



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

Gentlemen:

SUNDANCE OIL COMPANY
No. 9 Ingram Federal
330 FNL 990 FWL Sec. 5 T.8S R.31E
Chaves County Lease No. NM-15678

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
Acting District Engineer



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-005-20702

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

330' FNL and 990' FWL, Unit D

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

18. DISTANCE FROM PROPOSED LOCATION*

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

990

19. PROPOSED DEPTH

4100

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

4232.4' GL

22. APPROX. DATE WORK WILL START*

November 10, 1979

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.

9

10. FIELD AND POOL, OR WILDCAT

Tom-Tom, San Andres

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

NW NW

Section 5, T.8S., R.31E.

12. COUNTY OR PARISH

Chaves

13. STATE

New Mexico

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

B L M COPY

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

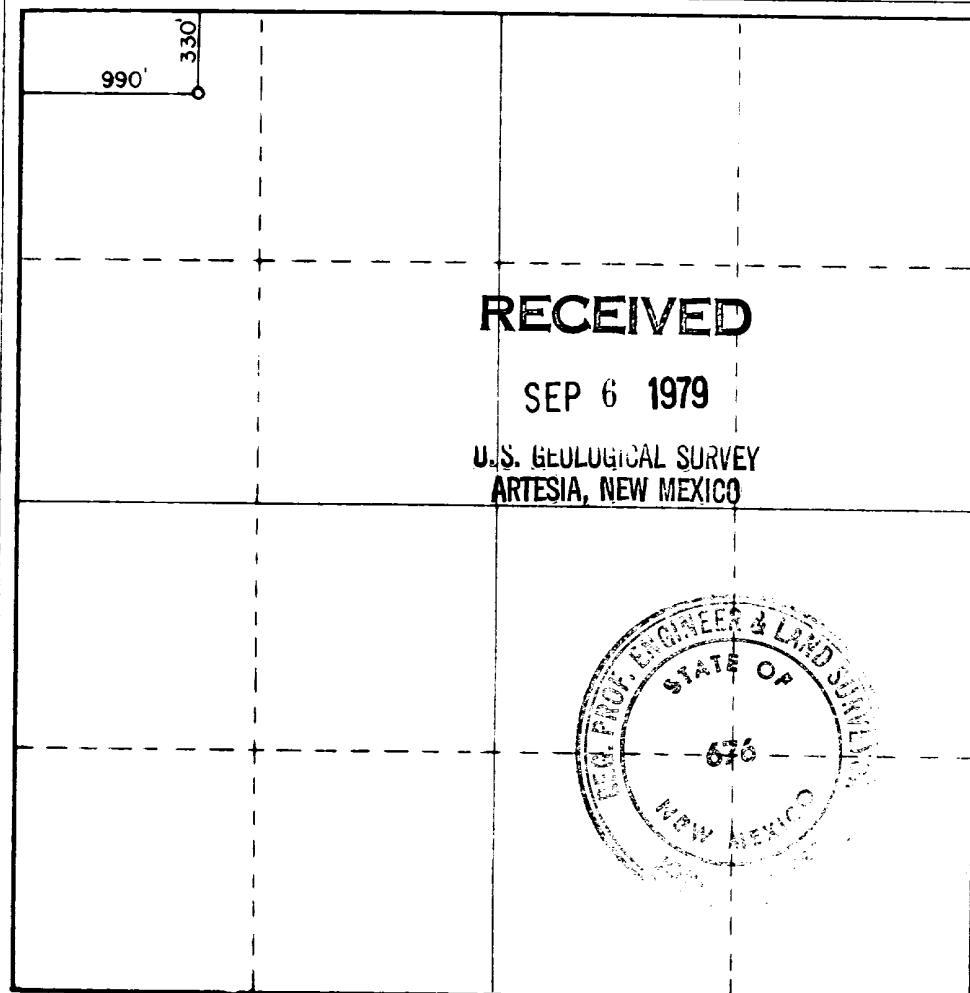
| | | | | | | |
|--|---------------------|----------------------------|----------------------------|-----------------------------|--|----------------------|
| Operator SUNDANCE OIL CO. | | | Lease Ingram Fed | | | Well No. 9 |
| Section Letter D | Section 5 | Township 8 South | Range 31 East | County Chaves | | |
| Actual Footage Location of Well: 330 feet from the North line and 990 feet from the West line | | | | | | |
| Ground Level Elev. 4230.0 | Producing Formation | | Pool | Dedicated Acreage: 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.

Name *J. D. Alkin*
 Position *Dred & Poly Foreman*
 Company *Sundance Oil Co.*
 Date *9-4-79*

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

August 31, 1979

Registered Professional Engineer
and/or Land Surveyor

John W. West
 Certificate No. **John W. West 676**

Ronald J. Eideen 2230

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

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

Sundance Oil Company: Ingram Federal #9
330' FNL and ~~660'~~ FWL 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.
Production: New 4½", 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. |

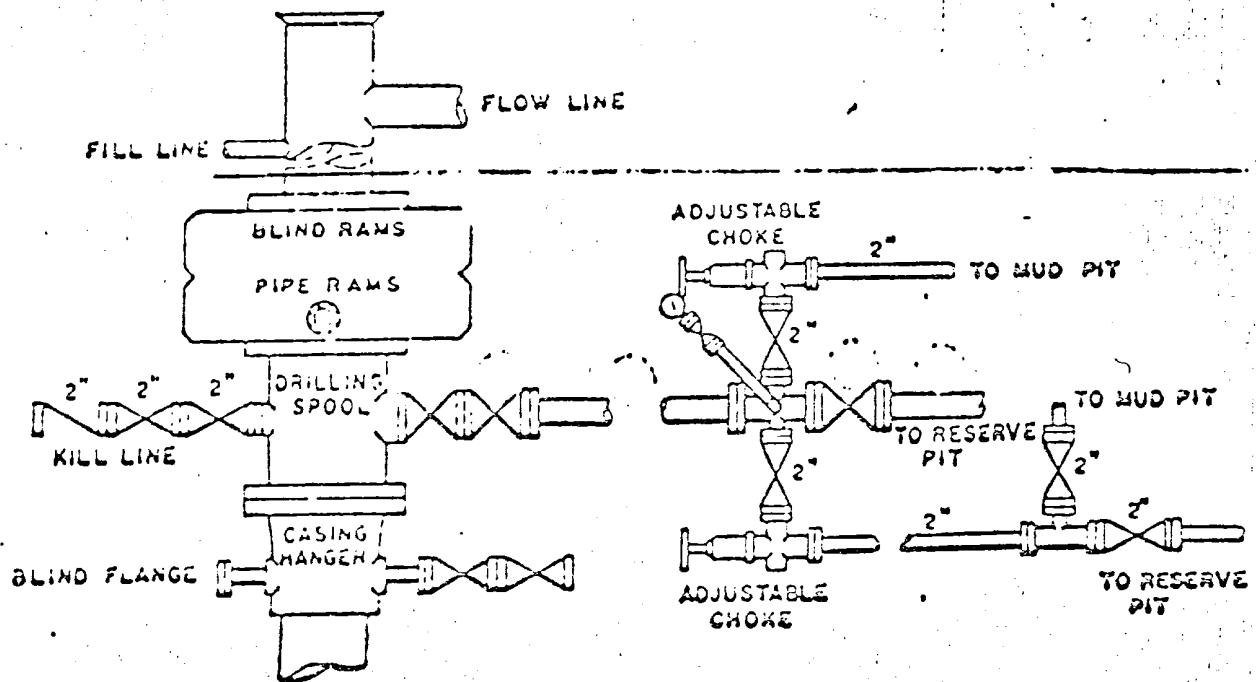
7. The auxiliary equipment to be used is:

- 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 November 10, 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 #9
330' FNL and ~~660'~~^{990'} FWL 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 ~~660'~~^{990'} FWL 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 1550' 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 veing 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 $3\frac{1}{2}$ 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



SUNDANCE OIL COMPANY

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 #9
NW NW Section 5, T.8S., R.31E.
Chaves County, New Mexico

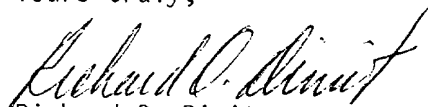
Gentlemen:

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.

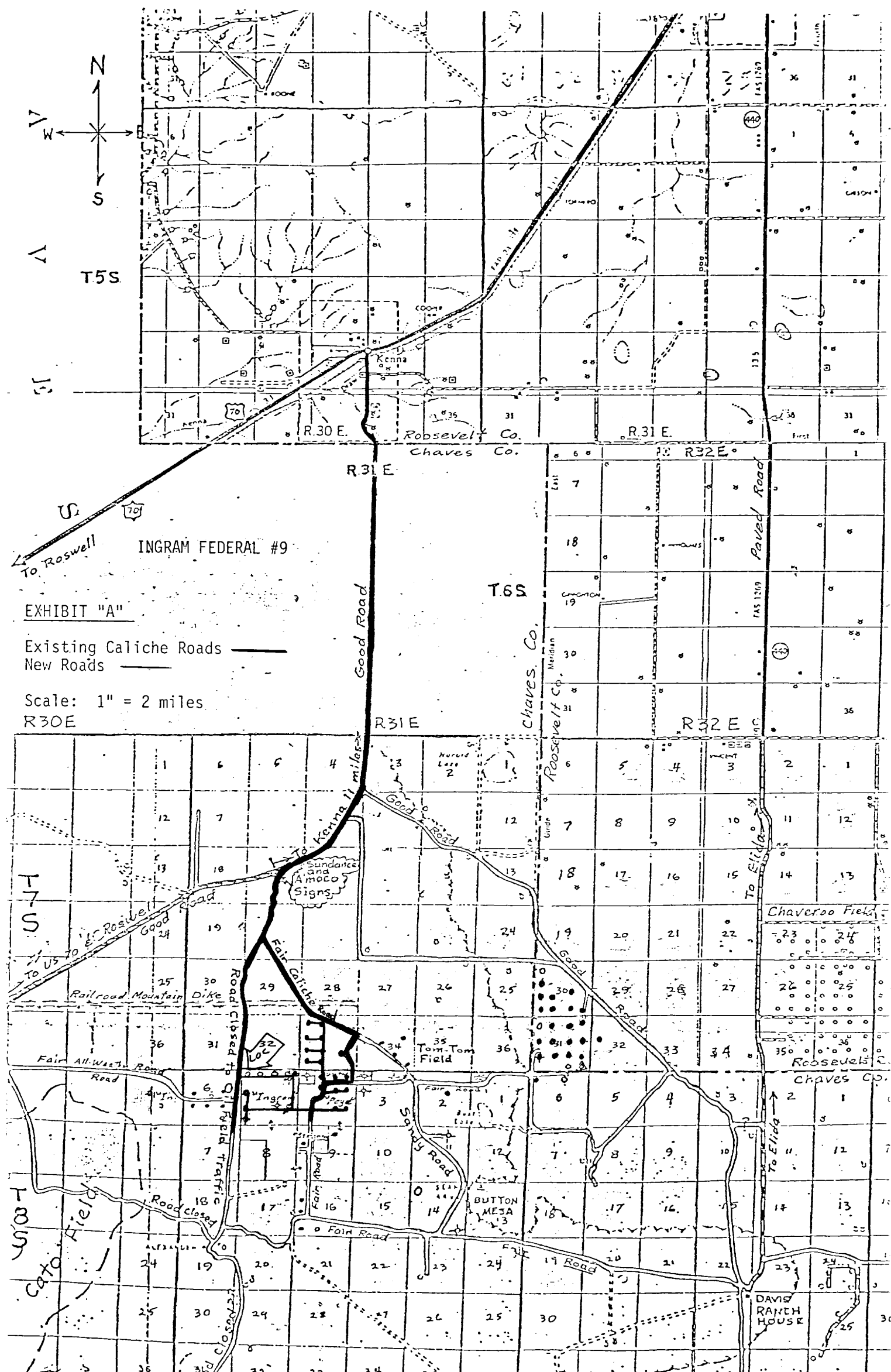
If the well is completed as a dry hole and plugged and abandoned, pits will be covered and location cleaned of all trash and junk. The road will remain in place. The drilling pad will either remain or be ripped at the landowner's option.

Yours truly,


Richard O. Dimit
Vice President, Production

RD:ds

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



NM 15893

EXHIBIT "B"

INGRAM FEDERAL #9

NM.05
57167

TO
KENNA

NM0558977

NM 15677

Existing Roads

Proposed Roads

Scale: 2" = 1 mile

NM
15446

NM
13240

NM
15015

NM0558977

NM0558977

NM 15677

Flag-Red.
"Amoco Fed"
NM
13418

NM 15677

29

29

NM
15015

28

NM 16637

Flag-Red.
"Hahn Fed"

26

Flag-Red.
"Hahn Fed"

NM 13418

NM 15015

NM 14148

NM 16637

Sundance

Union Tex.

Mor. 4

NM 15677

"Hahn Fed"

Amoco

TOM-TOM

PAN AM

32

33

35

State

"Oakson Fed"

Sundance

NM 15015

Mor. 1

N.M.046153-A

"Miller Fed"

N.M.046153-A

N.M.046153-A

"Beard"

N.M.04

94462

Sundance

N.M.0403741

N.M.0403741

4020

4059

Phillips

F.A.F.

"Cone Fed"

"Ingram" NM 15678

"Paye" NM 13419

N.M.O

403741

3920

N.M.0403741-B

State

Sundance

NM 16637

Phillips

NM

17229

"Strange"

"Paye" U.S.

N.M.0403741-B

NM 15312

Sundance

4192

NM 15016

"Ingram" NM 15678

"Ingram" NM 15678

NM 15312

N.M.0403741-B

NM 16816-A

"Grunberg Fed"

NM 11329

SIETE

BROWN

3742

17

BROWN

P-2+450

Read & Stevens

1 Sun St.

BROWN

R&S

P-1+530

P-2+450

R&S

State

N.M.067707

BROWN

EASTLAND

3818

3782

PAN AM

13857

Sundance

NM

15678

U.S.

NM 16443

N.M.0403741-A

"Roberts Fed"

NM 11329

Sundance

4170

20

21

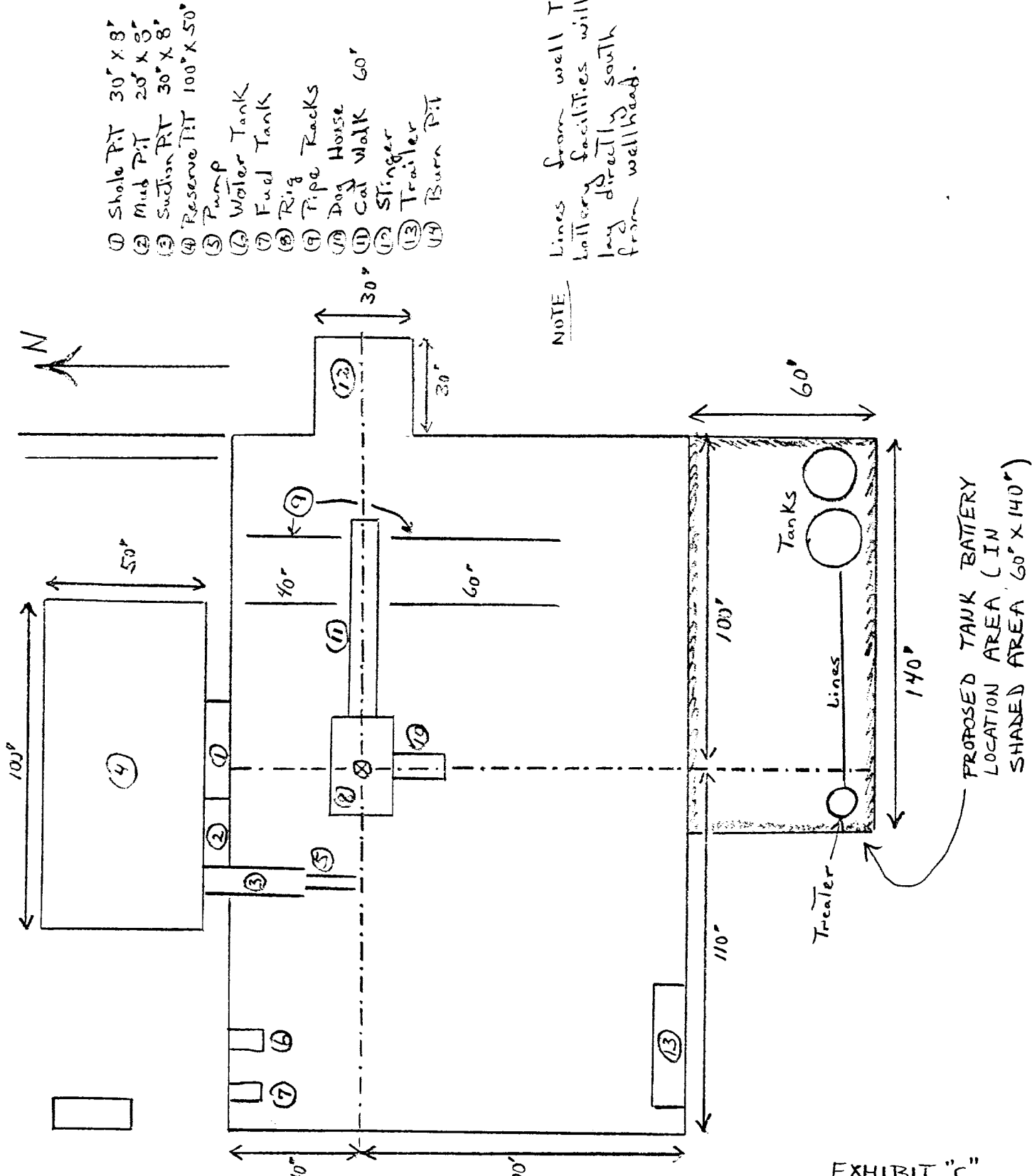
22

NM 15894

23

4100

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.

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

EXHIBIT "C"

RECEIVED

SEP 20 1979

**O. C. C.
ARTERIA, OFFICE**

RECEIVED
SEP 24 1979
O.C.D. HOBBS, OFFICE

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