



14000 COPY

# United States Department of the Interior

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

February 16, 1979

Sundance Oil Company  
1776 Lincoln Street  
Suite 510  
Denver, Colorado 80203

SUNDANCE OIL COMPANY Oakason "B" Federal No. 4 660 FNL 660 FWL Sec. 33, T7S, R31E Chaves County Lease No. NM-15015-B
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Above Data Required on Well Sign
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Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 4,000 feet to test the San Andres formation 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 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 this approval including the GENERAL REQUIREMENTS.
3. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress 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 Requirements. The color used should simulate sandstone brown (Federal Standard Color #595A, color 20318 or 30318).

Sincerely yours,

(Orig. 384) ALBERT R. STALL

Albert R. Stall  
Acting District Engineer

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 Street, Denver, CO 80203

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

At surface

660' FNL, 660' FWL

Unit D

At proposed prod. zone

Same

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

1 1/2 miles south 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

## 16. NO. OF ACRES IN LEASE

200

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

1320

## 19. PROPOSED DEPTH

4000

## 20. ROTARY OR CABLE TOOLS

Rotary

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

4287.7' GL

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

February 28, 1979

## 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	1450'	260 sx Econ & 100 sx Class C
7 7/8	4 1/2"	10.5	4000'	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.

RECORDED  
JAN 11 1979  
U.S. GEOLOGICAL SURVEY  
ARLINGTON, TEXAS

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 Vice President, Production

DATE January 8, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION P**

Form O-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator <b>Sundance Oil Co.</b>			Lease <b>Oakason "B" Federal</b>		Well No. <b>4</b>
Section <b>D</b>	Section <b>33</b>	Township <b>7 South</b>	Range <b>31 East</b>	County <b>Chaves</b>	
Actual Well Location of Well: <b>660</b> feet from the <b>North</b> line and <b>660</b> feet from the <b>West</b> line					
Ground Level Elev <b>4287.7</b>	Producing Formation <b>San Andres</b>		Pool <b>Tom Tom</b>	Dedicated Acreage: <b>40</b> Acres	

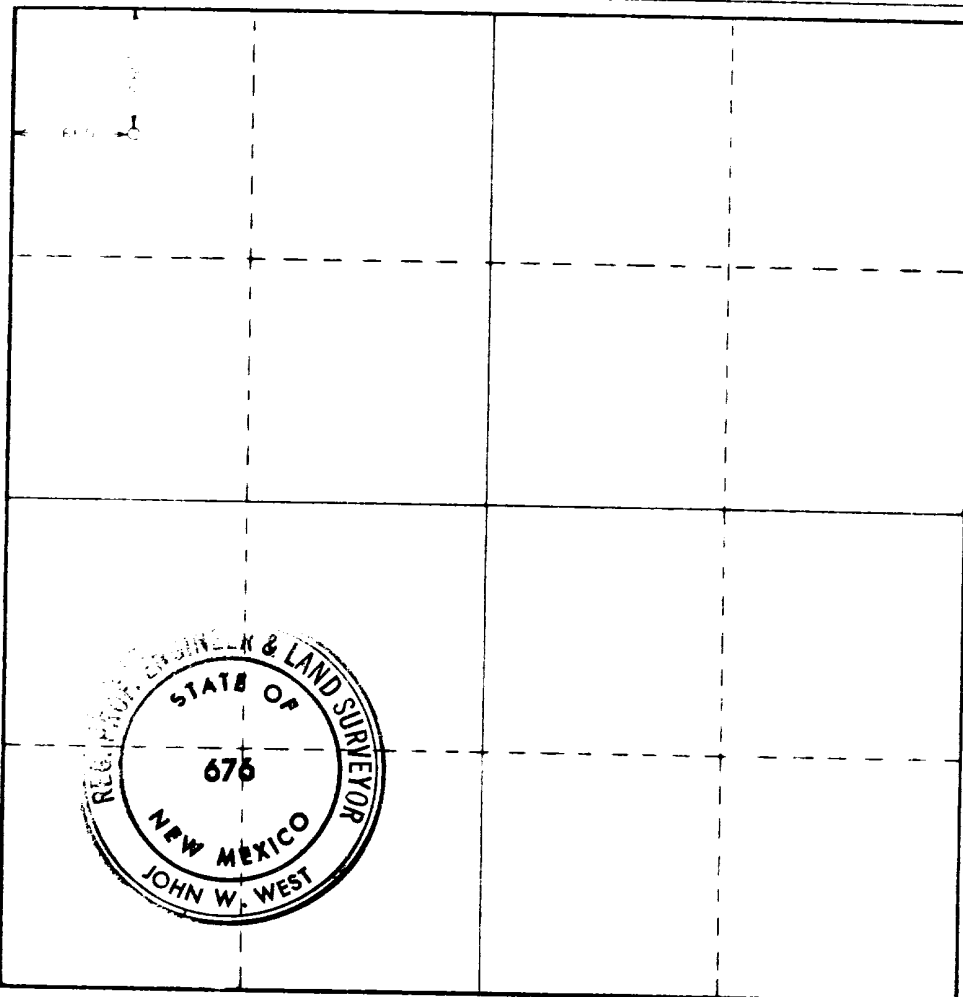
- 1 Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- 2 If more than one lease is dedicated to the well, outline each and identify the owners and their interest in the well (to working interest and royalty).
- 3 If more than one lease of different 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 \_\_\_\_\_

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**JAN 11 1979**  
**U.S. GEOLOGICAL SURVEY**  
**ARTESIA, NEW MEXICO**

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

**Vice President, Production**  
Company

**Sundance Oil Company**  
Date

**January 8, 1979**

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 13, 1978**

Registered Professional Engineer and/or Land Surveyor

*John W. West*  
Certificate No. **John W. West**

**676**

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

Sundance Oil Company, Oakason "B" Federal #4  
660' FNL and 660' FWL of Section 33, T. 7S., R. 31E.  
Chaves 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	1410'
Salado	1470'
Yates	1860'
San Andres	2980'
P-1	3670'
P-2	3755'
TD	3910'
3. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations will be encountered are as follows:

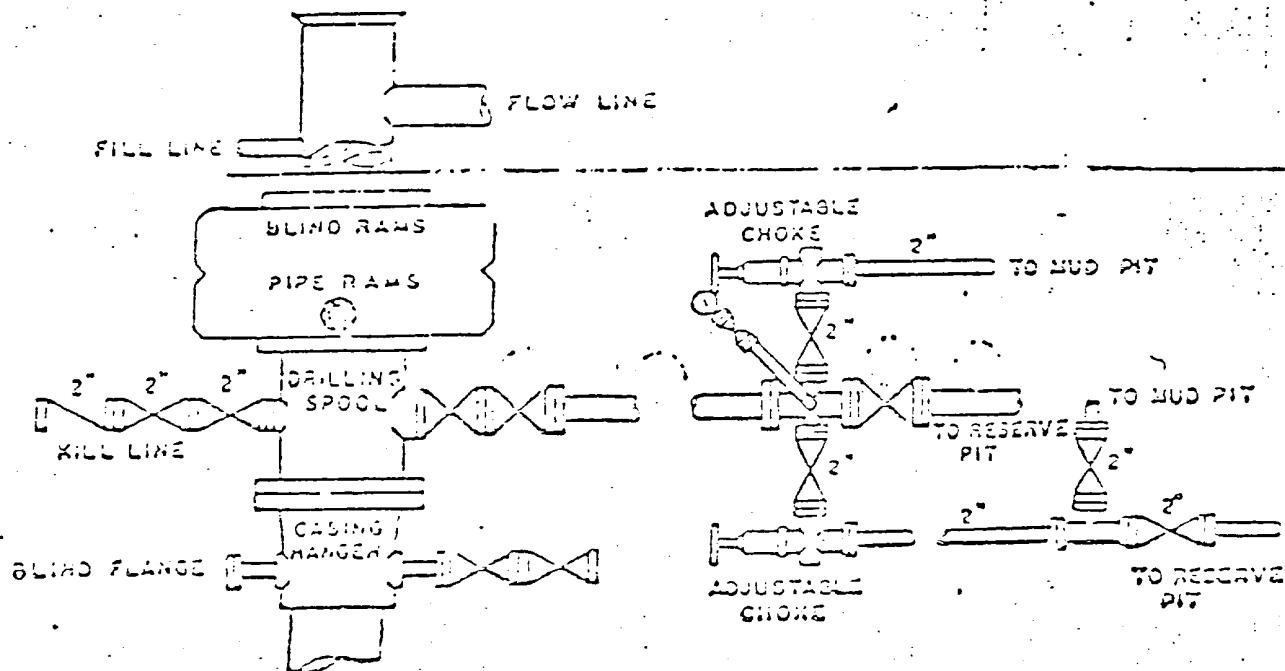
Ogalala	150' water
Salado	1430' salt
San Andres	3000' oil and gas
P-1	3690' oil and gas
P-2	3930' oil and gas
4. The proposed casing program is as follows:

Surface - New 8 5/8", 28#/ft., ST&C Secondary 45 (J&L).  
Production - New 4½", 10.5#/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:

0-1450' spud mud	8.5 - 9.0 lbs./gal.
1450-3000' native mud	9.0 - 9.5 lbs./gal.
3000' to TD salt gel	9.5 - 10.0 lbs./gal.
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 1450'.
9. No abnormal pressures or temperatures are expected to be encountered in this well.
10. The anticipated starting date for this well is February 28, 1979. Estimated duration of drilling operations is 10 to 12 days.

# BLOWOUT PREVENTER & CHOKE MANIFOLD

API 3M-8410-RdS



RECEIVED

MULTI-POINT SURFACE USE & OPERATIONS PLAN

JAN 11 1979

Sundance Oil Company: Oakason "B" Federal #4  
660' FNL and 660' FWL of Section 33, T. 7S., R. 31E.  
Chaves County, New Mexico

U.S. GEOLOGICAL SURVEY  
AMERSON, NEW MEXICO

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 15½ miles south 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 660' FNL and 660' FWL of Section 33, T. 7S., R. 31E., Chaves 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 15½ miles south 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. Length & Width: New road required will be 1320' long and 12' wide. This new road is labeled and color coded Red on Exhibits "A" and "B". The center line of the proposed new road has been flagged and staked with the stakes being visible from one to the next.
- B. Surfacing Material: Six inches of caliche, watered, compacted and graded.
- C. Drainage Design: New road will have a drop of 6 inches from center line on each side.
- D. Culverts: None.
- E. Turnouts: None.
- F. Cuts and Fills: 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.
- G. Gates, Cattleguards, Fences: None.

3. Location of Existing Wells

- A. See Exhibit "B".

4. Location of Existing and/or Proposed Facilities

- A. There is an existing tank battery and flow line on lease 15015-A owned by Lessee/Operator. The battery is located at the center of SE SW Section 33, next to well #2. The off-lease facilities permit has been approved.

- B. If commercial production is established, a flow line from well "B" #4 to a header at well "B" #2 will be installed. No additional surface disturbance will occur. 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 a 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 NW NW Section 4, T. 8S., R. 31E.

7. Methods for Handling Waste Disposal

- A. Drill cuttings will be disposed of in the reserve pit.
- 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 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 trash pit is shown on Exhibit "C". If well is productive, maintenance waste will be placed in special trash cans and hauled to an approved sanitary landfill, 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 pits, reserve pit, trash pit and location of major components.
- B. The reserve pit will be lined with plastic.
- C. The pad and pit area has been flagged and 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: One mile 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                      Business phone (303) 361-4694  
Sundance Oil Company  
Suite 510, 1776 Lincoln Street  
Denver, CO 80203

### 13. Certification

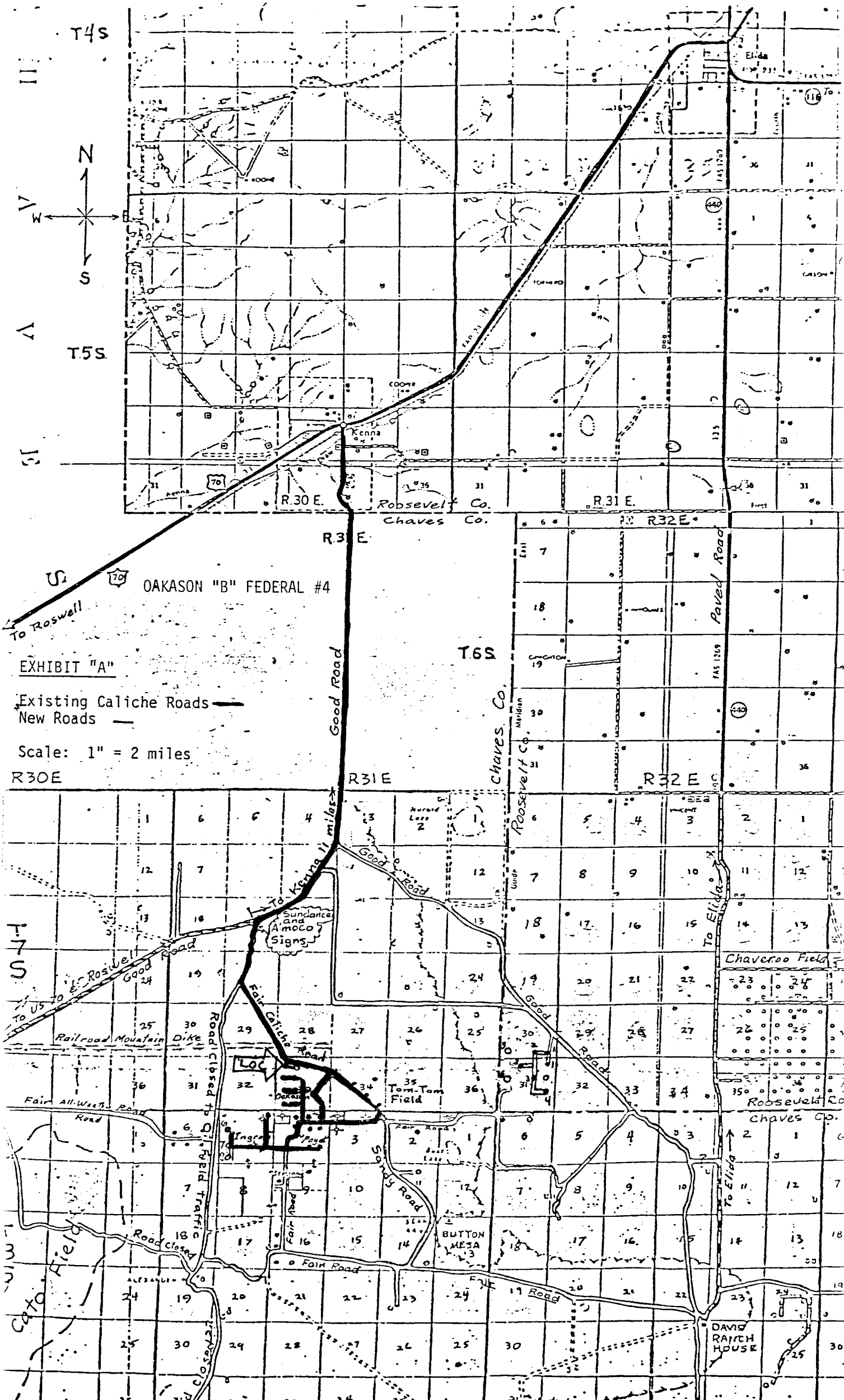
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated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

Date \_\_\_\_\_

1/7/79

Richard O. Dimit  
Vice President, Production





T4S

T5S

T6S

OAKASON "B" FEDERAL #4

EXHIBIT "A"

Existing Caliche Roads  
New Roads

Scale: 1" = 2 miles

R30E

R31E

R32E

Chaverro Field

Roosevelt Co.

Chaves Co.

Chaves Co.

Roosevelt Co.

DAVIS RANCH HOUSE

BUTTON MESA

Sundance and Alamo Signs

Good Road

Good Road

Fair Caliche Road

Fair All-Weather Road

Fair Road

Fair Road

Fair Road

To Roswell

To Roswell

To Roswell

To Roswell

To Roswell

To Roswell

To Elida

To Elida

To Elida

To Elida

To Elida

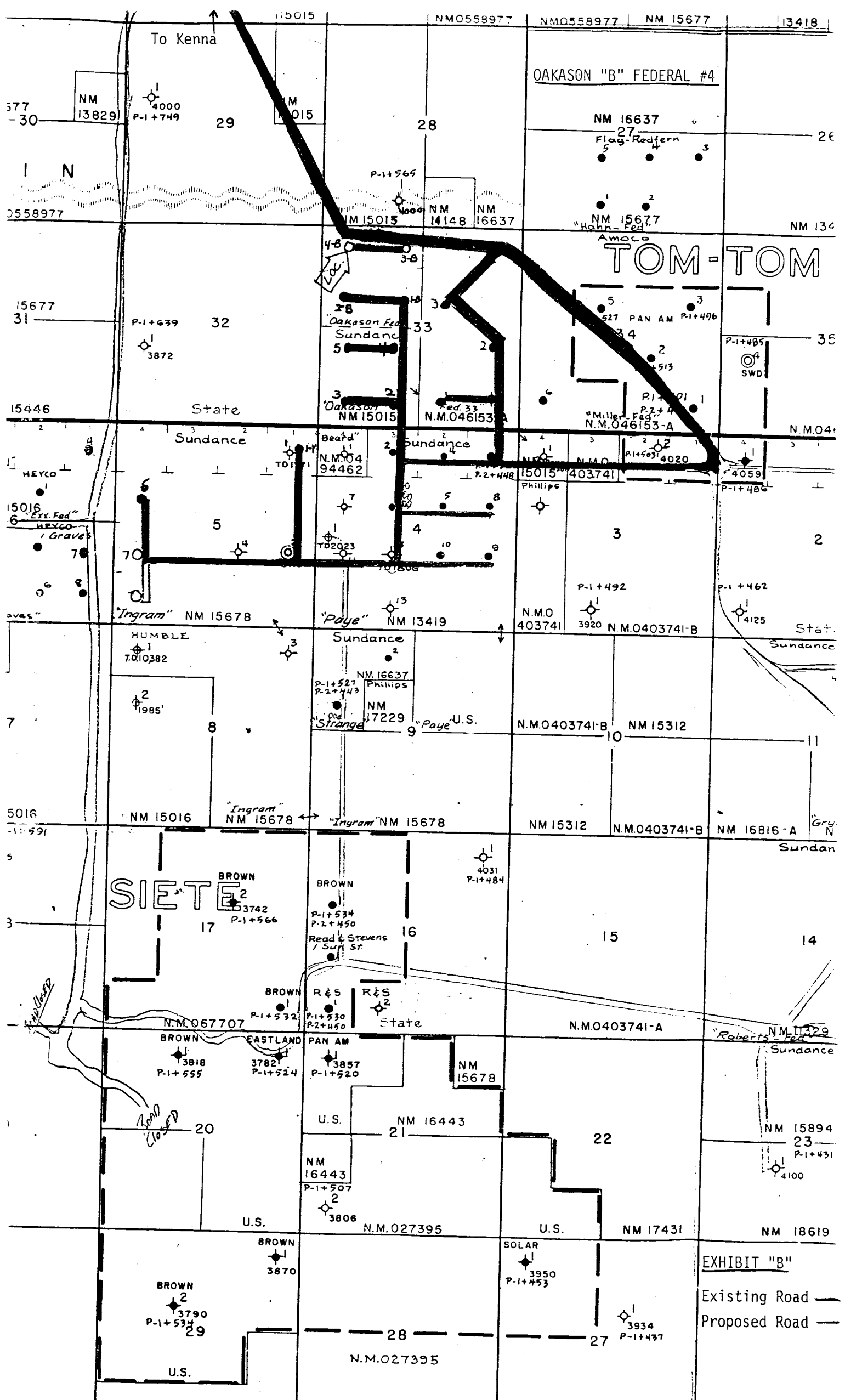
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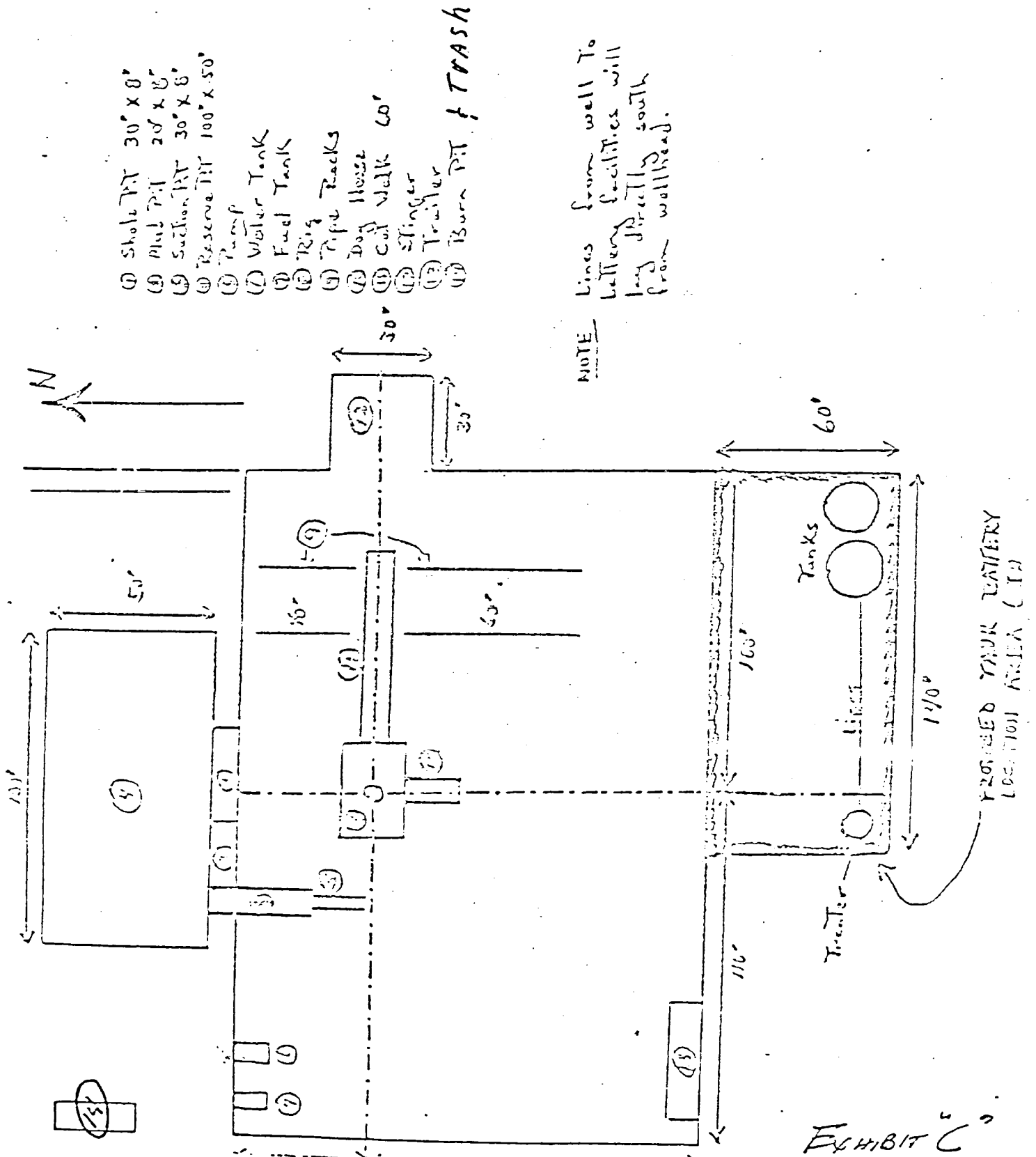
E

S

W



LOCATION, MUD PIT AND  
PROPOSED TANK BATTERY  
AREA SPECIFICATIONS





O I L   C O M P A N Y

January 8, 1979

U.S.G.S.  
P.O. Drawer U  
Artesia, NM 88210

RE: Agreement with Surface Landowner  
and Sundance Oil Company  
Oakason "B" Federal #4  
Unit D  
NW NW Section 33, T.7S., R.31E.  
Chaves County, New Mexico

Gentlemen:

This is to certify that in regard to captioned well, Sundance Oil Company 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 well site 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.

Yours, truly,

Richard O. Dimit  
Vice President, Production

RD:ds