



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

September 18, 1979

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

SUNDANCE OIL COMPANY
No. 11 Ingram Federal
330 FNL 2310 FEL Sec. 5 T.8S R.31E
Chaves County Lease No. NM-15678

Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 4100 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. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

GEORGE H. STEWART

George H. Stewart
Acting District Engineer



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-005-20704
5. LEASE DESIGNATION AND SERIAL NO.
NM-15678
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME
Ingram Federal
9. WELL NO.
11
10. FIELD AND POOL, OR WILDCAT
Tom-Tom, San Andres
11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
NW NE
Section 5, T.8S., R.31E.
12. COUNTY OR PARISH
Chaves
13. STATE
New Mexico

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
330' FNL and 2310' FEL, Unit B
At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
15 miles south of Kenna

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 1401.68

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 4100

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4252.9' GL

22. APPROX. DATE WORK WILL START*
October 1, 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	1350'	550 sx
7 7/8"	4 1/2"	10.5	4100'	300 sx

The well will be drilled, logged and evaluated by drill stem tests for full evaluation of the San Andres Formation. If warranted, completion will be made in the same formation.

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 17, 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 PLAT**

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

All distances must be from the outer boundaries of the Section

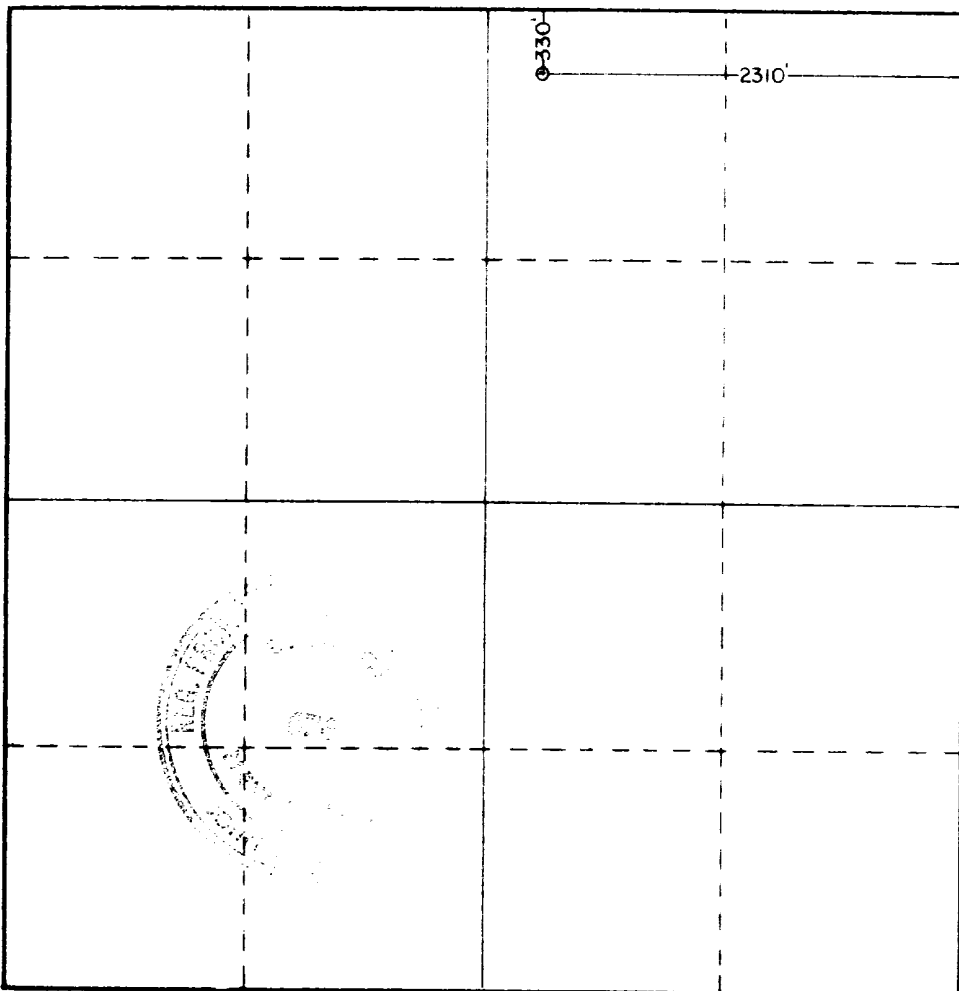
Operator SUNDANCE OIL COMPANY			Lease INGRAM FED.		Well No. 11
Unit Letter B	Section 5	Township 8 SOUTH	Range 31 EAST	County CHAVES	
Actual Footage Location of Well: 330 feet from the NORTH line and 2310 feet from the EAST line					
Ground Level Elev. 4252.9	Producing Formation San Andres		Pool Tom-Tom	Dedicated Acreage: 40 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?

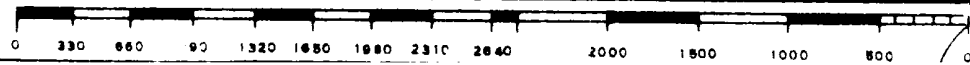
Yes No If answer is "yes," type of consolidation _____

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.	
<i>Richard O. Dimit</i>	
Name	
Richard O. Dimit	
Position	
Vice President, Production	
Company	
Sundance Oil Company	
Date	
August 17, 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	
JULY 31ST, 1979	
Registered Professional Engineer and/or Land Surveyor	
<i>John W. West</i>	
Certificate No.	John W. West 676
	Ronald L. Eide 2320



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

Sundance Oil Company: Ingram Federal #11
330' FNL and 2310' FEL of Section 5, 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	1540'
Salado	1600'
Yates	2030'
San Andres	3200'
P-1	3900'
P-2	4000'
TD	4100'
3. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations will be encountered are as follows:

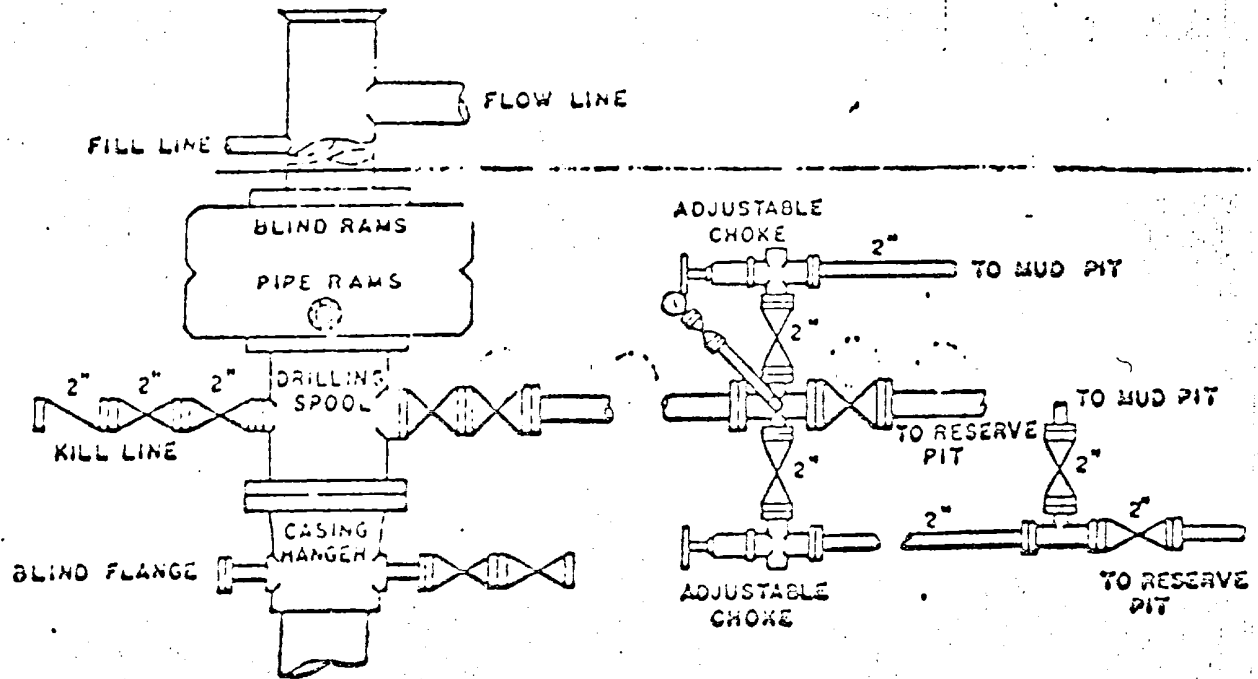
Ogalala	150' water
Salado	1600' salt
San Andres	3200' oil and gas
P-1	3900' oil and gas
P-2	4000' oil and gas
4. The proposed casing program is as follows:

Surface: New 8 5/8", 24#/ft., ST&C, Secondary 45 (J&L).
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:

0-1350' spud mud	8.5 - 9.0#/gal.
1350-3800' native mud	9.0 - 9.5#/gal.
3800-T.D. salt gel	9.0 - 10.0#/gal.
7. The auxiliary equipment to be used is:
 - a. Kelly cocks.
 - b. Floats at the bit.
 - c. 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 1350'.
9. No abnormal pressures or temperatures are expected to be encountered in this well.
10. The anticipated starting date for this well is October 1, 1979. Estimated duration of drilling operations is 10 to 12 days.

BLOWOUT PREVENTER A CHOKE MANIFOLD

API 3M-8410-RdS



MULTI-POINT SURFACE USE & OPERATIONS PLAN

Sundance Oil Company: Ingram Federal #11
330' FNL and 2310' FEL of Section 5, T.8S., R.31E.
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 330' FNL and 2310' FEL of Section 5, 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 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 this lease owned by Lessee/Operator. The battery is located at the SW NW of Section 5.

- B. If commercial production is established, flow lines will be installed from the well to the battery and no additional surface disturbance will occur. Facilities are 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 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 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 3½ miles 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 Operators Representative

Richard O. Dimit
Sundance Oil Company
Suite 510, 1776 Lincoln Street
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

8/17/79

Richard O. Dimit

Vice President, Production



S U N D A N C E O I L C O M P A N Y

August 17, 1979

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

RE: Agreement with Surface Landowner
and Sundance Oil Company
Ingram Federal #11
NW NE Section 5, T.8S., R.31E.
Chaves County, New Mexico

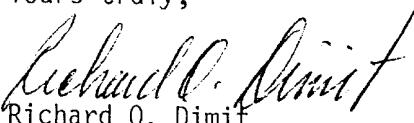
Gentlemen:

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.

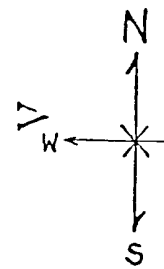
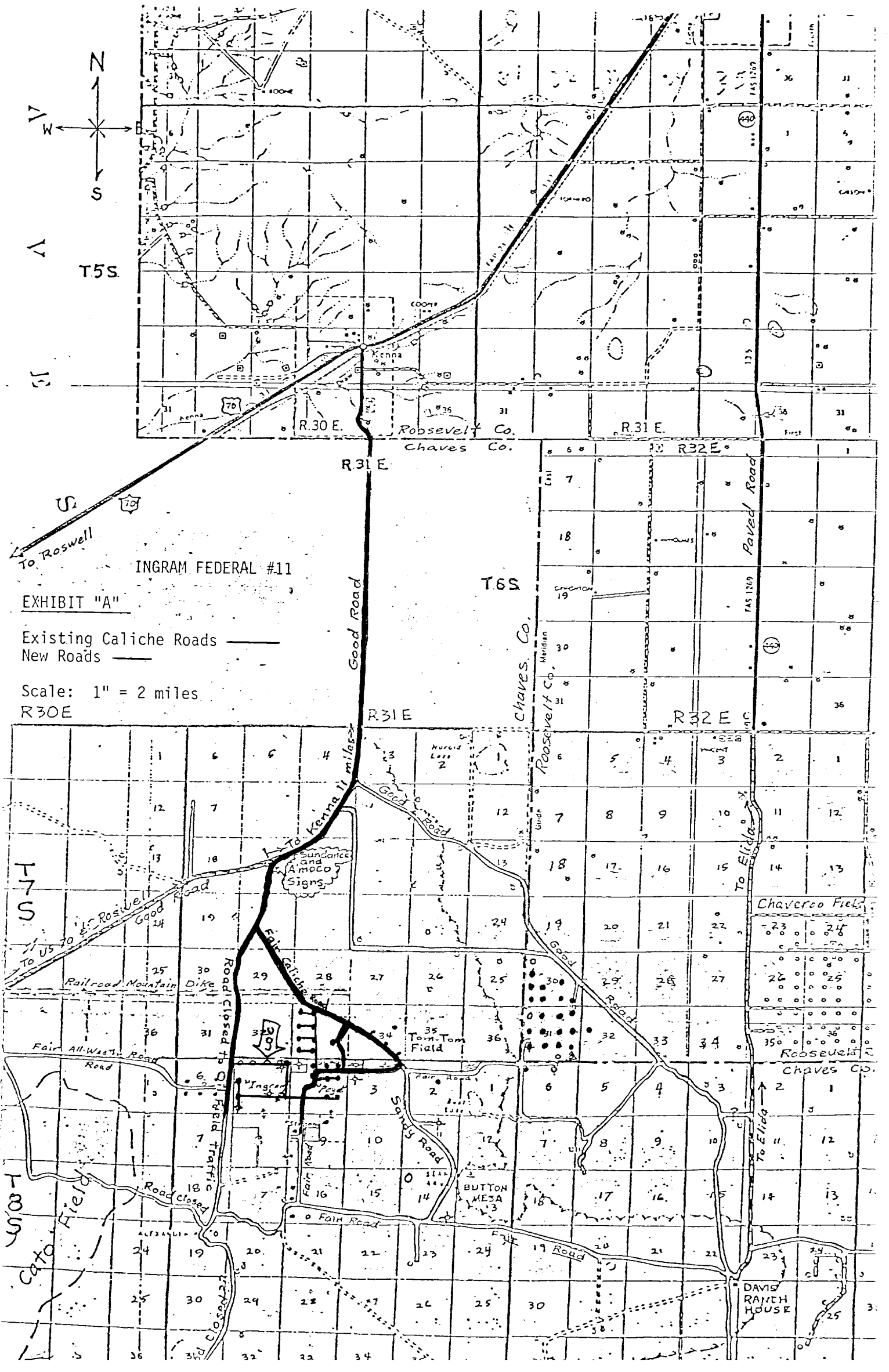
If the well is completed as a dry hole and plugged and abandoned, pits will be covered and location cleaned of all trash and junk. The road will remain in place. The drilling pad will either remain or be ripped at the landowner's option.

Yours truly,

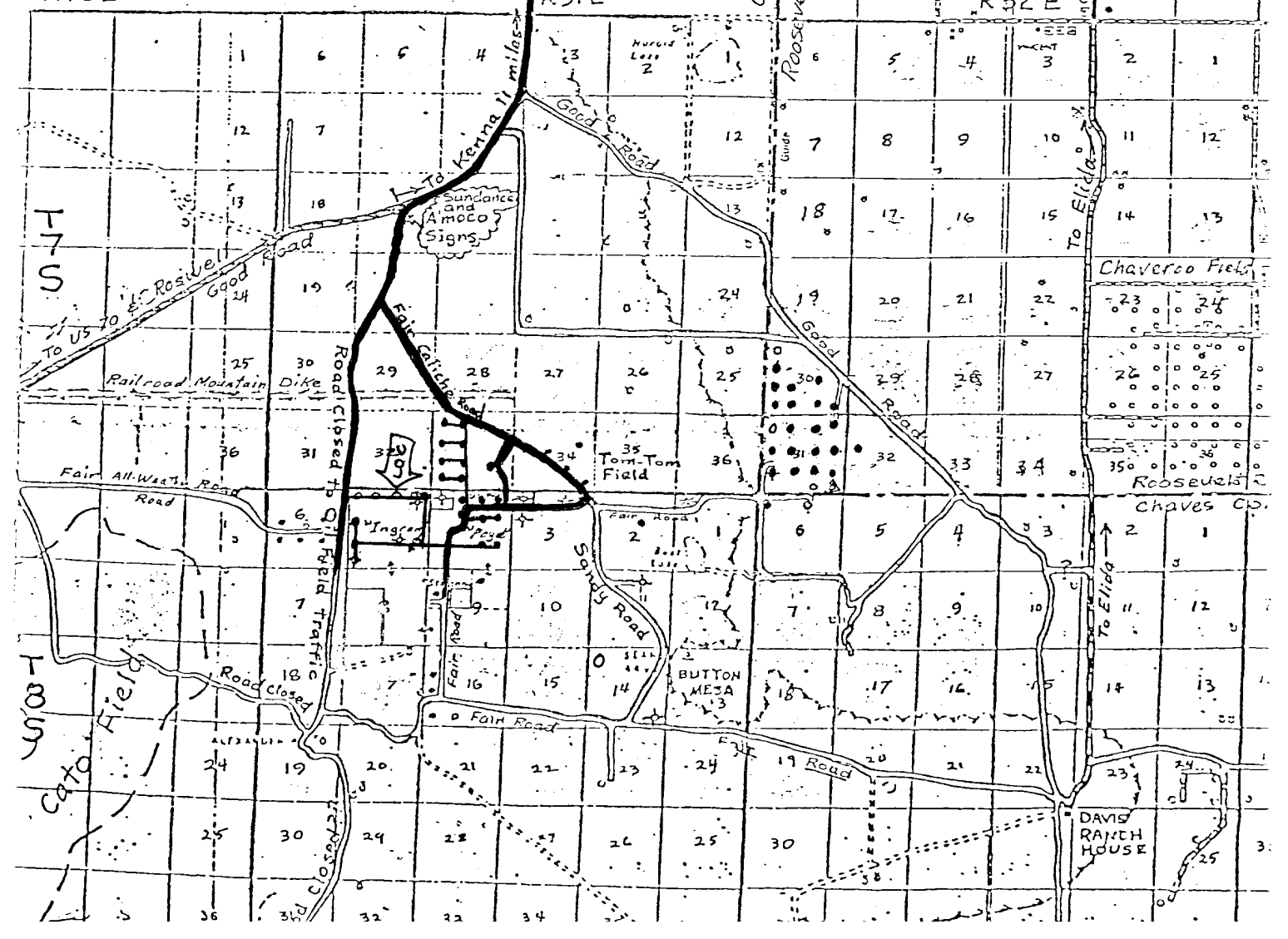

Richard O. Dimit
Vice President, Production

RD:ds

1776 Lincoln Street, Suite 510
Denver, Colorado 80203
Telephone (303) 861-4694



INGRAM FEDERAL #11
EXHIBIT "A"
Existing Caliche Roads ———
New Roads - - - - -
Scale: 1" = 2 miles
R30E



NM 15893

EXHIBIT "B"

INGRAM FEDERAL #11

N.M.05
57167

TO
KENNA

Existing Roads ———
Proposed Roads ———

NM055897 20

NM 15677

Scale: 2" = 1 mile

NM
15446
13240

NM
15015

NM0558977

NM0558977

NM 15677

Flag-Red
"Amoco Fed"
NM
13418

NM 15677

NM
15015

28

NM 16637

Flag-Red
"Redfern"

26

NM 15015

NM 14148

NM 16637

NM 15677

Flag-Red.

NM 13418

TOM-TOM

32

Sundance
4-B 3-B

Union Tex.
Mor. 4

PAN AM

35



"Oakason Fed"
Sundance

Moraille

"Miller Fed"
N.M.046153-A

N.M.046153-A

Sundance

N.M.046153-A

15015

403741

4059

F.A.F.

"Cone Fed"

"Ingram" NM 15678

"Paye" NM 13419

N.M.O
403741

3920

N.M.O403741-B

4125

State

HUMBLE
7010382

Sundance

Sundance

4192

1985

NM 16637
Phillips

NM
17229

"Strange"

"Paye" U.S.

N.M.O403741-B

NM 15312

NM 15016

"Ingram" NM 15678

"Ingram" NM 15678

NM 15312

N.M.O403741-B

NM 16816-A

"Grunberg Fed"
NM 11329

SIETE

17

BROWN

16

4031

15

14

BROWN

P-2+443

Read & Stevens
Sun St.

BROWN

R & S

R & S

P-1+530

P-2+450

State

N.M.O403741-A

"Roberts Fed"

NM 11329

Sundance

N.M.067707

BROWN

EASTLAND

PAN AM

3857

Sundance

NM
15678

20

U.S.

NM 16443

22

NM 15894

23

NM
16443

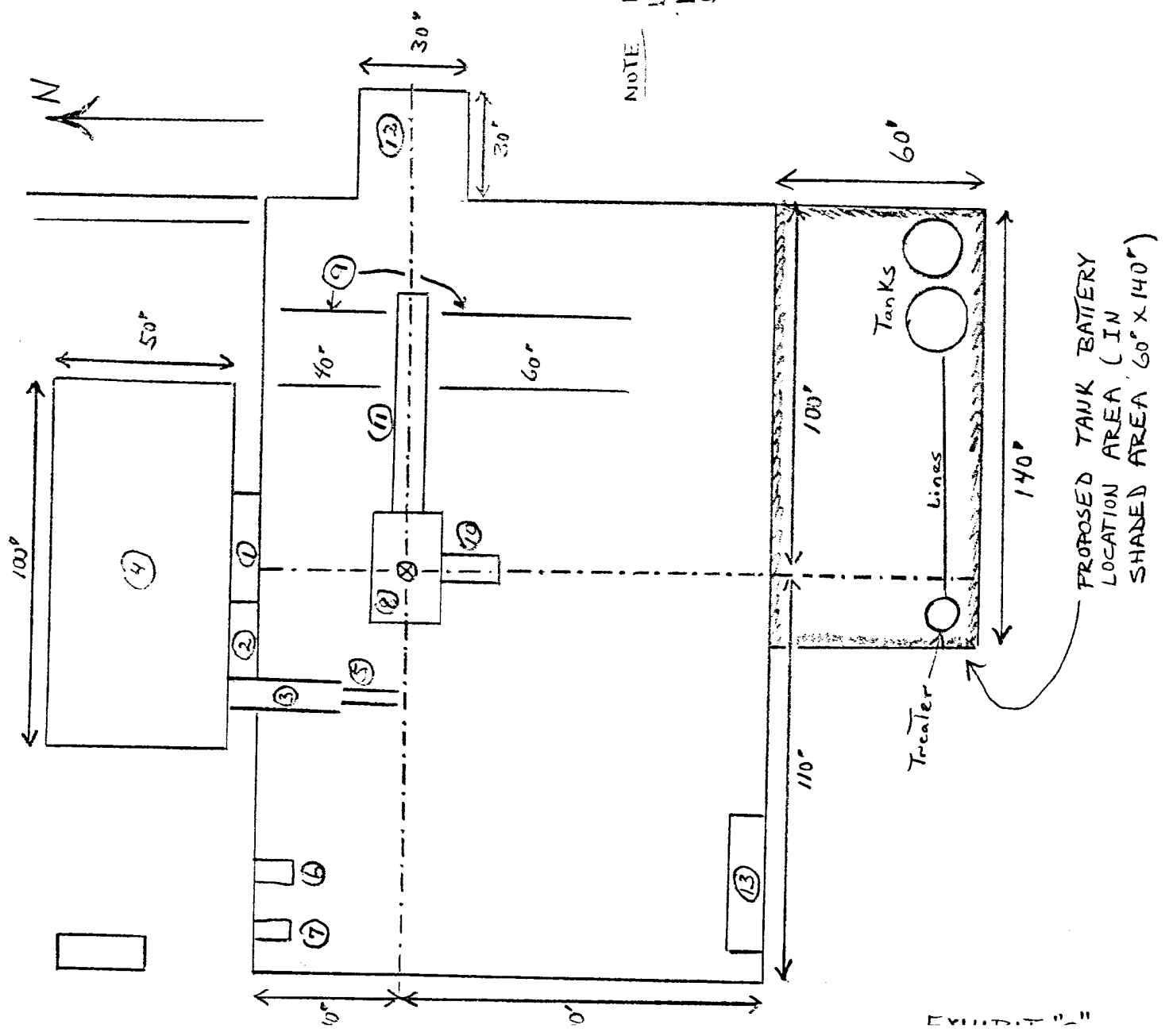
RECEIVED
SEP 24 1961
O.C.D. HOBBS OFFICE

11.

LOCATION, MUD PIT AND PROPOSED TANK BATTERY AREA SPECIFICATIONS

- ① Shale Pit 30' X 8'
- ② Mud Pit 20' X 5'
- 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.



PROPOSED TANK BATTERY LOCATION AREA (IN SHADED AREA 60' X 140')

RECEIVED

SEP 24 1970

O.C.D. HOBBS, OFFICE

111