

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other Instructions on
reverse side)

30-017-22830
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

RECEIVED

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

TERRA RESOURCES, INC.

3. ADDRESS OF OPERATOR

10 Desta Drive, Suite 500 West Midland, Texas 79705

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

At surface 2410' FNL

2200' FEL

At proposed prod. zone

Same

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

15 miles West of Carlsbad

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

2200'

16. NO. OF ACRES IN LEASE

1877.6

17. NO. OF ACRES ASSIGNED

TO THIS WELL

640

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

9950'

20. ROTARY OR CABLE TOOLS

Rotary

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

Ground level = 4014'!

22. APPROX. DATE WORK WILL START*

11-2-87

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17½"	13.375	48.0	360	400 SX CIRCULATE
12¼"	9.625	36.0	2550	900 SX CIRCULATE
8-3/4"	7	26.0	8200	250 SX
6½"	4½"	13.5	7900-9950	190 SX

- 1) Drill 17½" hole to 360' w/fresh water mud. Set & cement 13-3/8" casing. Circulate cement to surface.
- 2) Drill 12¼" hole to 2550' w/brine water. Set 9-5/8" casing at 2550' & circulate cement to surface.
- 3) Drill 8-3/4" hole to 8200' w/fresh water and fresh water based mud. Set 7" casing @ 8200'. Circulate cement back to 6750'.
- 4) Drill 6½" hole to 9950' w/fresh water and fresh water based mud. Set 4½" production liner at 9950' and hang in 7" casing at 7900'. Circulate cement up into 7" - 4½" annulus.

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

TITLE

OPERATIONS ENGINEER

DATE

10-19-87

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

10/30/87

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plate, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill, deepen, or plug back an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the lessee elects to initiate drilling operations on an oil and gas lease.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the lessee elects to initiate drilling operations on an oil and gas lease.

**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.

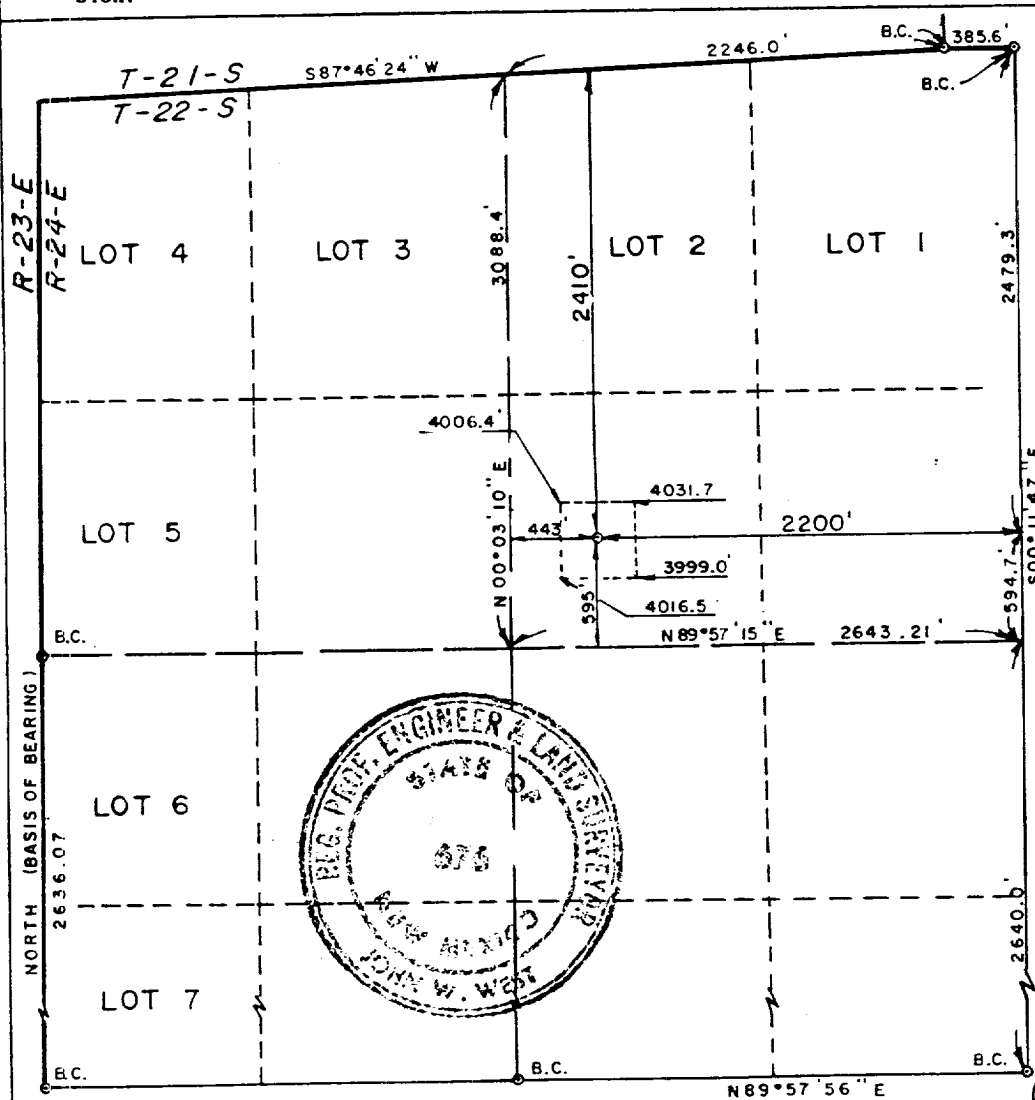
Operator Terra Resources, Inc.			Lease Amoco 6 Federal		Well No. 1
Unit Letter G	Section 6	Township 22 South	Range 24 East	County Eddy	
Actual Footage Location of Well: 2410 feet from the North line and 2200 feet from the East line					
Ground Level Elev. 4014.1	Producing Formation Morrow/Upper Penn	Pool Indian Basin	Dedicated Acreage: 640 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.

Name
Alan D. Means

Position
Operation Engineer

Company
Terra Resources, Inc.

Date
10/19/87

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.

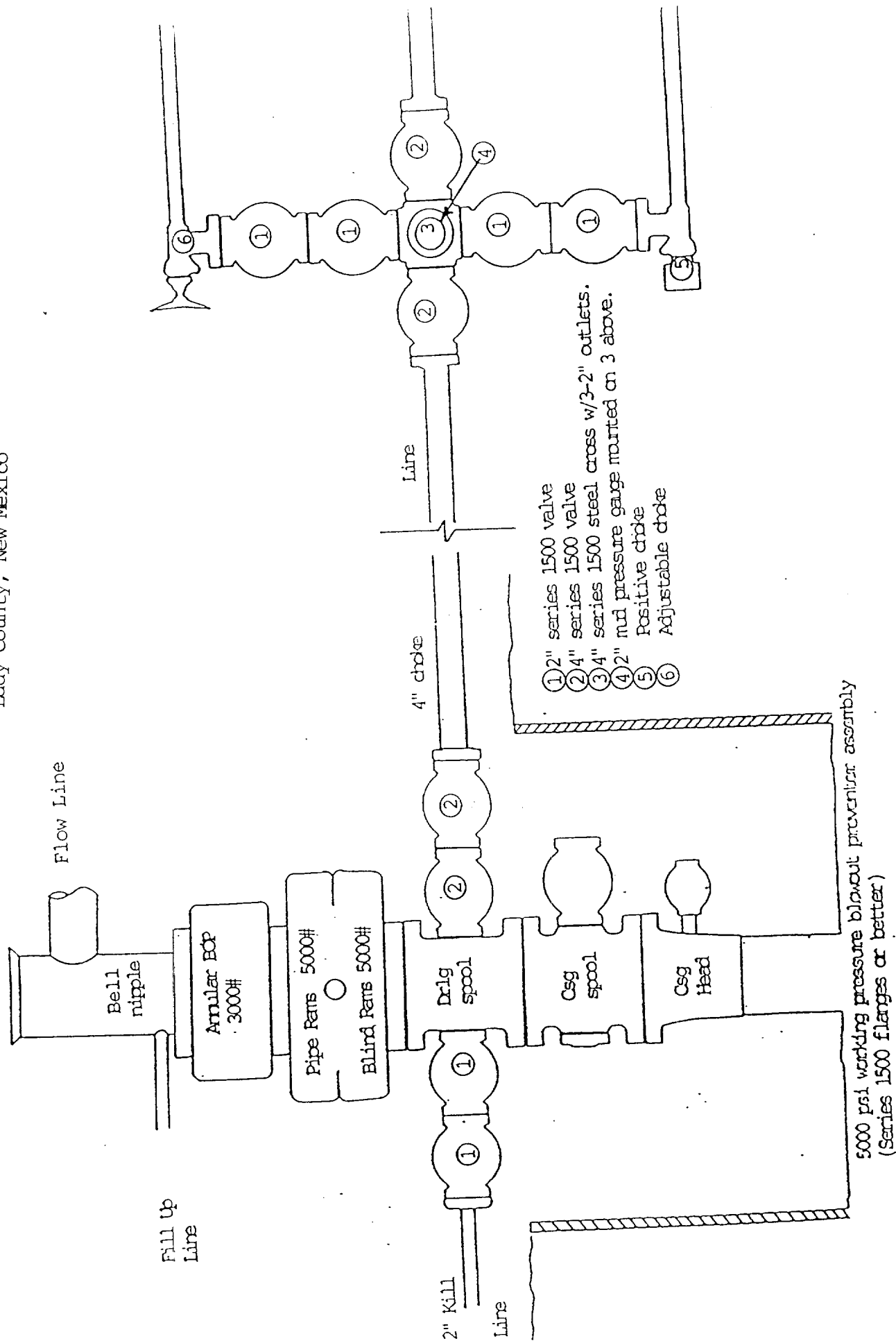
Date Surveyed
October 12, 1987

Registered Professional Engineer and/or Land Surveyor
John W. West

Certificate No. **JOHN W. WEST 676**

Ronald J. Eidson 3239

EXHIBIT F
 Pressure Control Equipment
 Terra Resources, Inc.
 Amoco "6" Federal #1
 2410' FNL & 2200' FEL
 Sec. 6, T-22-S, R-24-E
 Eddy County, New Mexico



TERRA RESOURCES, INC.
AMOCO "6" FEDERAL #1
2410' FNL & 2200' FEL
Sec. 6, T-22-S, R-24-E
Eddy County, New Mexico

In conjunction with form 3160-3, **Application for Permit to Drill**, Terra Resources, Inc. submits the following ten items of pertinent information in accordance with USGG requirements:

1. The geologic surface formation belongs to the Reeves - Gypsum land-Cottonwood Association.
2. The estimated tops of geologic markers are as follows:

San Andres	700'
Glorietta	2200'
Bone Spring	2800'
Wolfcamp	6720'
Cisco	7420'
Strawn	8100'
Morrow Clastics	9400'

3. The estimated depths at which anticipated fresh water, oil or gas formations are expected to be encountered:

fresh water:	surface to 2400'
Oil or gas:	Wolfcamp 6720'
	Cisco 7420'
	Morrow 9400'

4. Proposed casing and cementing program: See **Exhibit E**
5. Pressure control equipment: See **Exhibit F**
6. Mud program: See **Exhibit G**
7. Auxiliary equipment: none
8. Testing, logging and coring programs:
 - a) No cores are planned.
 - b) Drill Stem Tests (When justified by a valid show of oil or gas)
Wolfcamp 6720'
Cisco 7420'
Morrow 9400'
 - c) Open hole logs:
Gamma Ray - Caliper - Neutron - Density Porosity Log 2550' - TD
Gamma Ray - Neutron log Surf - 2550'
Gamma Ray - Dual Laterolog - Micro Laterolog 2550' - TD
9. No abnormal pressures or temperatures are anticipated.
10. Anticipated starting date: as soon as possible.

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Topographic Map
Terra Resources, Inc.
Amoco "6" Federal #1

2410 FNL & 2200 FEL
Sec 6, T-24-S, R-24-E
Eddy County, NM

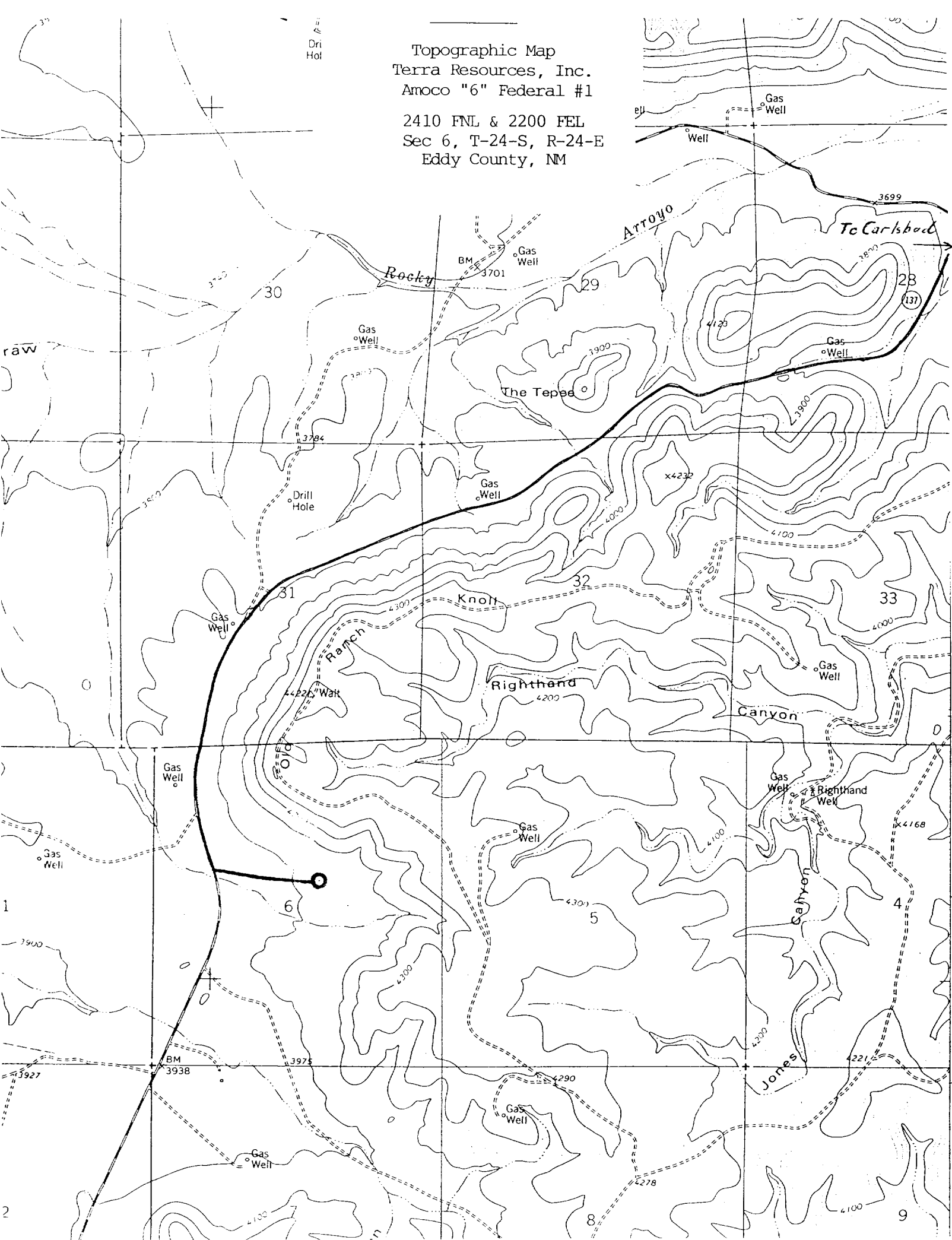


EXHIBIT D
Rig Layout
Terra Resources, Inc.
Amoco "6" Federal #1
2410' FNL & 2200' FEL
Sec. 6, T-22-S, R-24-E
Eddy County, New Mexico

