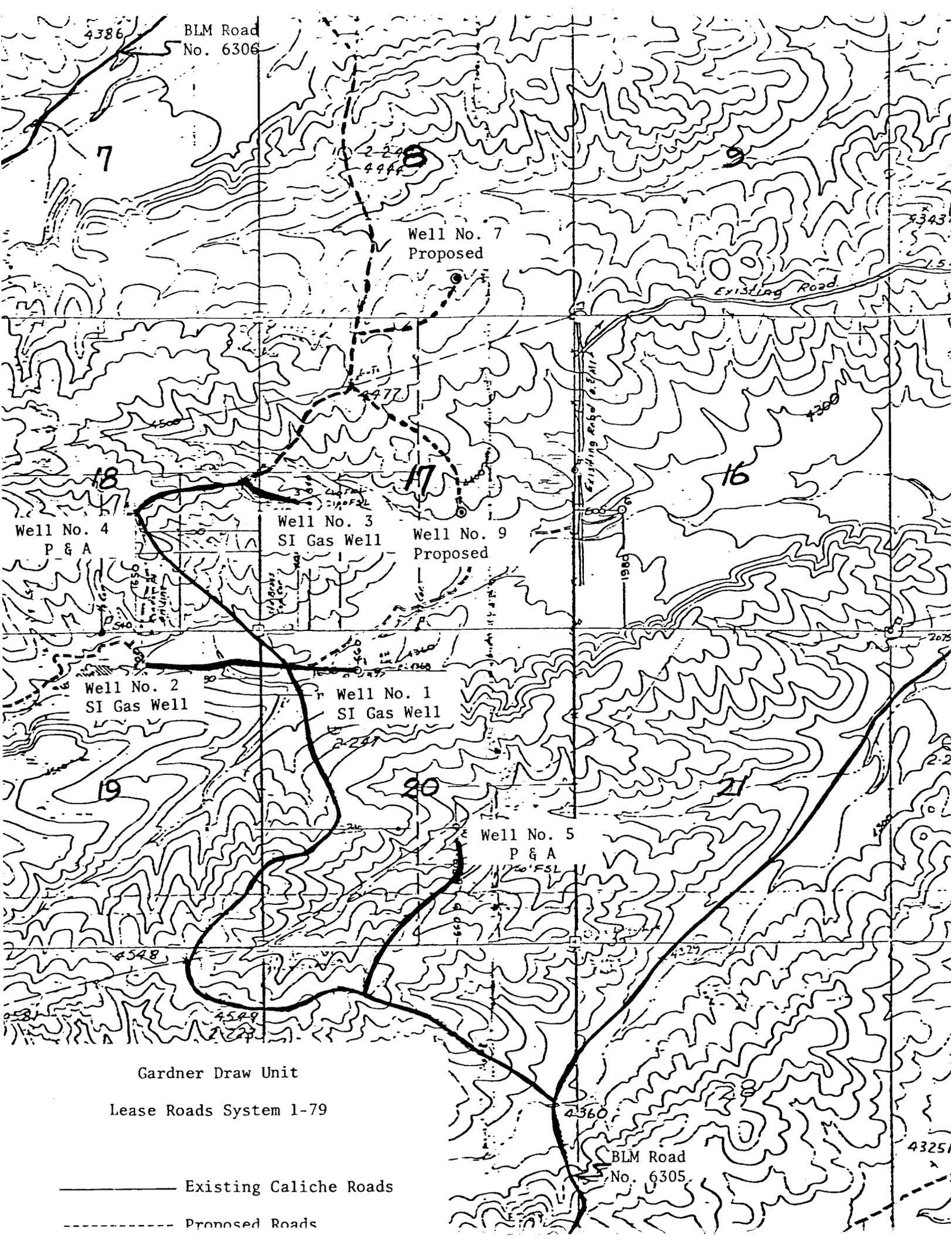
13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by Phoenix Resources Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date 1-17-79

Agent *ORouth*

Phoenix Resources Company



4386
BLM Road
No. 6306

Well No. 7
Proposed

Well No. 4
P & A

Well No. 3
SI Gas Well

Well No. 9
Proposed

Well No. 2
SI Gas Well

Well No. 1
SI Gas Well

Well No. 5
P & A

Gardner Draw Unit

Lease Roads System 1-79

- Existing Caliche Roads
- - - Proposed Roads

BLM Road
No. 6305

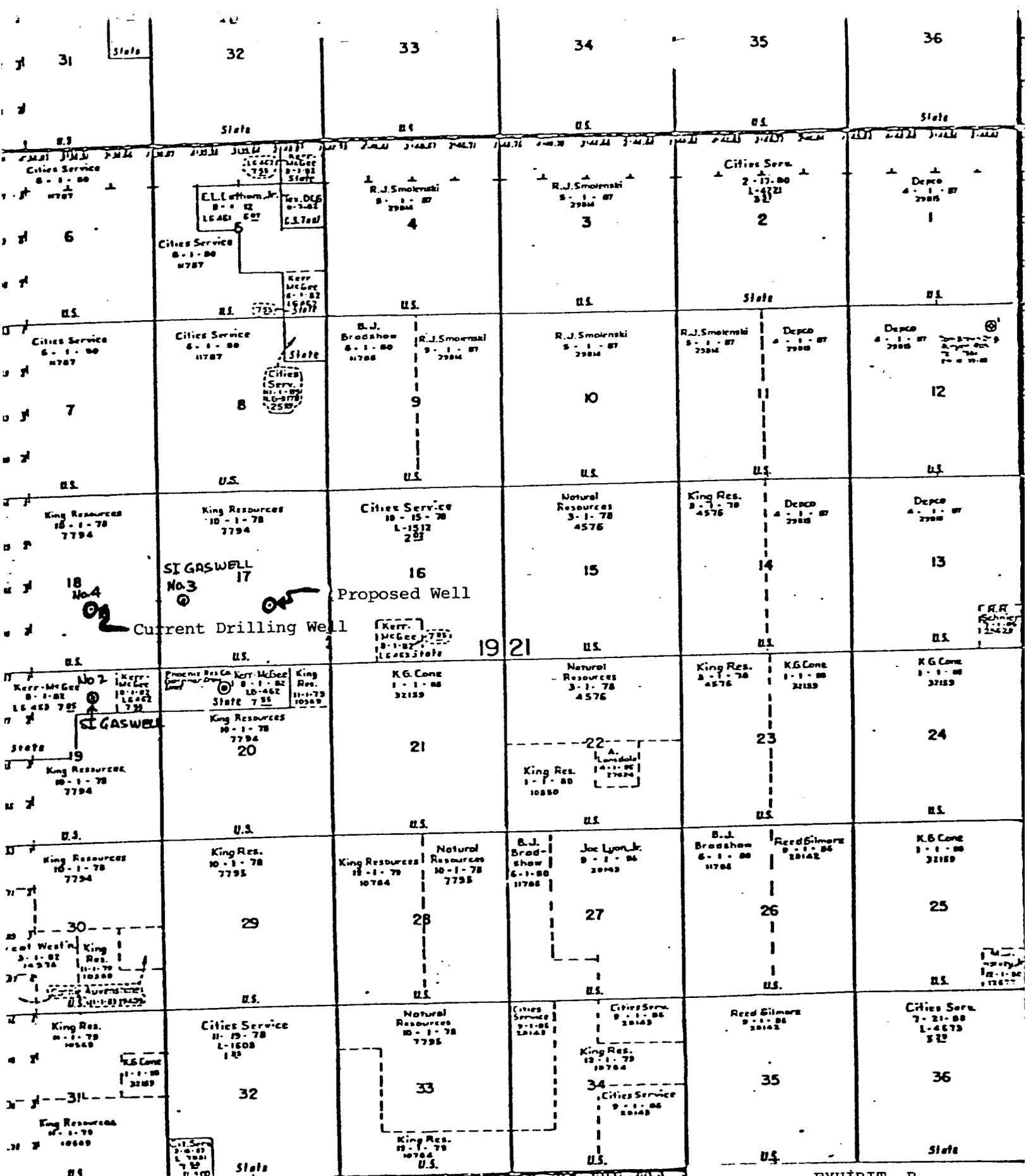


EXHIBIT B

Phoenix Resources Co.
 Gardner Draw Unit Well 9
 1980 FSL, 1980 FEL
 Section 17, T-19-S, R-21-E
 Eddy County, New Mexico

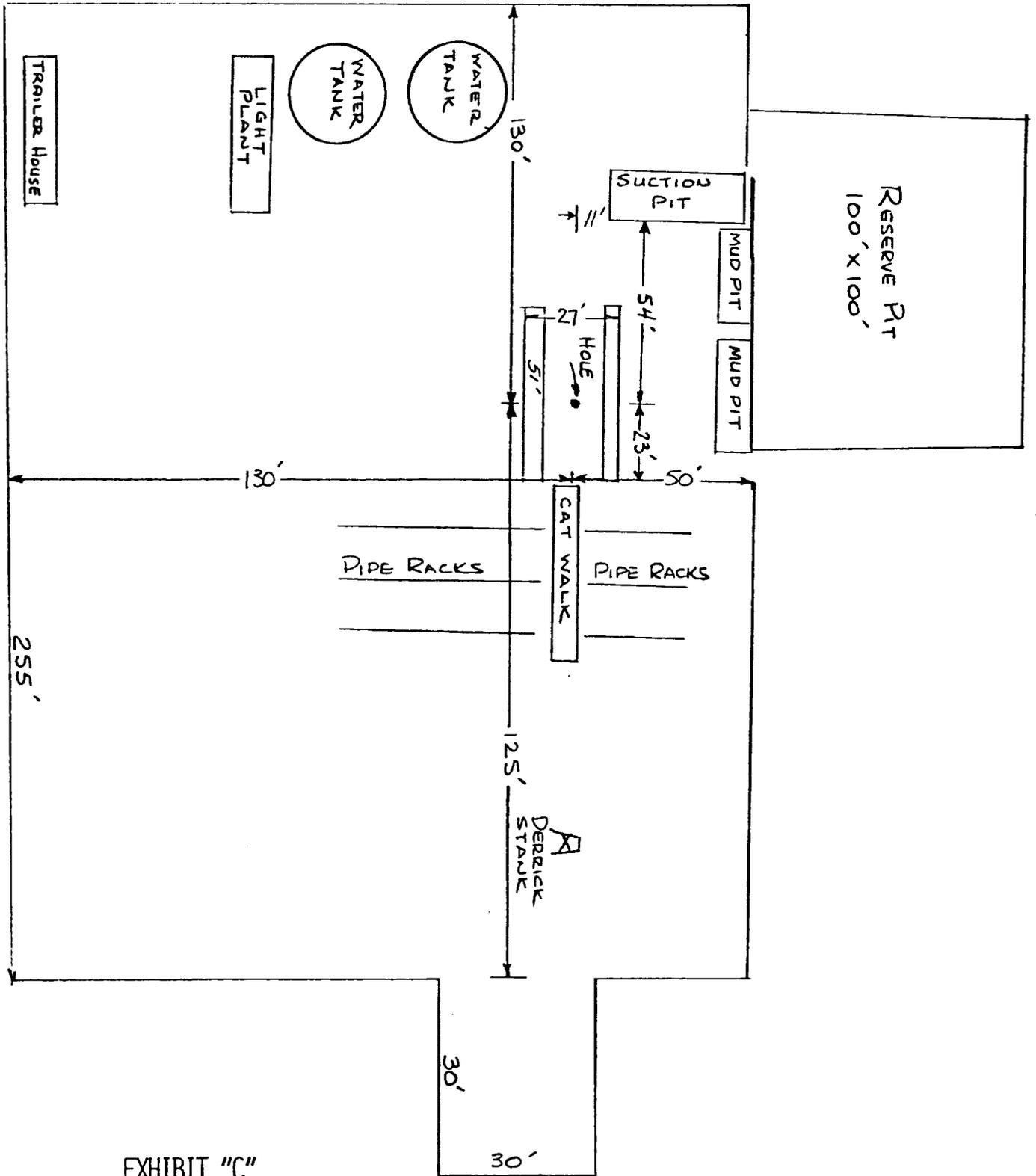


EXHIBIT "C"

PHOENIX RESOURCES Co.
GARDNER DRAW UNIT WELL 9

1980 FSL, 1980 FEL, SEC 17, T-19-S, R-21-E
EDDY COUNTY, NEW MEXICO





NMAS
New Mexico Archaeological Services, Inc.

P. O. Box 1341

Carlsbad, New Mexico 88220

(505) 887-7646

15 January 1979

Reconnaissance
Excavation
Analysis
Explanation
Curation

Mr. C.H. Routh
Foy-Boyd Associates
One Marienfeld Place
Suite 290
Midland, Texas 79701

Dear Mr. Routh:

Enclosed please find NMAS' archaeological clearance report for the existing ranch road north of Phoenix Resources' proposed Gardner Draw Unit No.9. No archaeological sites or isolated manifestations were recorded during this reconnaissance.

If you have any questions, please call my office. Thank you for asking NMAS to do this reconnaissance.

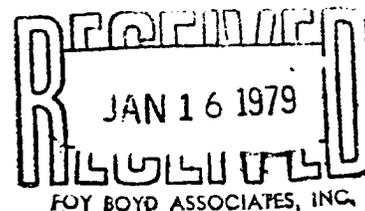
Your sincerely,

Dr. J. Loring Haskell
Principal Investigator

Enclosure

cc: Ms. Ann Ramage, BLM, Roswell
Mr. Thomas W. Merlan, SHPO, Santa Fe

as



RECEIVED

JAN 18 1979

**U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO**

Archaeological Clearance Report

for

Phoenix Resources, Inc.

(Foy-Boyd Associates)

Archaeological Reconnaissance of
Existing Ranch Road, Section 17, T19S, R21E,
NMPK, Eddy County, New Mexico

Prepared

By

Dr. J. Loring Haskell

Submitted

By

Dr. J. Loring Haskell
Principal Investigator
New Mexico Archaeological Services, Inc.
Carlsbad, New Mexico

15 January 1979

Permit No. 78-NM-120

Introduction

On 14 January 1979, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, undertook for Phoenix Resources, Inc., Oklahoma City, an archaeological reconnaissance of land administered by the Bureau of Land Management in Eddy County, New Mexico. The reconnoitered right-of-way will be impacted by the upgrading of the existing road in order to provide access to Gardner Draw Unit Well No.9. This project was expedited by Mr. C.H. Routh, Foy-Boyd Associates, Midland, Texas, and Dr. J. Loring Haskell, Principal Investigator, NMAS. Dr. Haskell conducted the reconnaissance under excellent field conditions.

Survey Technique

The existing roadbed and its immediate environs was investigated for evidence of man's past activities by walking it in two, 15 ft wide, close interval (15° or less), zigzag transects. Methodologically, it served to promote optimal conditions for the visual examination of areas to be impacted on a primary and secondary bases.

Ranch Road

Location

As proposed, Phoenix Resources will upgrade approximately 2400 ft of the existing ranch road which will measure 12 ft in breath. This right-of-way passes through the:

NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 17, T19S, R21E, NMPM, Eddy County, NM (BLM)
SE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 17, T19S, R21E, NMPM, Eddy County, NM (BLM)
SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 17, T19S, R21E, NMPM, Eddy County, NM (BLM)
NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 17, T19S, R21E, NMPM, Eddy County, NM (BLM)

Map Reference: USGS Holt Tank Quadrangle, 7.5 Minute Series, 1978.

Terrain

The existing roadbed crosses the south facing slope of a generally east-west oriented ridge. Principal drainage is provided by Holt Tank Draw which is situated due south of the investigated right-of-way. Lithic Calciustolls and Rock Land constitute the dominant soil types within the bounds of the reconnaissance. Permian-aged limestones of a vugic nature mantle the local landform. Soil individuals tend to be fine-grained silt loams containing limestone gravel and cobble inclusions.

Floristics

Lithic Calciustolls support an overstory of Larrea tridentata, Yucca baccata, Nolina sp., Agave neomexicana, Acacia greggii and Dasylirion leiphyllum. Yucca elata, which generally confined to draws, does occur on a sporadic, albeit often stunted, basis on soil individuals in the immediate vicinity. Cacti are represented by Opuntia imbricata, Opuntia macrocentra (variant), and Echinocereus nectinatus. Dominant grasses include Sclerogonon brevifolius, Hilaria mutica, Munroa squarrosa, and Tridens pulchellus. Excepting Senecio longilobus, forbs are generally absent owing to the season.

Cultural Resources

No archaeological sites or isolated manifestations were observed during this reconnaissance. The complete absence of cultural resources in this general area can be accounted

for by a dearth of raw material suitable for knapping purposes, sheetwash and flash flooding, and a paucity of plants lending themselves to milling operations. Sotal and yucca undoubtedly were tapped in this district and roasted in ring middens; however, evidence of this set of activity were not discernible in the investigated area.

Recommendations

NMAS recommends clearance for the proposed road project and suggests that work-related activities proceed according to existing plans.

1 - 7 station Koomey Accumulator

1 - Koomey Remote Stand

5000 WP Manifold

1 - 10⁰ Shaeffer Double BOP 900 Series, 3000 WP

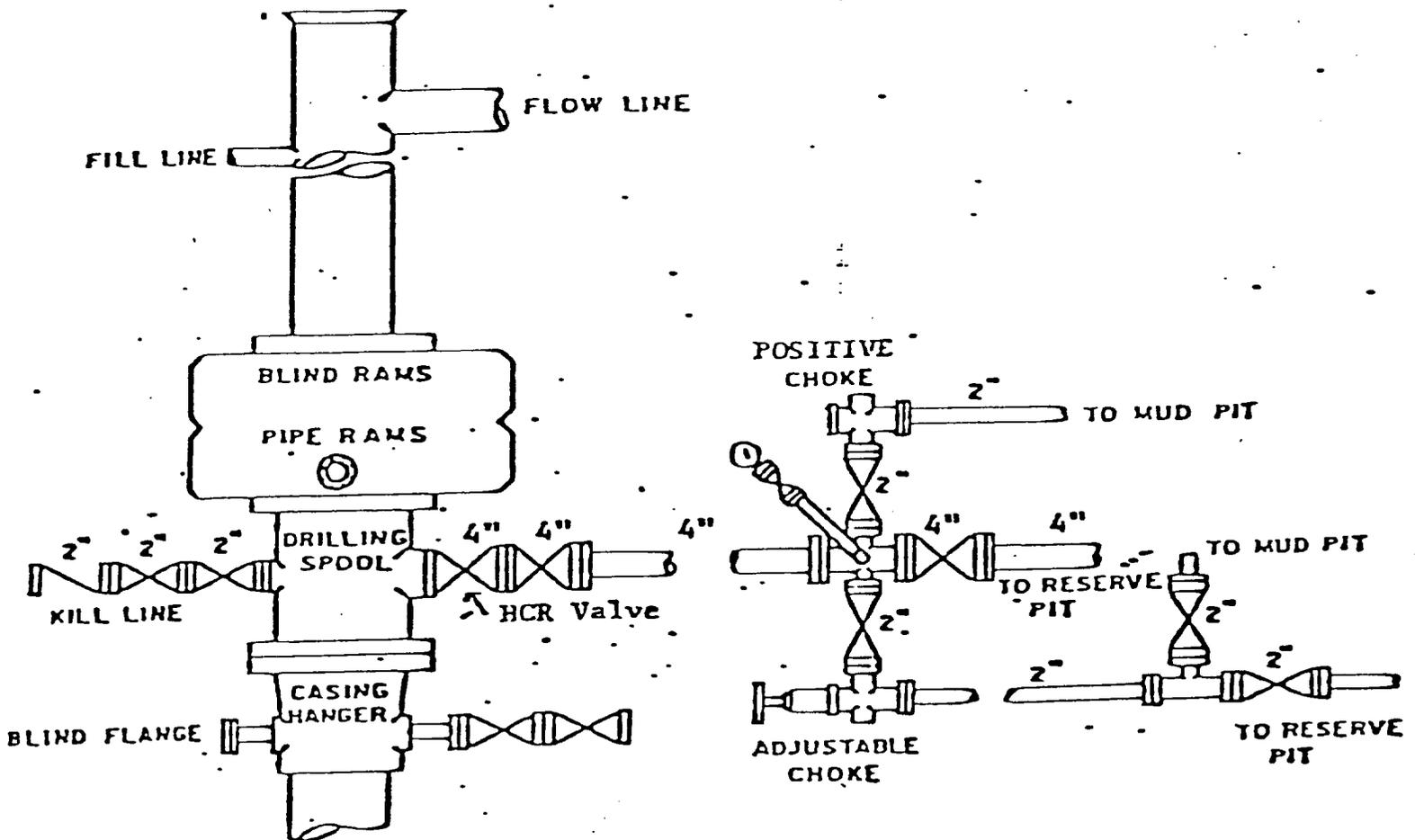


Exhibit "D"
BOP Sketch

Phoenix Resources Company