

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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

SUNDANCE OIL COMPANY

## 3. ADDRESS OF OPERATOR

Suite 510, 1776 Lincoln St., Denver, CO 80203

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

At surface

1980' FNL and 1980' FEL

Unit G

At proposed prod. zone

San Andres

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

15<sup>1</sup>/<sub>2</sub> miles Southeast of Kenna, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

660

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

1320

## 16. NO. OF ACRES IN LEASE

560

## 19. PROPOSED DEPTH

4350

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

## 20. ROTARY OR CABLE TOOLS

Rotary Tools

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

4450.7' GL

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

On Approval

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11	8 5/8	28	1750	260 sx Econ & 100 sx Class C
7 7/8	4 1/2	11.60 & 10.5	4350	300 sx 50/50 Poz

Well will be drilled to TD and evaluated, if further evaluation is required, will log to determine if casing will be run.

Unless Drilling Operations have  
Commenced, this drilling approval  
Expires 12-29-77

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

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

Richard O. Dimit

TITLE Chief Engineer

DATE September 13, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

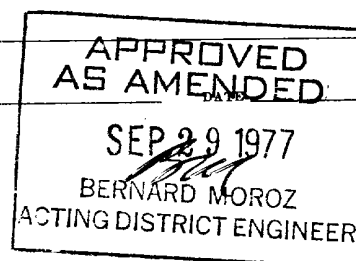
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

"APPROVAL TO FLARE GRANTED  
WHILE DRILLING AND TESTING."

\*See Instructions On Reverse Side



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JUL 17 1977  
U. S. GOVERNMENT PRINTING OFFICE  
WASHINGTON, D. C. 20540

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

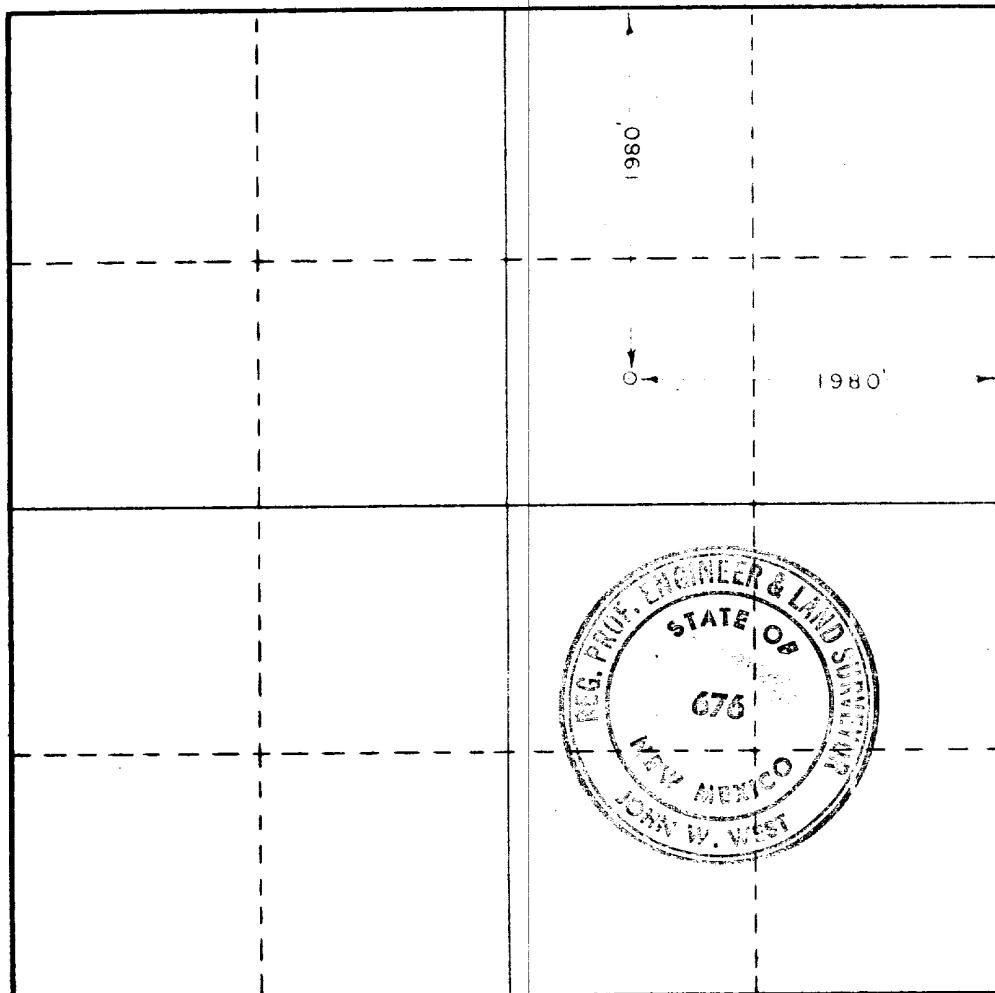
Operator <b>SUNDANCE OIL COMPANY</b>		Lease <b>Cone-Federal</b>		Well No. <b>3</b>
Unit Letter <b>G</b>	Section <b>31</b>	Township <b>7 South</b>	Range <b>32 East</b>	County <b>Roosevelt</b>
Actual Footage Location of Well: <b>1980</b> feet from the <b>north</b> line and <b>1980</b> feet from the <b>east</b> line				
Ground Level Elev. <b>4450.7</b>	Producing Formation <b>SAN ANDRES</b>	Pool <b>UNDESIGNATED</b>	Dedicated Acreage: <b>40</b> 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 \_\_\_\_\_

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.

*Richard O. Dimit*  
Name

Richard O. Dimit

Position

Chief Engineer

Company

Sundance Oil Company

Date

September 13, 1977

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

Aug. 15, 1977

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No.

676



RECEIVED  
OCT 13 1977  
OIL CONSERVATION COMM.  
HOBBS, N. M.

Attachment to Form 9-331 C  
Application for Permit to Drill

Sundance Oil Company, #3 Cone Federal  
1980' FNL and 1980' FEL of Section 31, T. 7S., R. 32E.  
Roosevelt County, New Mexico

1. The geologic name of the surface information is Triassic red beds overlain by wind blown sands.
2. The estimated tops of important geologic markers are as follows:

Rustler	1730'
Salado	1770'
Yates	2160'
San Andres	3290'
P-1	4000'
P-2	4080'
T.D.	4200'

3. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations will be encountered are as follows:

Ogalala	150' water
Salado	1770' salt
San Andres	3290' oil and gas
P-1	4000' oil and gas
P-2	4080' oil and gas

4. The proposed casing program is as follows:

Surface - New 8 5/8", 28 lb/ft., ST&C, Secondary 45 (J&L).  
Production - New 4 1/2", 10.5 lb/ft., ST&C, K-55 and 11.6 lb/ft.,  
ST&C, JCW-36 (J&L).

5. A sketch of an API Series 900 Blowout Preventer is attached. Pipe rams and blinds will be checked to 1,000 PSI for 30 minutes when BOP is installed. BOP will be checked when casing is set and operated daily for checks.

6. The proposed mud program is as follows:

0-1800' spud mud	8.5 - 9.0 lbs./gal.
1800-3800' native mud	9.0 - 9.5 lbs./gal.
3800' to TD salt gel	9.0 - 10.0 lbs./gal.

Attachment to Form 9-331 C  
Application for Permit to Drill  
Cone Federal #3  
Page Two

7. The auxiliary equipment to be used is:

- (1) Kelly cocks.
- (2) Floats at the bit.
- (3) Stabbing valve on rig floor with sub to fit drill pipe.

8. It is proposed to run 2" and 5" GR, CNL, FDC, DLL/MLL Logs from TD to 1800'.

9. No abnormal pressures or temperatures are expected to be encountered in this well.

10. The anticipated starting date for this well is November 20, 1977. Estimated duration of drilling operations is 10 to 12 days.

## SURFACE USE PLAN

Sundance Oil Company: Cone Federal #3  
1980' FNL and 1980' FEL of Section 31, T. 7S., R. 32E.  
Roosevelt County, New Mexico

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately  $15\frac{1}{2}$  miles SSE of Kenna, New Mexico. The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the well may have on the environment of the well and road sites and surrounding acreage.

### 1. Existing Roads

- A. The proposed well site is 1980' FNL and 1980' FEL of Section 31, T. 7S., R. 32E., Roosevelt County, New Mexico.
- B. Exhibit "A" is portion of a map showing existing roads with directions to the location from Kenna, New Mexico. The route to the location is marked in red along side of roads to be used. The well location is approximately  $15\frac{1}{2}$  miles SSE of Kenna, New Mexico.
- C., D. & E. Access roads are shown on Exhibit "A".
- F. No improvement or maintenance is anticipated for the existing roads.

### 2. Planned Access Roads

- A. No road shall be required.
- B. Turnouts: None.
- C. Drainage Design: New road will have a drop of 6 inches from center line on each side.
- D. Culverts, Cuts and Fills: Culverts - none. The location and pits will be constructed as shown on Exhibit C. Maximum cut will be 3' on the east and maximum fill will be 3' on the west of the location, other than leveling sand dunes.
- E. Surfacing Material: Six inches of caliche, bladed, watered and compacted.
- F. Gates, Cattleguards, Fences: None.
- G. The proposed road is existing.

### 3. Location of Existing Wells

- A. See Exhibit B.

4. Location of Existing and/or Proposed Facilities

- A. There is an existing tank battery with production facilities and lines owned by the lessee/operator on this lease.
- B. If commercial production is established, facilities and lines will be connected to this existing battery. Pads for equipment will be made with caliche. Facilities will be fenced and/or covered to protect livestock and wildlife.
- C. All unused areas disturbed by construction will be restored to natural terrain profile after construction is completed.

5. Location and Type of Water Supply

- A. Water will be obtained from well at Kenna and/or Crossroads.
- B. Water will be transported by truck.

6. Source of Construction Materials

- A. Caliche will be obtained from a pit in Section 7, T. 7S., R. 32E. Fee minerals owned by F. P. Southard.

7. Methods for Handling Waste Disposal

- A. Waste Disposal - well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible locations within drill site area during drilling and completion procedures. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" of dirt. See Exhibit C for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted to the survey for appropriate approval.

8. Ancillary Facilities: None.

9. Well Site Layout

- A. Exhibit C shows the relative location and dimensions of the well pad, mud pit, reserve pit, trash barrel, etc. The reserve pit will be lined with plastic. The pad and pits are staked.

10. Plans for Restoration of Surface

- A. Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement.



11. Other Information

- A. Terrain: Low rolling sand hills.
- B. Soil: Sandy.
- C. Vegetation: Scrub oak, bear grass and very sparse vegetation.
- D. Surface Use: Grazing.
- E. Ponds and Streams: None within one mile.
- F. Water Wells: One mile northwest of location.
- G. Residences and Buildings: Three miles northwest of location.
- H. Arroyos, Canyons, Etc.: Caprock escarpment approximately one mile west of location.
- I. Well Sign: Sign identifying and locating well will be maintained at drill site with the spudding of the well.
- J. Open Pits: All pits containing mud or other liquids will be fenced.
- K. Archaeological Resources: None observed.

12. Lessee's or Operator's Representative

Richard O. Dimit  
Sundance Oil Company  
Suite 510, 1776 Lincoln St.  
Denver, CO 80203

Business phone: (303) 825-7657

Home phone: (303) 841-4592

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 SUNDANCE OIL COMPANY and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

9/13/77  
Date

Richard O. Dimit  
Richard O. Dimit  
Chief Engineer

SUNDANCE OIL CO.  
P.O. BOX 115  
Roswell, N.M. 88201  
September 19, 1977

USGS  
PO Box 1157  
205 N. Linam Street  
Hobbs, NM 88240

Re: Agreement with Surface Land-  
owner - Sundance Oil Co.  
#3 Cone Fed., Sec. 31-T7S-  
R32E., 1980' FN & EL,  
Roosevelt Co., NM

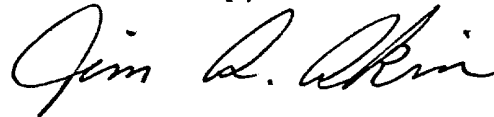
Dear Sir:

This is to certify that in regard to captioned well, Sundance Oil Co. has an agreement with the surface owner in regard to the surface restoration.

If this well is completed as a producing well, the pits are to be filled and covered and the location cleaned of all trash and junk in order to leave the wellsite in an aesthetically pleasing condition. Prior to the filling of the pits any unguarded pit containing fluid will be fenced.

If the well is completed as a dry hole and plugged and abandoned, pits will be covered, and location cleaned of all trash and junk. The road will remain in place. The drilling pad will either remain or be ripped at the landowner's option.

Sincerely,



Jim A. Akin  
Field Superintendent  
Permian Basin Area

April 21, 1977

AGREEMENT

Sundance Oil Co. agrees to pay \$100.00 each time they cut and set a cattle guard in the fence line.

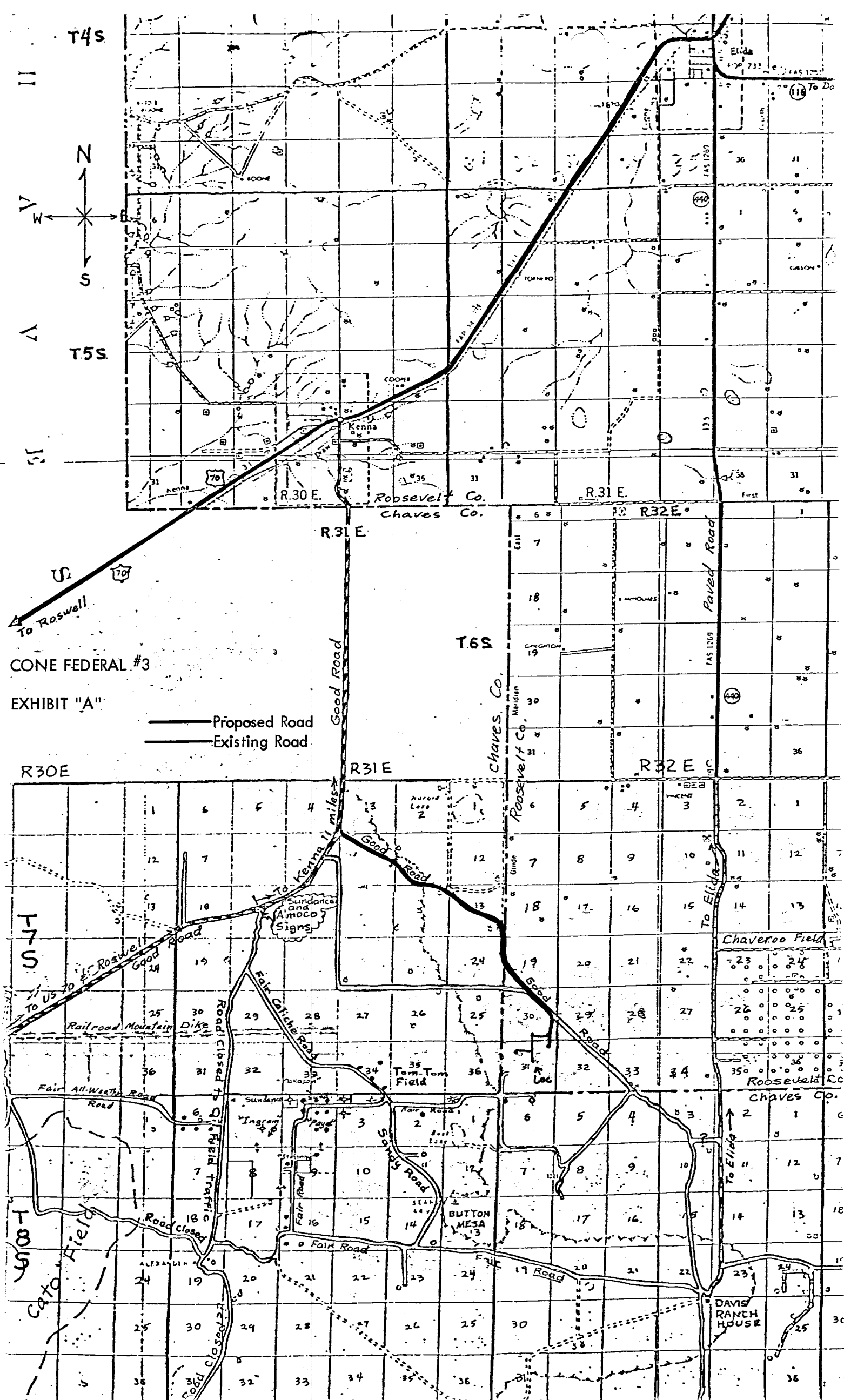
Sundance Oil Co. agrees to pay \$4.00 a rod for new roads and \$750.00 for each well site location, \$250.00 for a tank battery pad built between locations and \$1.00 a rod for pipeline not laid beside road right-of-ways. \$3.00 a rod for pipeline right-of-way that have to be built or made by a tractor or motor grader.

This agreement is payable only to Sec. 30 & 31, Twn. 7S, Rge. 32E, which is Fee surface.

Caliche to be hauled from pit in Sec. 7, Twn. 7S, Rge. 32E. Price on yardage will be paid directly from Sundance Oil Co.

William N. Morgan  
William N. Morgan  
Representative of  
Sundance Oil Co.

Frank P. Southard  
Frank P. Southard  
Land Owner



R32E

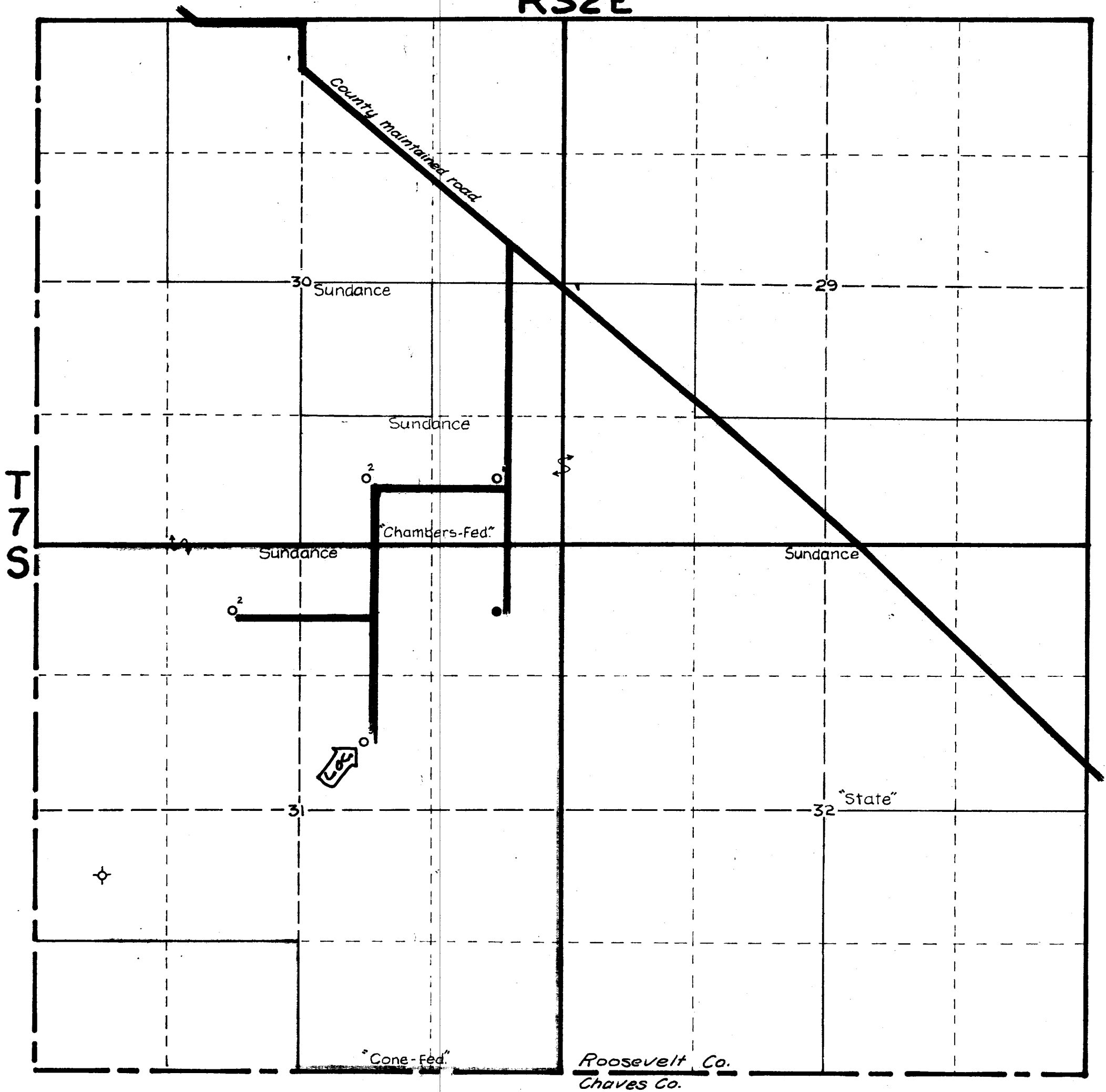


EXHIBIT "B"

Cone Federal #3

LOCATION, MUD PIT AND  
PROPOSED TANK BATTERY  
AREA SPECIFICATIONS

- ① Shale Pit 30' x 8'
- ② Mud Pit 20' x 8'
- ③ Suction Pit 30' x 8'
- ④ Reserve Pit 100' x 50'
- ⑤ Pump
- ⑥ Water Tank
- ⑦ Fuel Tank
- ⑧ Rig
- ⑨ Pipe Racks
- ⑩ Dog House 60'
- ⑪ Cat Walk 60'
- ⑫ Stinger
- ⑬ Trailer
- ⑭ Burn Pit

NOTE Lines from well to  
battery facilities will  
lay directly south  
from wellhead.

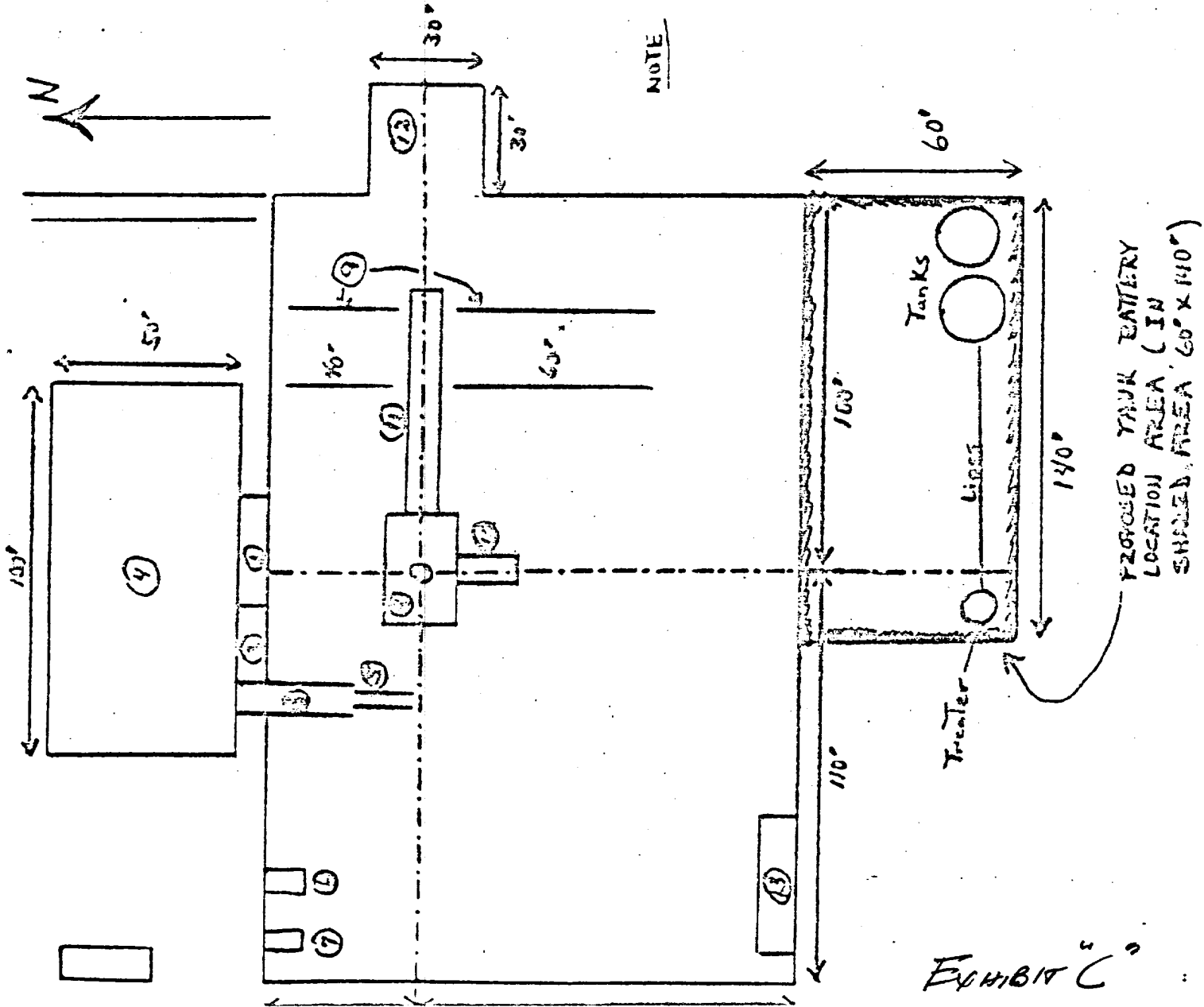
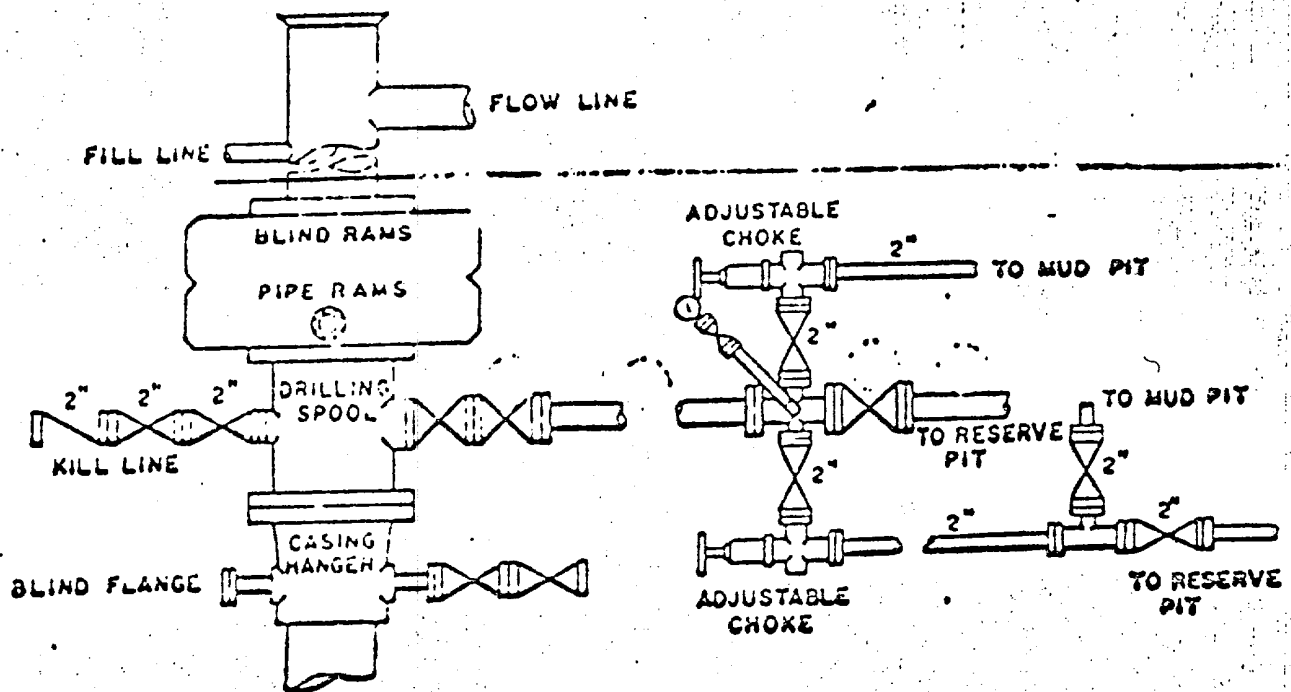


EXHIBIT "C"

# BLOWOUT PREVENTER & CHOKE MANIFOLD

API 3M-8410-RdS



U. S. Geological Survey

HOBBS DISTRICT

Sundance Oil Company  
No. 3 Cone Federal  
SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31-7S-32E  
Lea County, N. M.

Above Data Required on Well Sign

CONDITIONS OF APPROVAL

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Drilling Operations on Federal Oil and Gas Leases, dated January 1, 1977.
2. Notify this office (telephone (505) 393-3612) when the well is to be spudded and in sufficient time for a representative to witness all cementing operations. Attached are names and telephone numbers of Geological Survey and Bureau of Land Management personnel who are available for consultation during construction, drilling, completion, and rehabilitation activities.
3. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life.
4. Secure prior approval of the District Engineer for variance from the approved drilling program and before commencing plugging operations, plug-back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely.
5. Blowout prevention equipment is to be installed, tested, and in working order before drilling below the surface casing and shall be maintained ready for use until drilling operations are completed.
6. Operations must be in compliance with the provisions of the landowner agreement concerning surface disturbance and surface restoration.
7. 8-5/8" surface casing should be set in the Rustler Anhydrite formation and cement circulated to the surface. If surface casing is set at a lesser depth, the 4 $\frac{1}{2}$ " casing must be cemented from the casing shoe to the surface or cemented to the surface through a stage tool set at least 50 feet below the top of the Rustler, after cementing around the shoe with sufficient cement to fill to the base of the salt section.
8. For the protection of livestock and wildlife all pits containing toxic liquids will be fenced and covered with a fine mesh netting (i.e., Hardware Cloth) with openings being 1/2 inch or less.