

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY30-025-86599
5. LEASE DESIGNATION AND SERIAL NO.
NM 34448

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

A. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

B. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

C. NAME OF OPERATOR

AMARILLO OIL COMPANY

D. ADDRESS OF OPERATOR

P.O. BOX 151 AMARILLO, TEXAS 79105

E. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface

1980' FSL AND 660' FWL OF SEC. 18

At proposed prod. zone

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

2-1/2 MILES NORTHEAST OF CROSSROADS, NEW MEXICO

G. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drilg. unit line, if any)

660'

H. NO. OF ACRES IN LEASE

234.92

I. NO. OF ACRES ASSIGNED

TO THIS WELL
157.49

J. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

K. PROPOSED DEPTH

5000'

L. ROTARY OR CABLE TOOL

ROTARY

M. ELEVATIONS (Show whether DF, RT, GR, etc.)

4096 GR

N. APPROX. DATE WORK WILL START*

DECEMBER 15, 1979

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24# K-55	250'	Circulate
7-7/8"	4-1/2"	10.5# K-55	5000'	550 sacks (See attached Supplemental Data)

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA
BOP SKETCH
DEVELOPEMENT PLAN FOR SURFACE USE

GAS IS NOT DEDICATED.

RECEIVED

NOV 21 1979

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

* 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 prevention program, if any.

SIGNED W. D. Smeltzer TITLE DRILLING SUPERINTENDENT DATE 11-20-79

(This space for Federal or State office use)

FORM NO.

APPROVAL DATE

APPROVED

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

DEC 11 1979

ACTING DISTRICT ENGINEER

*See Instructions On Reverse Side

1

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DIVISION

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**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

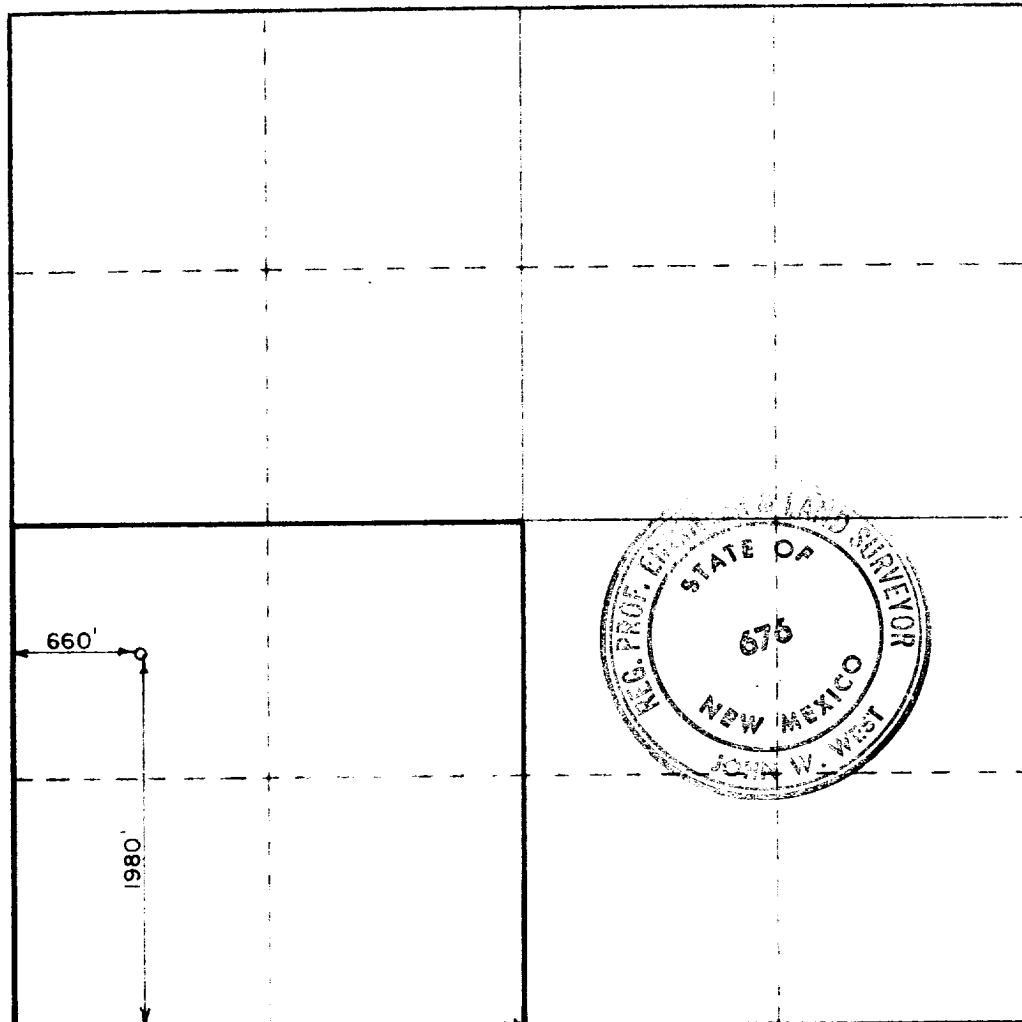
Operator Amarillo Oil Company			Lease Federal 18		Well No. 1
Unit Letter L	Section 18	Township 9 South	Range 36 East	County Lea	
Actual Footing Location of Well: 660 feet from the West line and 1980 feet from the South line					
Ground Level Elev. 4096.0	Producing Formation San Andres		Pool Undesg. Bough San Andres Gas		Dedicated Acreage 157.49 Acres

- 1 Outline the acreage dedicated to the subject well by colored pencil or hachure 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 To be Communitized

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

W.D. Smeltzer

W.D. Smeltzer

Drilling Superintendent

Amarillo Oil Company

11-20-79

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

October 30, 1979

Registered Professional Engineer and Professional Surveyor

John W. West

Certificate No. **John W. West 676**
Ronald J. Eidson 3239

0 330 660 9 1320 1980 2640 3960 5280 6600 7920 9240 10560

SUPPLEMENTAL DRILLING DATA

AMARILLO OIL COMPANY
WELL NO.1 FEDERAL 18
LEASE NM 34448

1. SURFACE FORMATION: Tertiary

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	2200
Yates	2765
San Andres	4035

3. ANTICIPATED POSSIBLE WATER AND HYDROCARBON BEARING ZONES:

Fresh Water	Above	250'
San Andres (Gas)		4750-4800

4. PROPOSED CASING AND CEMENTING PROGRAM:

Casing program is shown on form 9-331 C.

To protect fresh water, surface casing will be set at 250 feet or 50 feet into the Red Beds, whichever is deeper, and will be cemented to the surface.

4-1/2" casing will be, either cemented to the surface with lite-wate cement tailed in with 200 sacks of class "H", or cemented to the surface through a cementing tool located 50' below the top of the Rustler Anhydrite with lite-wate cement tailed in with 100 sacks of class "H" after cementing around the shoe with 200 sacks of class "H" cement.

Cement quantities and additives may be varied to suit well conditions.

5. PRESSURE CONTROL EQUIPMENT:

Blowout preventer stack will consist of two Series 600 ram type preventers.

Sketch of BOP stack is attached.

6. CIRCULATING MEDIUM:

0-250 feet; Fresh water with gel or lime as necessary for control of viscosity.

250-4500 feet; Salt water with salt gel if viscosity control is needed.

4500-5000 feet; Water with gel or other additives as necessary for viscosity and water-loss control.

7. AUXILIARY EQUIPMENT:

Drill string safety valve will be maintained on the rig floor in open position while drilling operations are in progress.

8. TESTING, LOGGING AND CORING PROGRAMS:

One drill stem test may be run if samples and drilling rate indicate that a test is advisable.

It is planned that electric logs will include Sidewall Neutron with Gamma Ray and Dual Laterlog from 4000 feet to Total Depth.

No cores are planned.

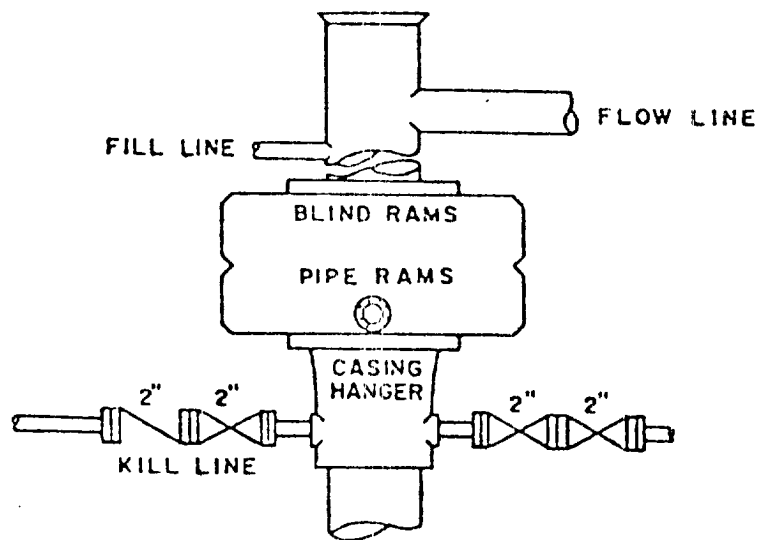
9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE GAS:

None anticipated.

10. ANTICIPATED STARTING DATE:

It is planned that drilling operations will commence about December 15, 1979.

Duration of drilling and completion operations should be about 30 days.



BOP STACK

SERIES 600

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

FOR

AMARILLO OIL COMPANY
WELL NO.1 FEDERAL 18
1980'FSL & 660'FWL SEC.18, T.9 S.,R.36 E.
LEA COUNTY, NEW MEXICO

LOCATED: 2-1/2 air miles northeast of Crossroads, New Mexico.

FEDERAL LEASE NUMBER: NM 34448

LEASE ISSUED: October 1, 1978, for five years.

RECORD LESSEE: Amarillo Oil Company.

ACRES IN LEASE: 234.92

SURFACE OWNERSHIP: Privately owned

POOL: Undesignated Bough San Andres Gas Pool.

POOL RULES: Statewide. 160 acre spacing.

EXHIBITS:

- A. General Road Map
- B. Plat Showing Existing Roads and Existing Wells.
- C. Drilling Rig Layout

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well. To go to the proposed well location from Crossroads, New Mexico, go 2.1 miles north on State Highway 18. Exit Highway 18 to the east on a caliche road and go 2.1 miles and turn south. From this point going south there is a cattle guard at 0.1 mile, an oil well on the right at 0.2 mile and a plugged well marker at 0.5 mile. The proposed well location is 1320 feet south of this plugged well marker.
- B. Exhibit "B" is a plat showing existing roads in the vicinity of the well site. Existing roads are color coded blue.
- C. Any repairs to existing roads do not appear necessary at the present time.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new road will be 12 feet wide and approximately 1300 feet long. The new road is labled and color coded red on Exhibit "B". The center line of the proposed road, from the beginning to the well site, has been staked and flagged with the stakes being visible from any one to the next. It is planned not to surface the well pad and new road initially unless necessary to do so. The new road and well pad will be bladed and graded. If the well is completed for production, the road and well pad will be surfaced.
- B. Surfacing Material: If surfacing is necessary, it will be six inches of caliche, watered, compacted and graded.
- C. Maximum Grade: Probably less than one percent.
- D. Turnouts: None required.
- E. Drainage Design: New road will have a drop of six inches from the center on each side.
- F. Culverts: None required.
- G. Cuts and Fills: None necessary. Only clearing and minor levelling will be required.
- H. Gates and Cattle Guards: None required. No fences involved.

3. LOCATION OF EXISTING WELLS:

A. Existing wells in the immediate area are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. There has been previous development on this lease, however the existing well and facilities are owned by another operator.

B. If the proposed well is productive, the tank battery and flow line will be located on the well pad and no additional surface disturbance will be necessary.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is not contemplated that a water well will be drilled. Water necessary for drilling will be purchased and hauled to the well site over existing and proposed roads shown on Exhibit "B".

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche necessary for road and well pad construction will be obtained from a pit on privately owned land. There are caliche pits located approximately 2 miles northwest of the well site in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 9 S., R. 35 E.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the drilling pit.

B. Drilling fluid will be allowed to evaporate in the drilling pits until the pits are dry.

C. Water produced during tests will be disposed of in the drilling pit. Oil produced during tests will be stored in test tanks until sold.

D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

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 the trash pit is shown on Exhibit "C".

- F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, trash pit, and the location of major rig components.
- B. Only minor levelling of the well site will be required. No significant cut and fill will be necessary.
- C. 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 will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment, all equipment, trash and junk will be removed and the location cleaned. Any special rehabilitation and/or special revegetation requirements of the surface owner will be complied with and accomplished as expeditiously as possible.

11. OTHER INFORMATION:

- A. Topography: The land surface is relatively level. Regional slope is to the southeast.
- B. Soil: The top soil at the well site is a sandy loam.
- C. Flora and Fauna: The vegetative cover is sparse and consists

of mesquite, yucca, shinnery oak, weeds and 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.

E. Residences and Other Structures: The nearest occupied dwelling is one mile southwest. The nearest windmill is there also.

F. Archaeological, Historical and Cultural Sites: None observed in the area.

G. Land Use: Grazing.

H. Surface Ownership: Privately Owned.

12. OPERATOR'S REPRESENTATIVE:

The representative responsible for assuring compliance with the approved Surface Use Plan is:

W. D. Smeltzer
P. O. Box 151
Amarillo, Texas 79105
Office Phone: 806-378-3391
Home Phone: 806-353-6001

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Amarillo Oil Company and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

11-20-79
Date

W. D. Smeltzer
W. D. Smeltzer, Drilling Superintendent

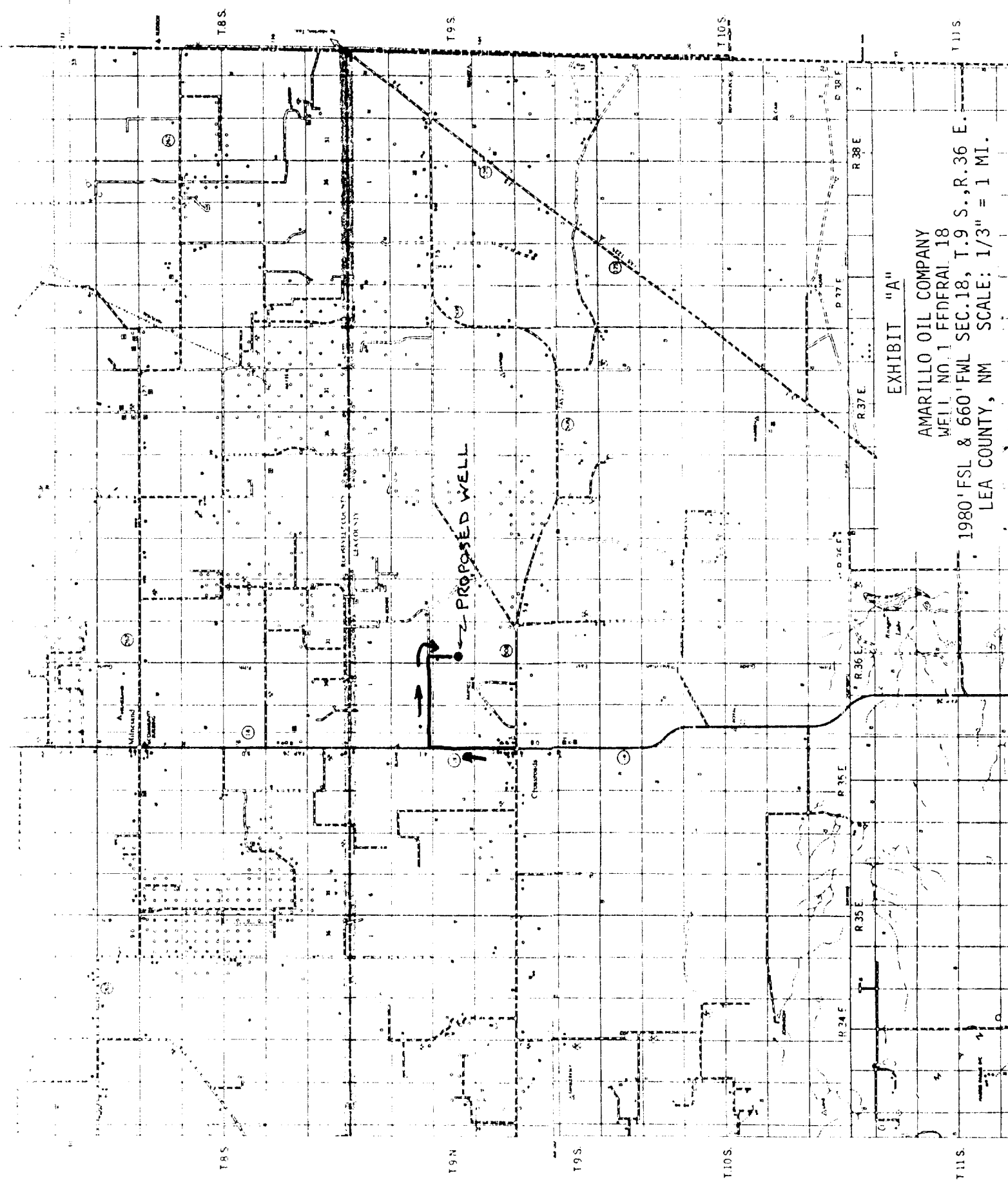
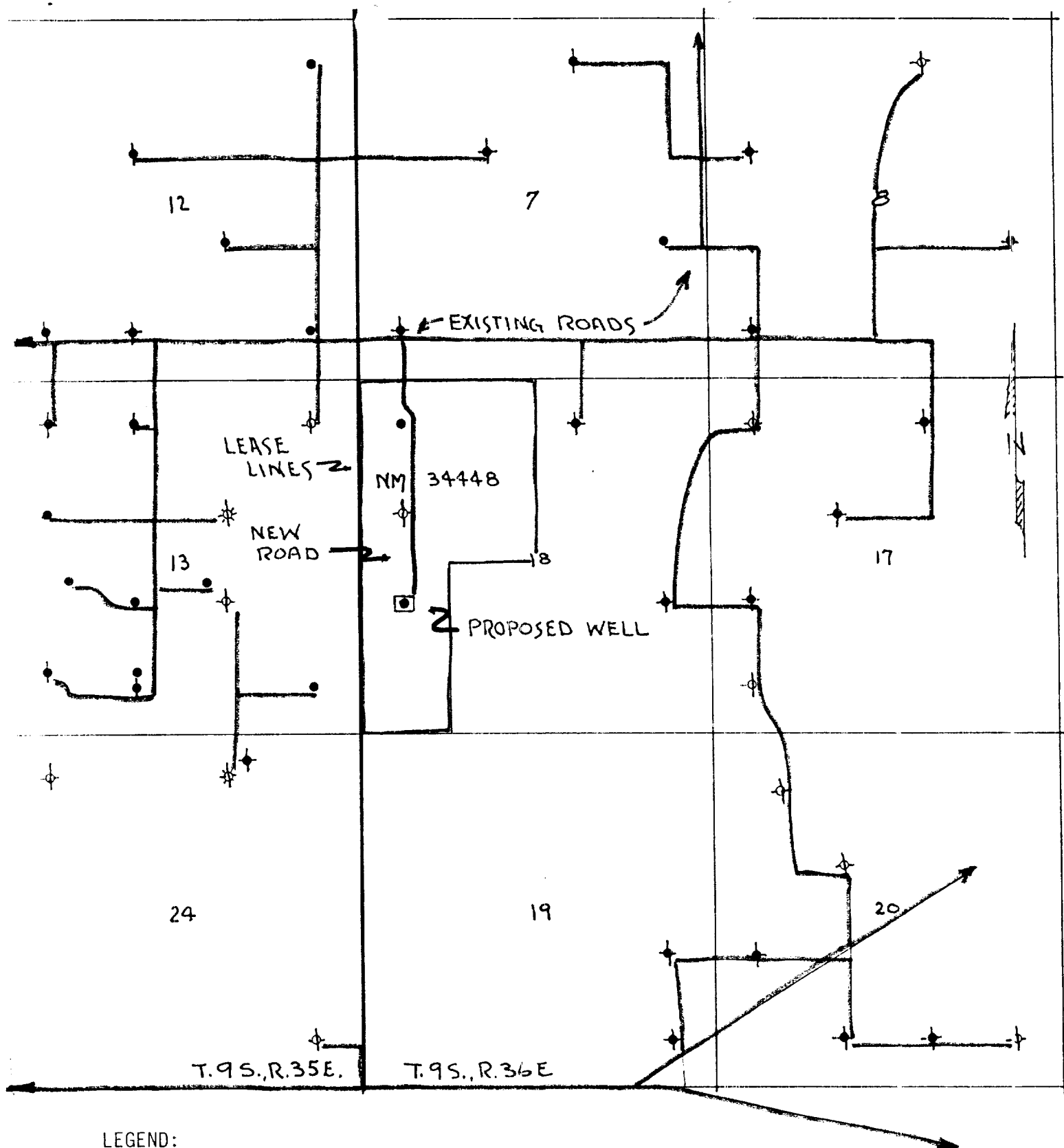


EXHIBIT "A"

AMARILLO OIL COMPANY
WELL NO. 1 FEDERAL 18
1980' FSL & 660' FWL SEC. 18, T. 9 S., R. 36 E.
LEA COUNTY, NM SCALE: 1/3" = 1 MI.



LEGEND:

- Oil Well
- ☆ Gas Well
- ⊕ Plugged Well
- Proposed Well
- Existing Road
- - - New Road

EXHIBIT "B"

AMARILLO OIL COMPANY
 WELL NO. 1 FEDERAL 18
 1980'FSL & 660'FWL SEC.18, T.9 S., R.36 E.
 LEA COUNTY, NM SCALE: 1" = 2000'

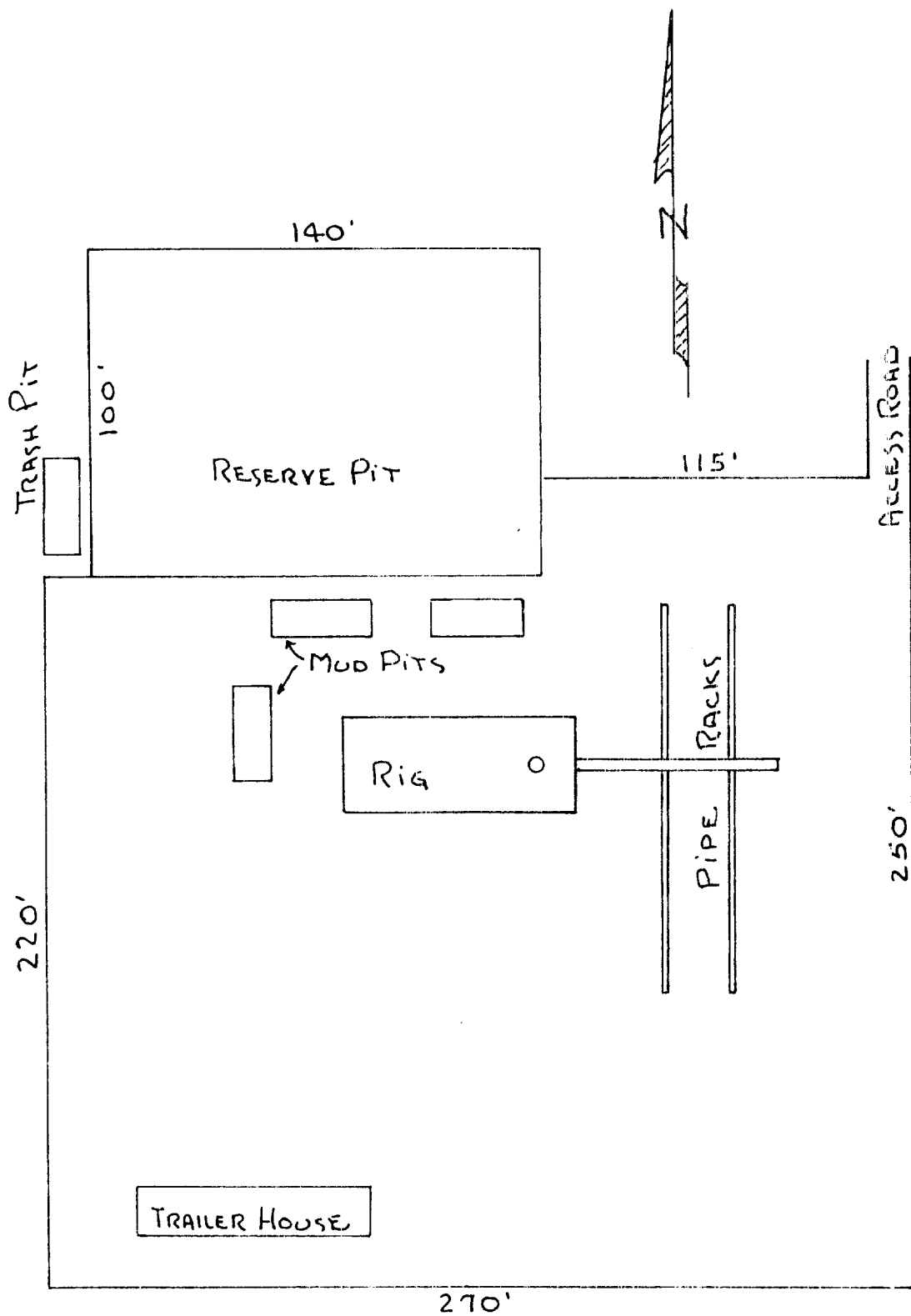


EXHIBIT "C"

RIG LAYOUT
 AMARILLO OIL COMPANY
 WELL NO.1 FEDERAL 18
 SCALE: 1" = 50'



SUITE 800, PLAZA ONE / P. O. BOX 151, AMARILLO, TEXAS 79105 / (806) 376-4841

W. D. SMELTZER
Drilling Superintendent

November 13, 1979

U. S. Geological Survey
P. O. Box 1157
Hobbs, New Mexico 88240

Re: Federal 18 Well #1
Lea County, New Mexico

Gentlemen:

Depicted below will be the agreement between Amarillo Oil Company and Mr. Milton Bonds for restoration of the location, reserve pit and road in the event of a dry hole and producer.

Producing Well

If road and location are prepared without caliche, caliche will be added to road and location if deemed necessary. Reserve pit will be dried up. This will probably entail hauling mud to a pit and Mr. Bonds said they have been using the pit in Section 5-T9S-R36E. After pit is dried up, it will be leveled and seeded with grass. The location and road will remain the same, caliched or uncaliched.

Dry Hole

If location and road are prepared using caliche, the caliche will be picked up off the location only and hauled to the existing pit in Section 5. The reserve pit would be dried up as before described, pit and location leveled and then seeded with grass.

This is basically our agreement except for possible minor adjustments.

Very truly yours,

W. D. Smeltzer
W. D. Smeltzer

/et