

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  
2310' FNL and 330' FWL, Unit E  
At proposed prod. zone  
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
15 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)  
330

16. NO. OF ACRES IN LEASE  
1120

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.  
3630

19. PROPOSED DEPTH  
4350

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4331.5' GL

22. APPROX. DATE WORK WILL START\*  
September 1, 1980

PROPOSED CASING AND CEMENTING PROGRAM				QUANTITY OF CEMENT	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		
12 1/4"	8 5/8"	24	1800	300 sx Econ &	100 sx Class C
7 7/8"	4 1/2"	10.5	4350	300 sx 50/50	

Well will be drilled to total depth and evaluated by running logs and DST's when necessary. Casing will be run when logs and DST's indicate possible commercial production.

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 August 1, 1980  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY (Orig. Sgd.) PETER V. CHESTERTITLE ACTING DISTRICT ENGINEER

CONDITIONS OF APPROVAL, IF ANY:

SEP 10 1980  
OIL CONSERVATION DIV

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

Form C-12  
Supersedes C-128  
Effective 4-65

All distances must be from the outer boundaries of the Section

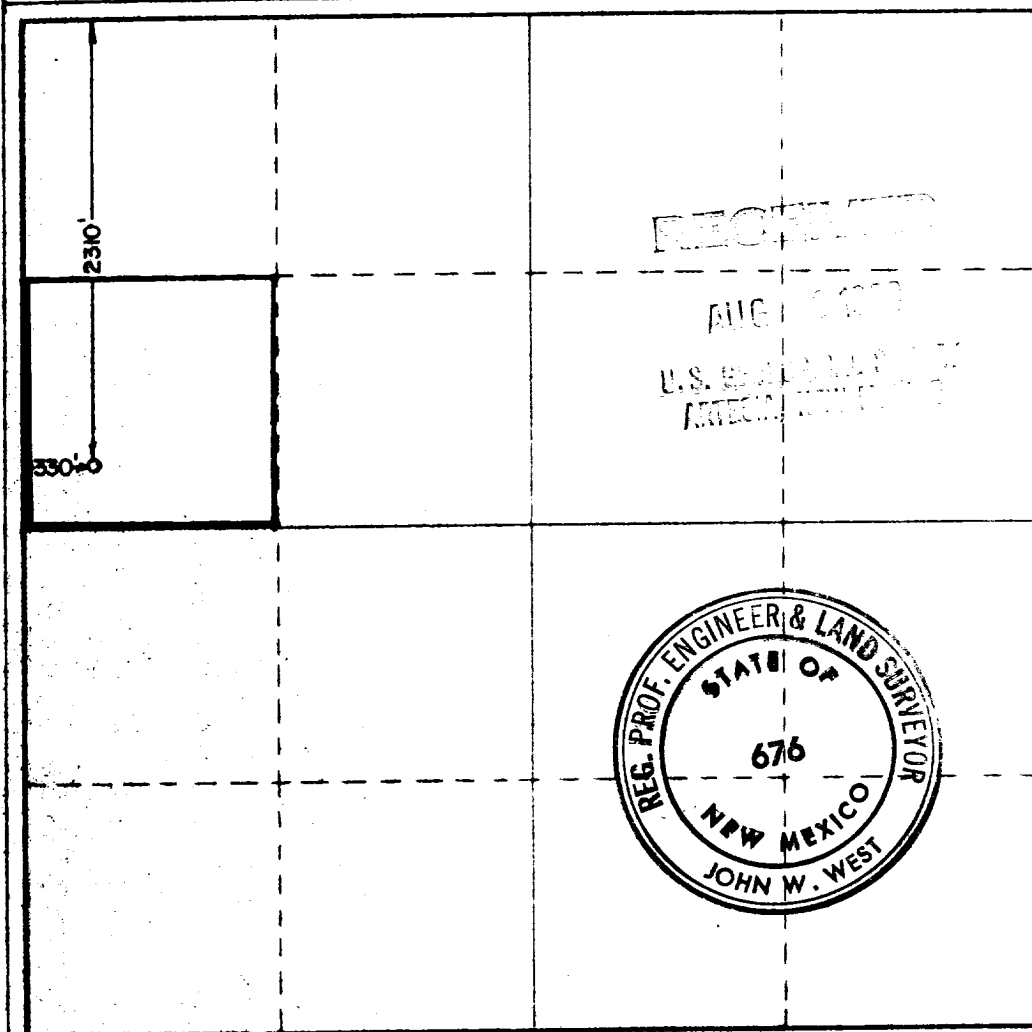
Operator <b>Sundance Oil Co.</b>			Lease <b>Grynborg FED.</b>		Well No. <b>4</b> <del>45</del>
Unit Letter <b>E</b>	Section <b>11</b>	Township <b>8 South</b>	Range <b>31 East</b>	County <b>Chaves</b>	
Actual Footage Location of Well: <b>2310</b> feet from the <b>North</b> line and <b>330</b> feet from the <b>West</b> line					
Ground Level Elev. <b>4331.5</b>	Producing Formation <b>San Andres</b>		Pool <b>East Siete</b>		Dedicated Acreage <b>40</b>

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.

Name  
**Richard O. Dimit**  
Position  
**Vice President, Production**  
Company  
**Sundance Oil Company**

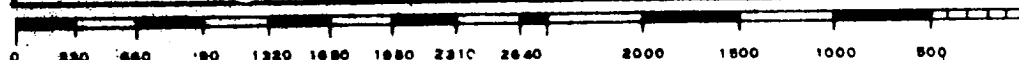
Date  
**August 1, 1980**

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  
**July 17, 1980**

Registered Professional Engineer and/or Land Surveyor

*John W. West*  
Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6463**  
**Ronald J. Eidson 3239**



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SEP 9 1980

O. C. D.  
ARTESIA, OFFICE

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

Sundance Oil Company, Grynberg Federal #4  
2310' FNL and 330' FWL of Section 11, T.8S., 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	1790'
Salado	1820'
Yates	2210'
San Andres	3370'
P-1	4070'
P-2	4155'
T.D.	4350'
3. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations will be encountered are as follows:

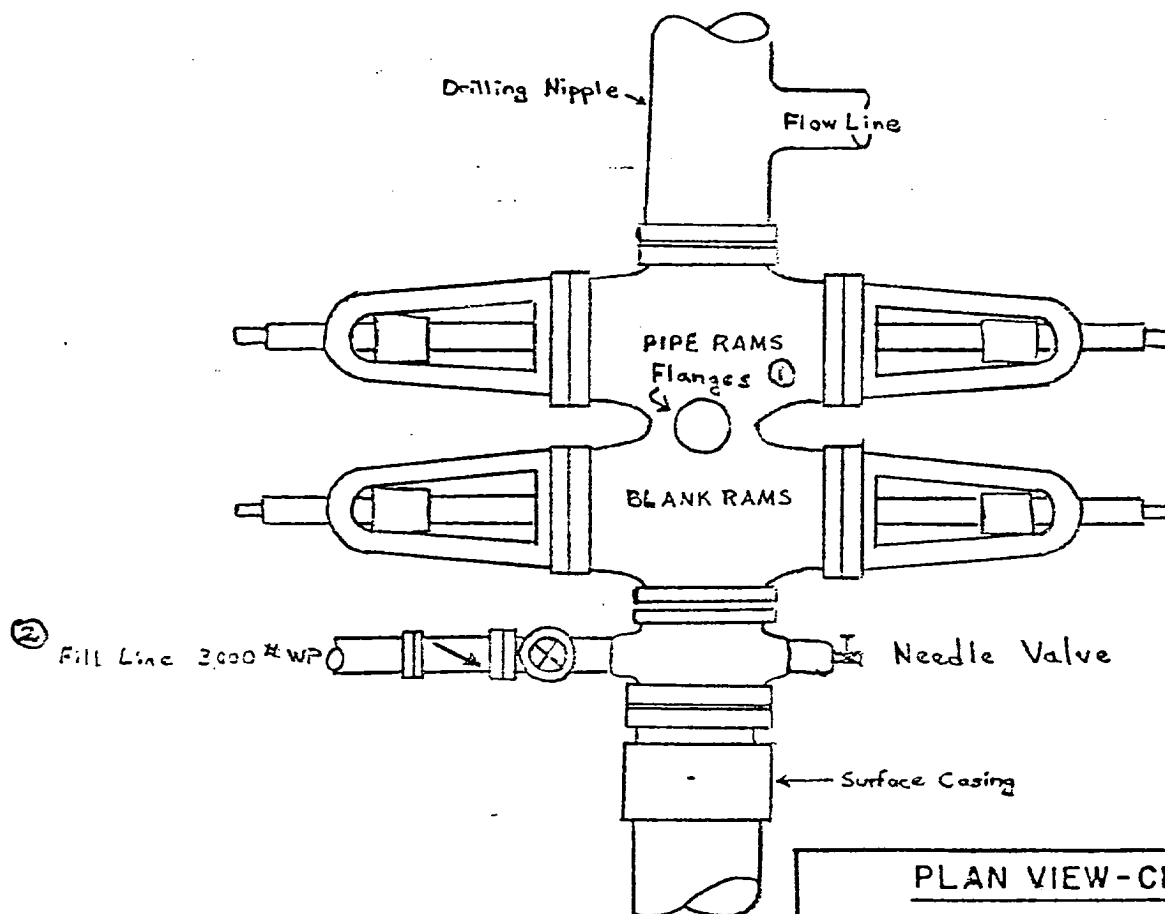
Ogalala	150' water
Salado	1820' salt
San Andres	3370' oil and gas
P-1	4070' oil and gas
P-2	4155' oil and gas
4. The proposed casing program is as follows:

Surface: New 8 5/8", 24#/ft., ST&C.  
Production: New 4 1/2", 10.5#/ft., ST&C, K-55.
5. A sketch of an API Series 900 Blowout Preventer is attached. Pipe rams and blinds will be checked to 1000 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#/gal.
1800-3500' native mud	9.0 - 9.5#/gal.
3500-T.D. salt gel	9.0 - 10.0#/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 1800'.
9. No abnormal pressures or temperatures are expected to be encountered in this well.
10. The anticipated starting date for this well is September 1, 1980. Estimated duration of drilling operations is 10 to 12 days.

## B.O.P. HOOK-UP

Schaeffer Type E 10" Series 900 Hydraulic BOP. (3,000 PSI W.P.)

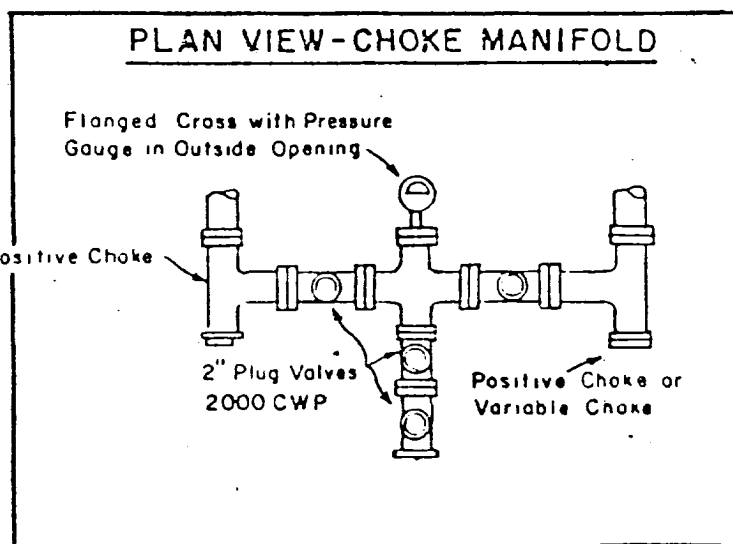


### NOTES:

- ① 1 Flange on each side of BOP Stack. Choke Manifold connects To one side. Other side has full opening pipe and valves connected To ii. KILL LINES.
- ② Fill line also has valve in it at rig floor level.

BOP Stack will be equipped To operate with both hydraulic and manual controls.

All equipment, piping and valves in BOP arrangement is 900 Series, i.e. 3,000 psi working pressure.



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MULTI-POINT SURFACE USE & OPERATIONS PLAN

Sundance Oil Company, Grynberg Federal #4  
O. C. D2310' FNL and 330' FWL of Section 11, T.8S., R.31E.  
ARTESIA, OFFICE Chaves County, New Mexico

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 15 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 2310' FNL and 330' FWL of Section 11, T.8S., 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 15 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 2700' 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 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 and maximum fill will be 3' on 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. The tank battery and production facilities will be located on this lease near the Grynberg Federal #4 location ( SW NW Section 11).
- B. 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 31, T.7S., R.32E.

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 rig 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 east 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) 861-4694

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

8/1/80

Richard O. Dimit

Vice President, Production

[illegible]

R30E

GRYNBERG FEDERAL #4

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NM 15893

EXHIBIT "B"

GRYNBERG FEDERAL #4

NM.05  
57167

TO  
KENNA

NM055897

NM 15677

Existing Roads ———  
Proposed Roads ———

Scale: 2" = 1 mile

NM  
15446

NM  
13240

Flag-Red.  
"Amoco Fed."  
NM  
13418

NM 15677

NM  
15015

NM0558977

NM0558977

NM 15677

Flag-Red.

29

4000

29

NM  
15015

28

NM 16637

Flag-Redfern

26

Flag-Red.

NM 13418

NM 15015

NM 14148

NM 16637

Union Tex.  
Mor. 4

"Hahn Fed"

Amoco

TOM-TOM

PAN AM

35

32

3872

State

"Oakason Fed B"  
Sundance

N.M.046153-A

"Miller Fed"  
N.M.046153-A

N.M.046153-A

"Beard"  
N.M.04  
94462

Sundance

N.M.0403741

Phillips

N.M.0403741

4020

4059

F.A.F.

"Cone Fed"

"Ingram" NM 15678

"Paye" NM 13419

N.M.O  
403741

3920 N.M.0403741-B

4125

State

HUMBLE  
7.0.10382

Sundance

NM 16637  
Phillips

NM  
17229

"Paye" U.S.

N.M.0403741-B

NM 15312

LOCATION

4192

Sundance

NM 15016

"Ingram" NM 15678

"Ingram" NM 15678

NM 15312

N.M.0403741-B

NM 16816-A

"Grynberg Fed"  
NM 11329

Sundance

BROWN

BROWN

4031

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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
- ⑪ Cat Walk 60'
- ⑫ Stinger
- ⑬ Trailer
- ⑭ Burn Pit

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

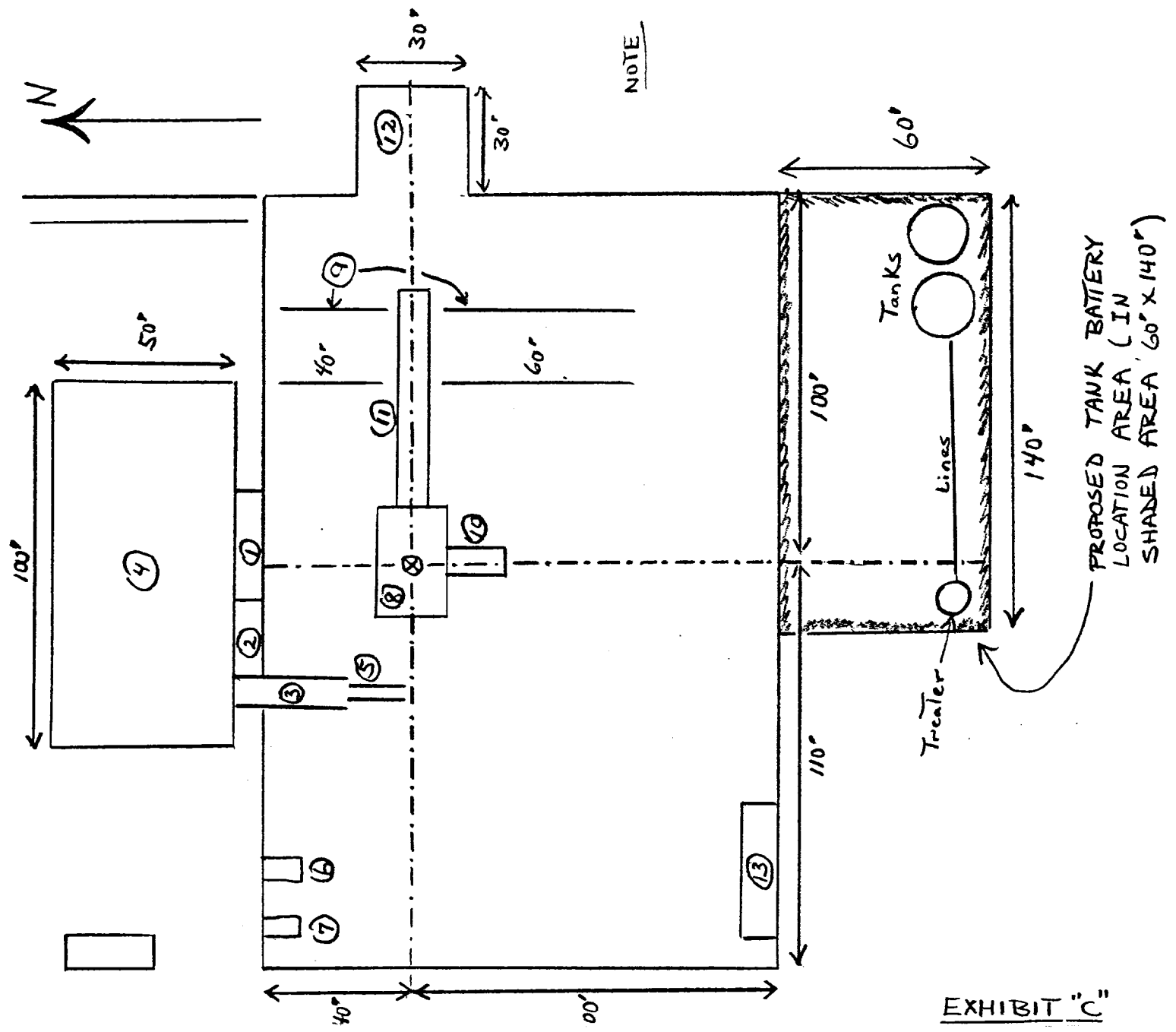


EXHIBIT "C"

SEP 10 1980  
DIE CONSERVATION DIV

ELF