

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN ***PLICATE***
(Other inst. forms on
reverse side)Form approved.
Budget Bureau No. 42-R1425.

30-005-61505

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Sun Oil Company

3. ADDRESS OF OPERATOR

P.O. Box 1861, Midland, Texas 79702

RECEIVED

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

At surface

660' FNL & 1980' FEL, Unit Ltr. "B"

At proposed prod. zone

Abo or Penn

MAR 18 1982

O. C. D.

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

19 miles NE of Roswell

ARTESIA, OFFICE

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

Wildcat NONE

N 660' Abo

16. NO. OF ACRES IN LEASE

480

17. NO. OF ACRES ASSIGNED
TO THIS WELL

Oil 320 Wildcat / Gas 160 Abo

18. DISTANCE FROM PROPOSED LOCATION*

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

2600'

19. PROPOSED DEPTH

6800'

20. ROTARY OR CABLE TOOLS

Rotary

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

3719.0' GR

22. APPROX. DATE WORK WILL START*

ASAP

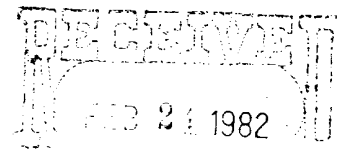
23.

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 17 1/2" | 13-3/8" | 48# | 300 | 320 CIRCULATE |
| 12 1/4" | 8-5/8" | 24# | 1600 | 650 CIRCULATE |
| 7-7/8" | 5 1/2" | 14# | 5100 | 700 |
| 7-7/8" | 5 1/2" | 15.5# | 1600 | |

See attachments

GAS NOT DEDICATED.

OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, 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.

24.

SIGNED

Maria L. Perez

TITLE

Sr. Acctg. Assist

DATE

2-23-82

(This space for Federal or State office use)

PERMIT NO.

APPROVED

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

MAR 15 1982

JAMES A. GILLHAM
DISTRICT SUPERVISOR

APPROVAL DATE

APPROVAL SUBJECT TO

TITLE

GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

ATTACHED.

DATE

*See Instructions On Reverse Side

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

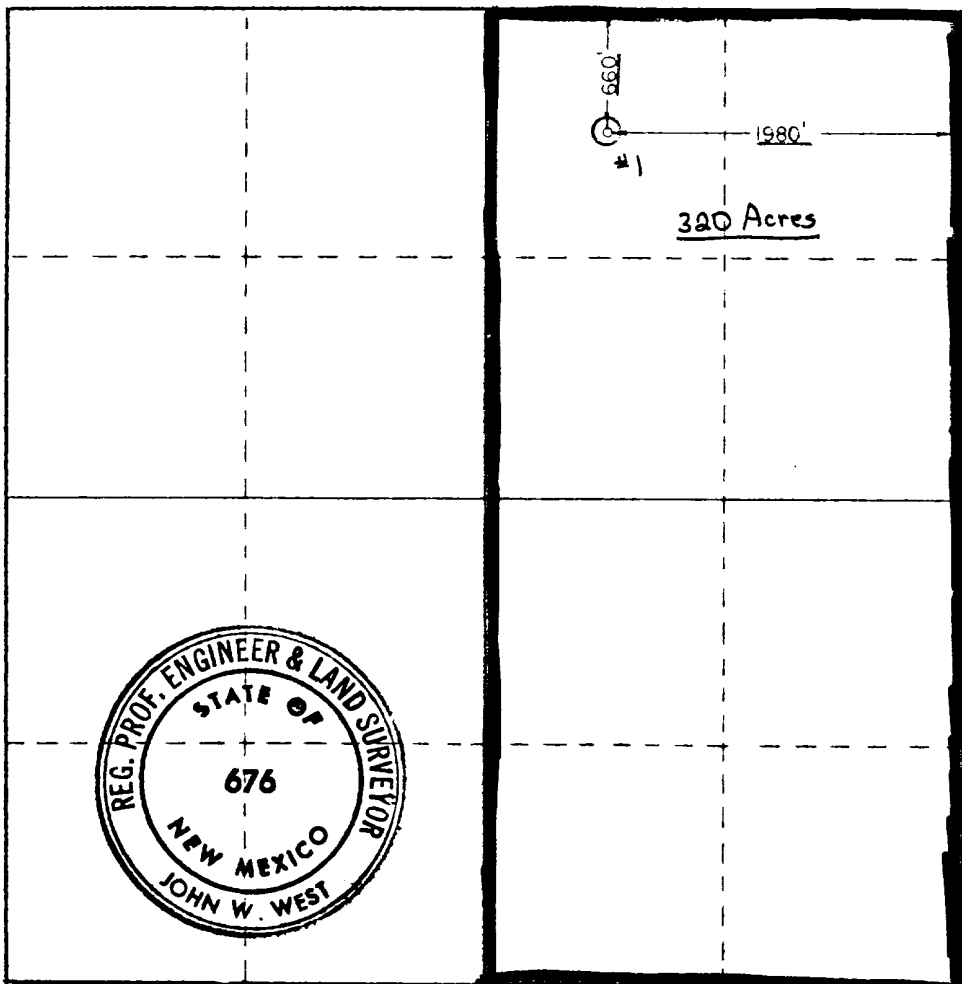
| | | | | |
|---|---|--------------------------------|-------------------------------------|-----------------------|
| Operator: Sun Production Company | | Lease: Chaves A Federal | | Well No. 1 |
| Unit Letter: B | Section: 21 | Township: 7-S | Range: 26-E | County: Chaves |
| Actual Footage Location of Well: 660 feet from the North line and 1980 feet from the East line | | | | |
| Ground Level Elev. 3719.0 | Producing Formation Wildcat / Penn | Pool Wildcat | Dedicated Acreage: 320 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 interests of all owners been consolidated by communitization, 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 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.

DeAnn Kemp
Name
Accounting Asst II
Position
Sun Oil Company
Company

2-23-82
Date
DeAnn Kemp

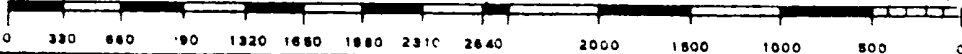
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

12/11/81

Date Surveyed

Registered Professional Engineer
and/or Land Surveyor

John W. West
Certificate No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6863
Ronald J. Fiddan 3239



SUN EXPLORATION AND PRODUCTION COMPANY
SUN PRODUCTION DIVISION

CHAVES "A" FEDERAL No. 1
SEC. 21, T-7-S R-26-E
660' FNL & 1980' FEL
CHAVES COUNTY, NEW MEXICO
FEDERAL LEASE #N.M. 022584

In conjunction with form 9-331C, Application for Permit to Drill subject well, Sun Production Division submits the following ten items of pertinent information in accordance with the Mineral Management Services requirements:

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

| | |
|------------|-------|
| San Andres | 900' |
| Abo | 3920' |
| Penn | 5220' |

3. Anticipated hydrocarbon bearing zones:

| | |
|------|-------|
| Abo | 3920' |
| Penn | 5220' |

4. Proposed casing program:

| Size | Footage | Grade | Wt/Ft |
|---------|---------|-------|------------|
| 13-3/8" | 300 | H-40 | 48 - New |
| 8-5/8 | 1600 | K-55 | 24 - New |
| 5-1/2 | 5100 | K-55 | 14 - New |
| 5-1/2 | 1600 | K-55 | 15.5 - New |

- 5 & 7. Pressure control equipment: See attached sheet*

6. Type and mud system characteristics:

| From | To | Wt (lbs/ft) | WL | Vis | Type Mud |
|------|------|-------------|----|-------|------------------------------------|
| 0 | 300 | 8.5- 9.5 | NC | 36-40 | Spud - Mud |
| 300 | 1600 | 8.5-10.0 | NC | 32-36 | Freshwater gel, lime |
| 1600 | 3600 | 9.5-10.0 | NC | 28-32 | Cut brine lime |
| 3600 | 6700 | 9.5-10.0 | 10 | 36-38 | Saltwater gel starch w/3-5% oil |

8. Testing, logging and coring program:

Drill stem tests:(all DST's to be justified by a valid show of oil): Penn 5220'

Logging: Schlumberger to log as follows:

Dual Lateral Log, Micro-Spherical Focus log, from casing to TD
CNL/FDC log, from TD to surface

Coring: None

9. No abnormal pressures, temperatures or H₂S is expected to be encountered.
10. Estimated starting: As soon as possible - subject to approval of permit and data presented herein.


Wayne Goodwyn
District Drilling Manager

SUN EXPLORATION AND PRODUCTION COMPANY

CHAVES "A" FEDERAL No. 1

Attachment*

Page 2 of 3

- 5 & 7. After setting the 8-5/8" casing string and before drilling into the Abo formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures. 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.

Pipe rams and the annular-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.

Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.

A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.

Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.

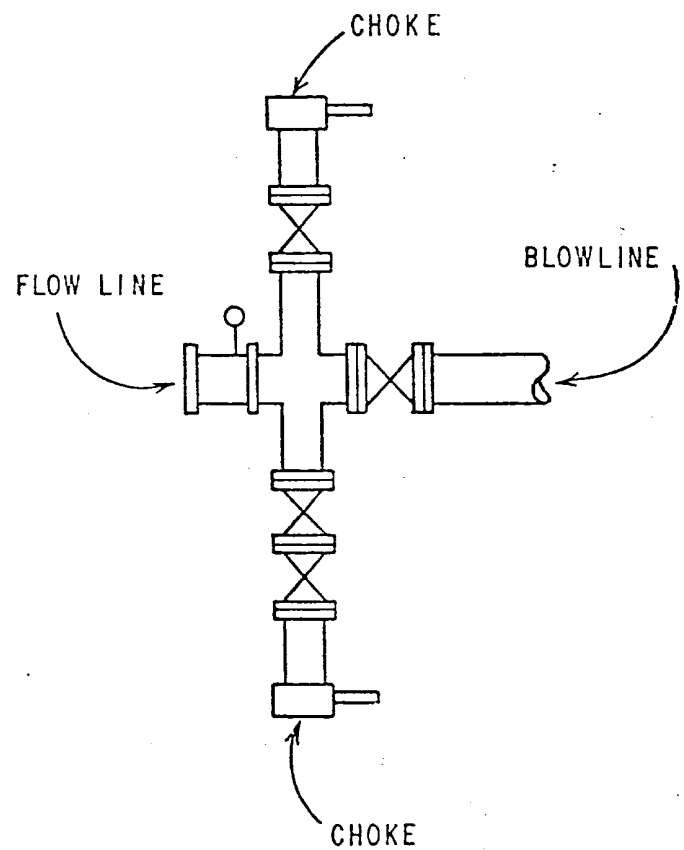
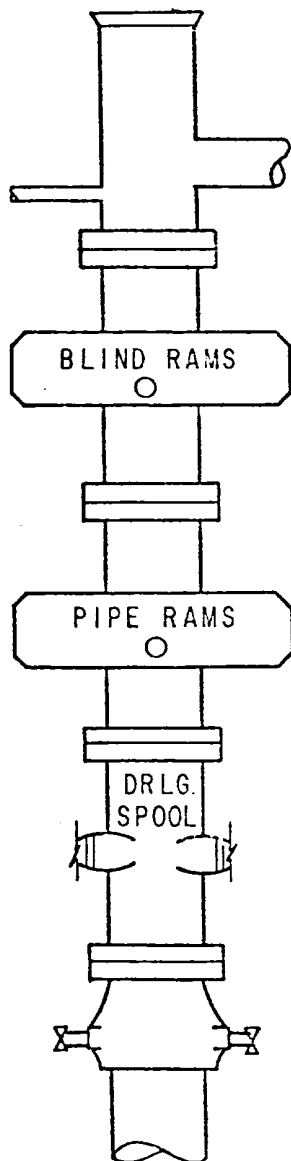
Good drilling practices will be implemented on the duration of this well. Visual monitoring of pit levels will be continual to allow for detection, before or during, of possible problems or well kicks. This will allow for quick action to deal with the successful handling of a well kick.

When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.

A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

BLOWOUT - PREVENTER ASSEMBLY

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MULTI-POINT SURFACE USE AND OPERATION PLAN

SUN EXPLORATION AND PRODUCTION COMPANY
SUN PRODUCTION DIVISION

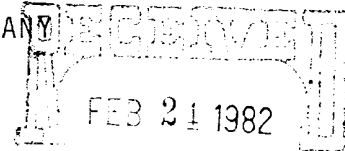
CHAVES "A" FEDERAL No. 1

SEC. 21, T-7-S R-26-E

660' FNL & 1980' FEL

CHAVES COUNTY, NEW MEXICO

FEDERAL LEASE #N.M. 022584



OR & C-3
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance 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. Exhibit "A" & "B" are a portion of topographic and county map illustrating the proposed well as staked. Directions to the location are as follows:

From Roswell travel northeast on Highway 70, nineteen miles to the Old Rock School House on the north side of the road. Turn north on the dirt road and travel seven and one-half miles. Turn west on lease road and travel one-half mile to another dirt road, turn south to location.

- B. Exhibit "C" is a plat illustrating all wells within a two mile radius of the wellsite and the access roads.

- C. No repair to the existing roads will be necessary.

2. Planned Access Roads

Exhibit "A" is a plat illustrating the wellsite and the planned access road.

- A. Length and width: The new road required will be 20 feet wide and approximately 50 feet long. This new road is labeled and color coded red on Exhibit "A". The center line of the proposed new road from the beginning to the wellsite, has been staked and flagged with the stakes being visible from one end to the next.
- B. Surface material: Six inches of caliche, water compacted and graded.
- C. Maximum grade: Three percent.
- D. Turnouts: None required on this short roadway.
- E. Drainage design: New road will be 20 feet wide and crowned for drainage.

MULTI-POINT SURFACE USE AND OPERATION PLAN
SUN EXPLORATION AND PRODUCTION COMPANY
CHAVES "A" FEDERAL No. 1

- F. Culverts: It is anticipated no culvert will be required.
- G. Cuts and fills: None anticipated
- H. Gates and cattleguards: None required
- 3. Location of Existing Wells:
 - A. Existing wells within a two mile radius are illustrated on Exhibit "C".
- 4. Location of Existing and/or Proposed Facilities:
 - A. Construct tank battery on well pad and no additional surface disturbance will occur.
- 5. Location and Type of Water Supply:
 - A. Purchase and haul water over existing roads illustrated on Exhibit "A" and "C".
- 6. Source of Construction Materials:
 - A. Caliche for surfacing the access roads and the well pad will be obtained from an exiting pit in the SW/4 SE/4 of Section 15, T7S, R26E. This pit has been cleared by the BLM.
- 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 test will be disposed of in the drilling pits. 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 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown on Exhibit "D".
 - 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:
 - None required.
- 9. Wellsite Layout:
 - A. Exhibit "D" shows the dimensions of the well pad and reserve pits and the location of the major rig components.
 - B. Only minor levelling of the wellsite will be required. No significant cuts or fills will be necessary.

MULTI-POINT SURFACE USE AND OPERATION PLAN
SUN EXPLORATION AND PRODUCTION COMPANY
CHAVES "A" FEDERAL No. 1

page 3

- 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 location cleaned of all trash and junk to leave the 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 location will be cleaned. The pit area, well pad, and all unneeded access road will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment. (Alternate if on Federal surface - after abandonment, any special rehabilitation and/or revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. All pits should be filled and levelled within 90 days after abandonment.)

11. Other:

- A. Topography: The land surface is generally flat with some rolling hills.
- B. Soil: Soil is a silty clay loam and a sandy clay loam with occasional inclusions of chert, quartzite and limestone gravels.
- C. Flora and Fauna: The vegetation consists of yucca, mesquite, rabbit bush and perennial native range grass. Wildlife in the area includes coyotes, rabbits, rodents, reptiles, quail, dove and an occasional antelope.
- D. Ponds and Streams: Pecos River is located approximately one mile to the west.
- E. Residences and other structures: There are two occupied dwellings in the area. One is three-quarters of a mile to the southwest and another about three-quarters of a mile to the northwest.
- F. Archeological, Historical and Cultural Sites: None were observed in the area.
- G. Land Use: Cattle grazing and hunting in season.
- H. Surface Ownership: Wellsite is on Federal surface.

MULTI-POINT SURFACE USE AND OPERATION PLAN
SUN EXPLORATION AND PRODUCTION COMPANY.

CHAVES "A" FEDERAL No. 1

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12. Operator's Representative:

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

Name: Wayne Goodwyn
Address: 901 W. Wall, Midland, Texas 79701
Office Phone: (915) 685-0303
Home Phone: (915) 697-2950

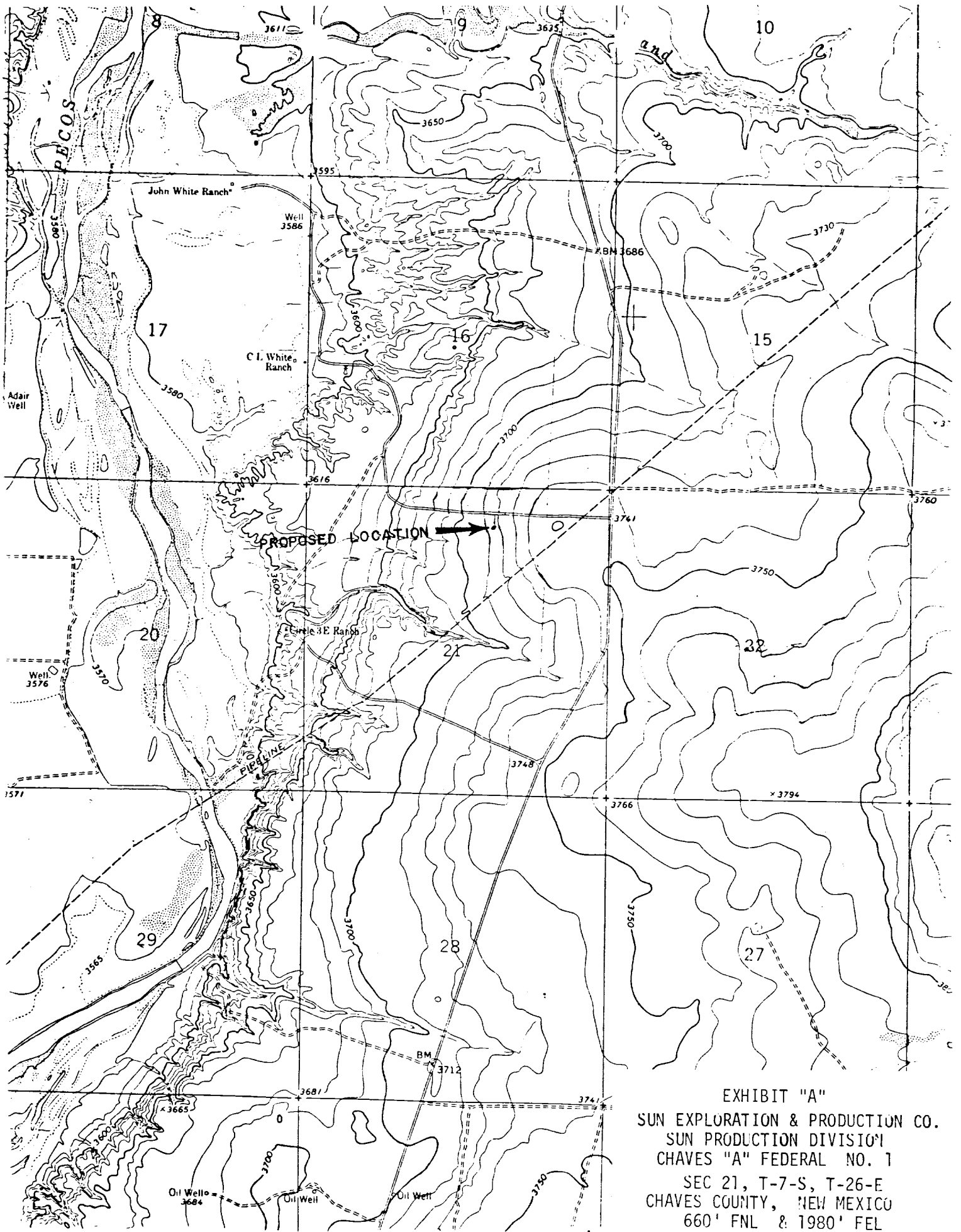
Name: Jerry McCarver
Address: 901 W. Wall, Midland, Texas 79701
Office Phone: (915) 685-0301
Home Phone: (915) 683-5943

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 Sun Exploration and Production Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date February 22, 1982


Wayne Goodwyn
District Drilling Manager



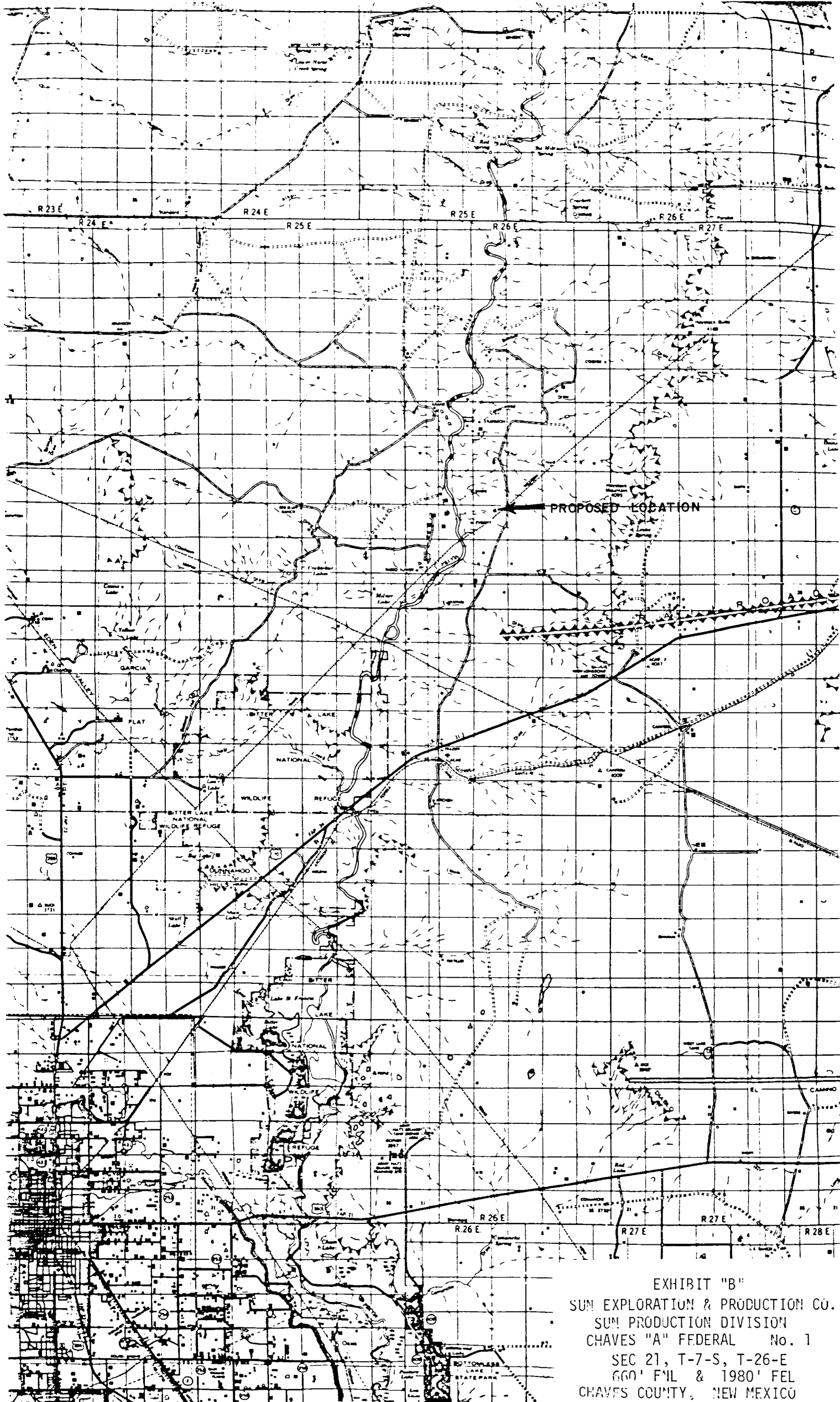


EXHIBIT "B"
SUN EXPLORATION & PRODUCTION CO.
SUN PRODUCTION DIVISION
CHAVES "A" FEDERAL No. 1
SEC 21, T-7-S, T-26-E
660' FNL & 1980' FEL
CHAVES COUNTY, NEW MEXICO

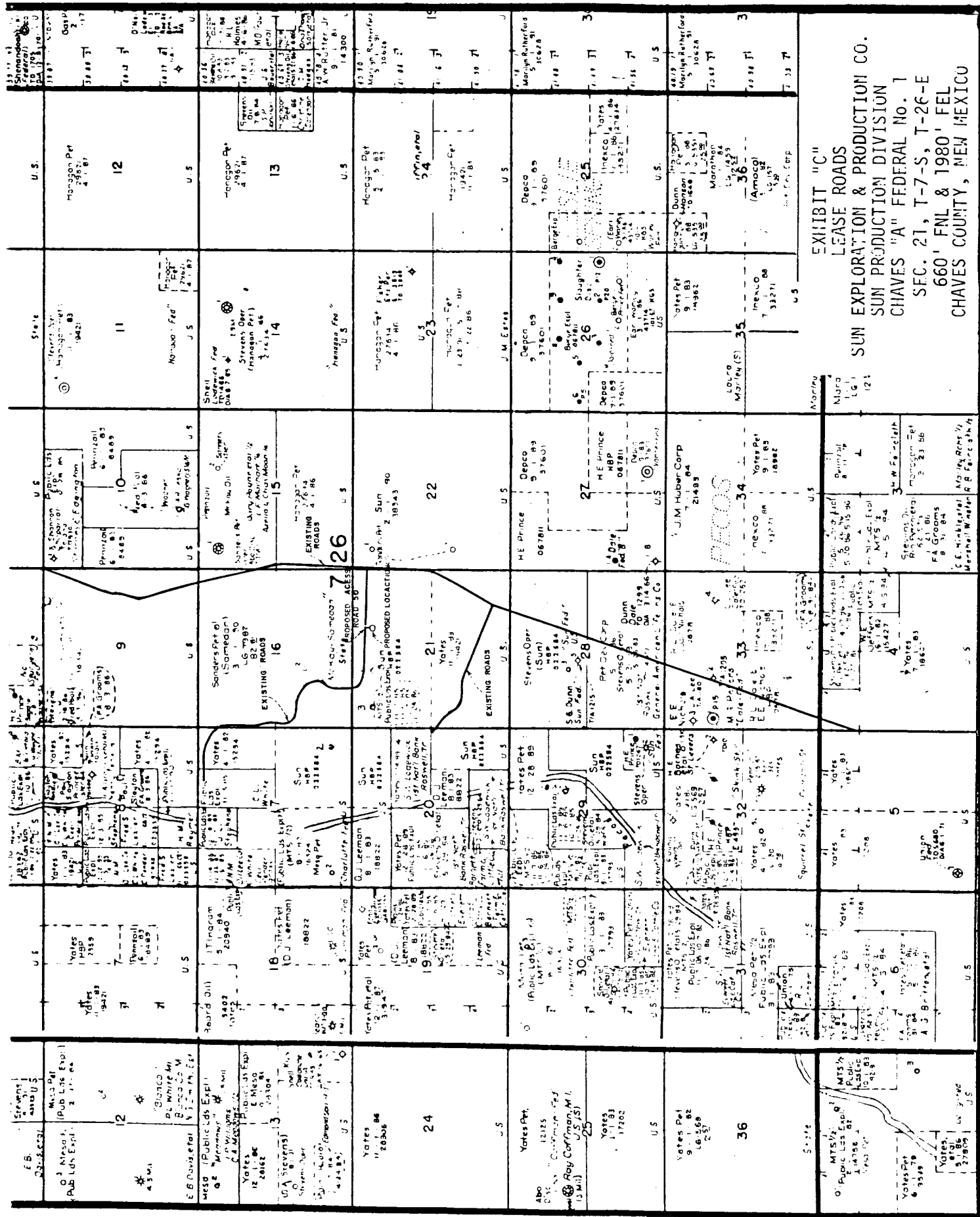
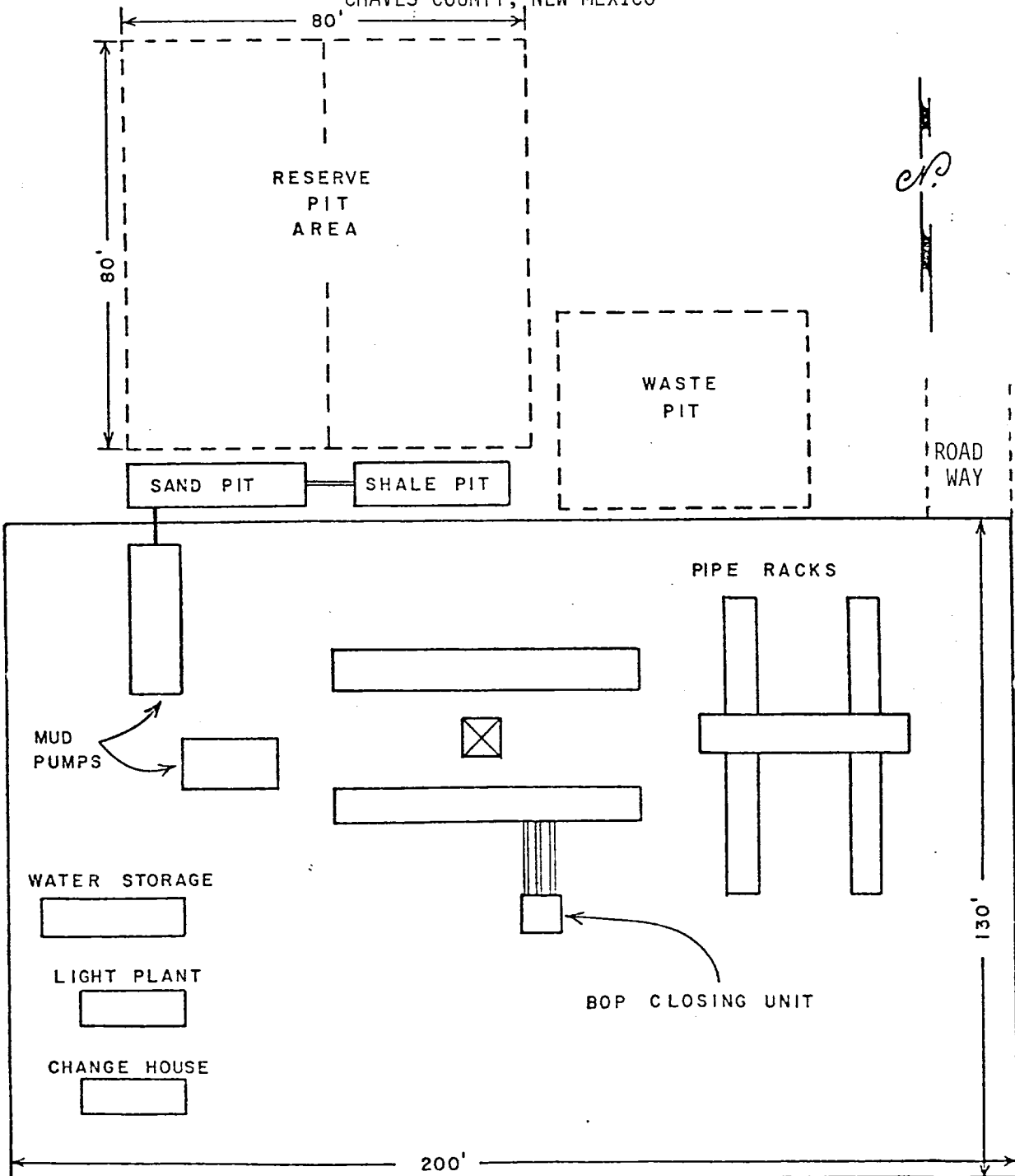


EXHIBIT "D"

SUN EXPLORATION & PRODUCTION CO.
SUN PRODUCTION DIVISION

CHAVES "A" FEDERAL NO. 1

SEC. 21, T-7-S, T-26-E
660' FNL & 1980' FEL
CHAVES COUNTY, NEW MEXICO





STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
ARTESIA DISTRICT OFFICE

March 19, 1982

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

P.O. DRAWER DD
ARTESIA, NEW MEXICO 88210
(505) 748-1283

Sun Oil Company
P.O. Box 1861
Midland, Texas 79702

Re: Chaves "A" Federal
#1-B-21-7-26
Chaves County, New Mexico

Gentlemen:

We hereby acknowledge receipt of the Application For Permit to Drill the subject well, approved by the USGS on March 15, 1982.

However, Form 9-331C has the operator as Sun Oil Company, Form C-102 has the operator as Sun Production Company, and you are dedicating the East 1/2 section to the Penn. This is an unorthodox location according to Division Rules and you must dedicate the North 1/2 or get the NSL approved by our Santa Fe office.

Further we just recently processed changes in operator name on all your wells from Sun Oil Company to Sun Exploration and Production Company.

Please contact this office at your earliest convenience concerning this matter.

Sincerely,

W.A. Gressett

WAG:mm