

Form 3160-3
(July 1989)
(formerly 9-331C)

NM Oil Cons. Commission
Drawer DD OFFICE FC MBER
Artesia, NM OF 89230
(Other instructions on reverse side)

30-005-62942

BLM Roswell District
Modified Form No.
NM60-3160-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Merit Energy Company

3a. Area Code & Phone No.

(214) 701-8377

3. ADDRESS OF OPERATOR

12221 Merit Dr., Ste. 500 Dallas, TX 75251

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

At surface

1640' FNL & 2160' FEL

At proposed prod. zone

Same

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

15 miles NE of Roswell, NM

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

2160'

(Also to nearest drig. unit line, if any)

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

2237.3

16. NO. OF ACRES IN LEASE

1514.68

19. PROPOSED DEPTH

4800'

17. NO. OF ACRES ASSIGNED TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

3754.9' GL

22. APPROX. DATE WORK WILL START

December 22, 1992

23.

PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	J-55	LTC	900'	Circ 500 sx
7 7/8"	4 1/2"	10.5#	J-55	LTC	4800'	300 sx "C"

MUD PROGRAM:

0' - 900': Fresh water spud mud. No. WL control.

900' - 4800': Cut Brine, 8.9-9.5#/gal, Vis. 28-30, WL 20cc or less, oil if required

BOP PROGRAM:

A 10" 3000 psi wp Schaffer Type E double hydraulic BOP will be installed on the 8 5/8" casing. Casing and BOP will be tested before drilling, and with 7 7/8". The BOP will be used as a 2000 psi wp system and will be tested daily.

Gas is partially dedicated.

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.

Agent for:

Merit Energy Company

Dec. 7, 1992

SIGNED

TITLE

DATE

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

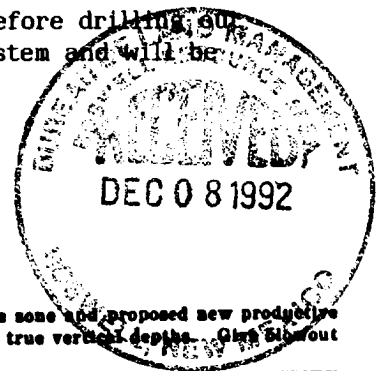
DATE

CONDITIONS OF APPROVAL, IF ANY

APPROVAL
CERTIFY THAT THE APPLICANT HAS A LEGITIMATE AND EQUITABLE
TITLE TO THOSE RIGHTS IN THE LAND OR LEASE WHICH WOULD
ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON.

PLEASE BE AWARE THAT THE BUREAU OF LAND MANAGEMENT
OF FEDERALLY OWNED LANDS WILL NOT PERMIT FOR CONSTRUCTION OF THE ACCESS ROAD OR PAD WITHOUT PAYMENT
IN ADVANCE.

Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

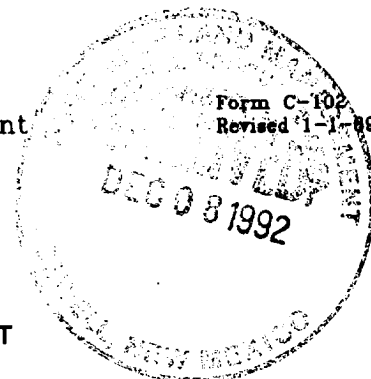


Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088



DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

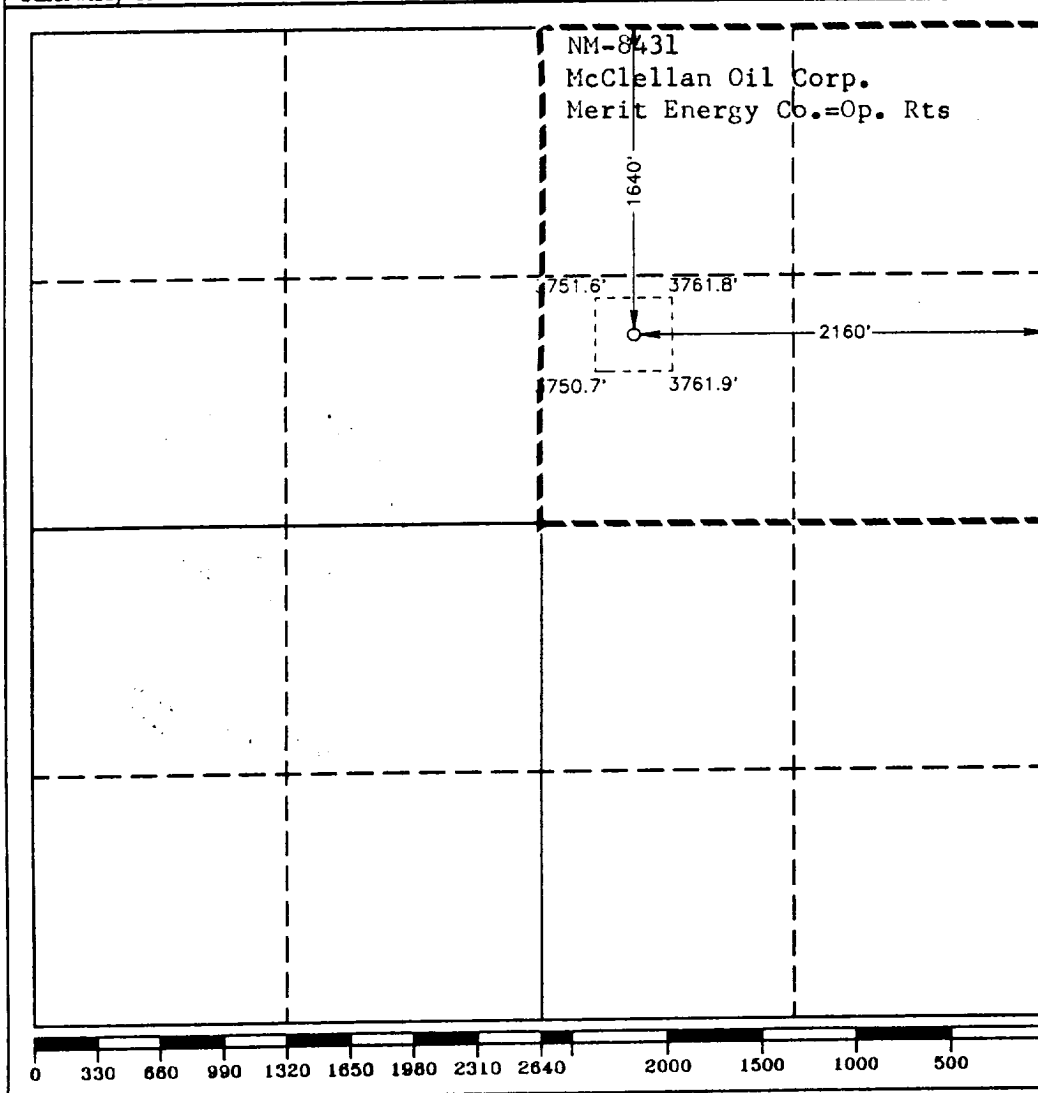
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MERIT ENERGY COMPANY			Lease PENJACK FEDERAL		Well No. 10
Unit Letter G	Section 7	Township 10 SOUTH	Range 26 EAST	NMPM	County CHAVES
Actual Footage Location of Well: 1640 feet from the NORTH line and 2160 feet from the EAST line					
Ground Level Elev. 3757.3'	Producing Formation Abo	Pool South Pecos Slope Abo		Dedicated Acreage: 160 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 interest 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 of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.) _____
- No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name
Sheryl J. Carruth

Position

Regulatory Manager

Company

Merit Energy Company

Date

10-6-92

SURVEYOR CERTIFICATION

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

SEPTEMBER 21, 1992

Signature & Seal of Professional Surveyor

GARY L. JONES
7977
Certificate No. **JOHN W. WEST, 878**
RONALD W. EIDSON, 3239
GARY L. JONES, 7977

92-11-1398

APPLICATION FOR DRILLING

MERIT ENERGY COMPANY
Penjack Federal, Well No. 10
1640' FNL & 2160' FEL, Sec. 7-T10S-R26E
Chaves County, New Mexico
Lease No.: NM-8431
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well. Merit Energy Company submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

San Andres	870'
Glorieta	1980'
Yeso	2070'
Abo	4240'
T.D.	4800'
3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Random fresh water sands from surface to - 300'+/-.

Oil: None expected.

Gas: Possible in the Abo below 4240'.
4. Proposed Casing Program: See Form 3160-3.
5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
6. Mud Program: See Form 3160-3.
7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging, and Coring Program:

Drill Stem Tests: None, unless warranted

Logging: T.D. to surface casing: CNL-LDT, and DLL w/selected RXO.
T.D. to surface: GR-CNL.

Coring: None planned.
9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated BHP = 1200 psi with 120°.

H₂S: None expected. None in the previously drilled wells in vicinity.
10. Anticipated starting date: December 22, 1992.
Anticipated completion of drilling operations: Approximately 30 days.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

MERIT ENERGY COMPANY
Penjack Federal, Well No. 10
1640' FNL & 2160' FEL, Sec. 7-T10S-R26E
Chaves County, New Mexico
Lease No.: NM-8431
(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM Roswell Quadrangle map showing the location of the proposed well as staked, in relation to existing roads and highway. The well site location is approximately 15 road miles east of Roswell, New Mexico. Traveling east from Roswell, there will be approximately 10 miles of paved U.S. Highway 380 and 4 miles of gravel ranch/oilfield roads.
- B. Directions: Travel East from Roswell, NM on U.S. Highway 380 for 10 miles to the Bottomless Lakes turnoff. Turn north on Chaves County road No. 61 for 5 miles, crossing cattle guard, that is approximately 1,500 feet east of the McCrea windmill. Turn right (southeast) to the Penjack Fed. No. 4 well site. Turn northeast for .2 mile to pipeline ROW road. Turn southeast on the pipeline access road for .5 mile, then turn right for 300 feet to the Penjack Fed., Well No. 8 well site. The start of the proposed access road is on the south side of the extant pad and will run south for 2000 feet to the northeast corner of the staked location.

2. PLANNED ACCESS ROAD:

- A. Length and Width: There will be approximately 2000 feet of new access road 12 feet wide (24' Max.), which is color coded red on Exhibit "B".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche. There is an overall up and down slope of 1% or less. The surface will be properly drained.
- C. Turnouts: One turnout may be required, which will increase the road width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: None required.
- F. Gates, Cattleguards: None required.
- G. Off Lease R/W: None required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery will be installed on the drilling pad. A 2 3/8" gas pipeline will be buried a minimum of 24" within the cleared ROW of the proposed access road to an existing pipeline at the Penjack Fed. #8 well site.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the proposed access road and well site pad will be obtained, as needed, from a private surface and mineral pit in the NE¼NE¼ of Section 30-T9S-R26E. The topsoil from the location will be stockpiled near the location for future rehabilitation use. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve/mud pit.
- B. Drilling fluids will be allowed to evaporate in the reserve/mud pit until the pit is dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary land fill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, waste pits, and major rig components. The pad and pit area has been staked and flagged, 400' X 400'.
- B. Mat Size: Maximum size: 260' X 185' plus 50' X 100' reserve pit on the north side of location.
- C. Cut & Fill: A 3' cut on the east with fill to the west will be required.
- D. The surface will be topped with compacted caliche.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced and screened until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as the pits are dry enough to work after abandonment.

11. OTHER INFORMATION:

- A. Topography: The proposed well site is located on a relatively level area from north to south, but the overall terrain has a 2.5% slope to the west/northwest from an elevation of 3757.3' G.L. The proposed access road is relatively level with less than 1% slope north/south. The area is part of the upland drainage area east of the Pecos River, which is 2.5 miles to the west.
- B. Soil: The topsoil at the well site is a light tan colored gypsiferous alluvium clay loam with outcrops of gypsum rock showing, indicating extensive coverage underlying the surface. This soil is part of the Hollomex-Reeves-Milner complex series.
- C. Flora and Fauna: The vegetation cover is a fair to good grass cover of three-awn, dropseed, grama, along with plants of mesquite, yucca, cacti, broomweed, thistle and miscellaneous weeds and wildflowers. The wildlife consists of antelope, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: The Pecos River is 2.5 miles to the west.
- E. Residences and Other Structures: The David McCrea ranch house is 1.5 miles to the northwest of the location.
- F. Land Use: Cattle grazing.

11. OTHER INFORMATION; cont.....

- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.
- H. There is no evidence of any archaeological, historical or cultural sites in the area. An archaeological survey has been conducted by Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

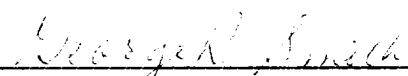
- A. The field representative for assuring compliance with the approved surface use and operations plan is as follows:

Mark Hamilton
Merit Energy Company
P. O. Drawer 8249
Roswell, New Mexico 88202
Home Phone: (505) 622-9062
Mobile Phone: (505) 625-6135

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 Merit Energy Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

December 7, 1992



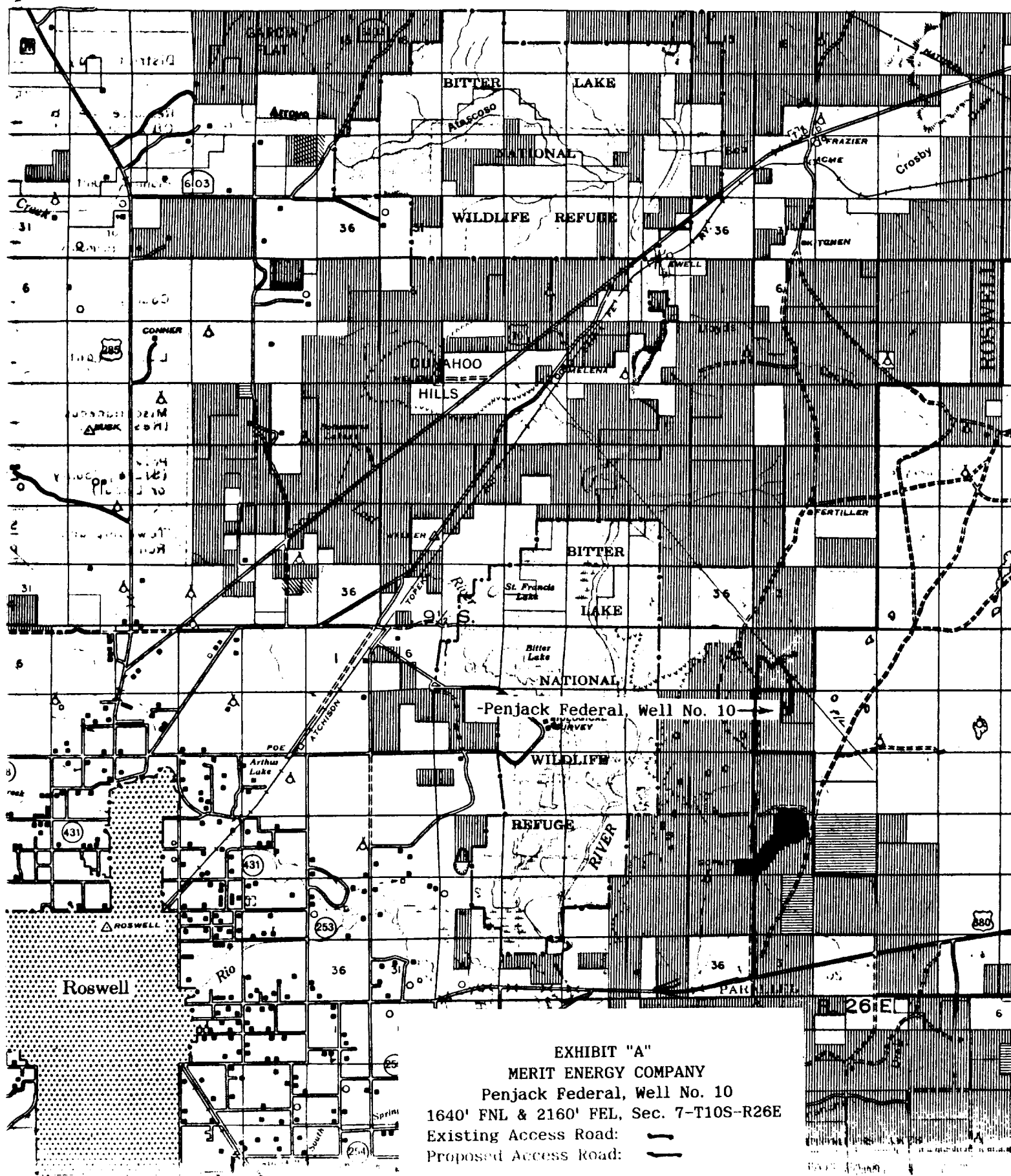
George R. Smith
Agent for: Merit Energy Company

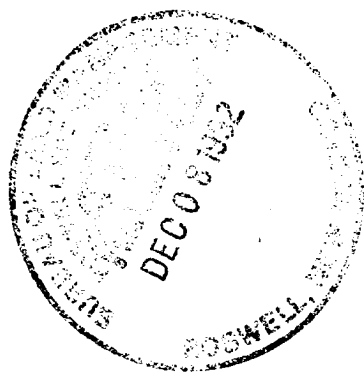
NEW MEXICO

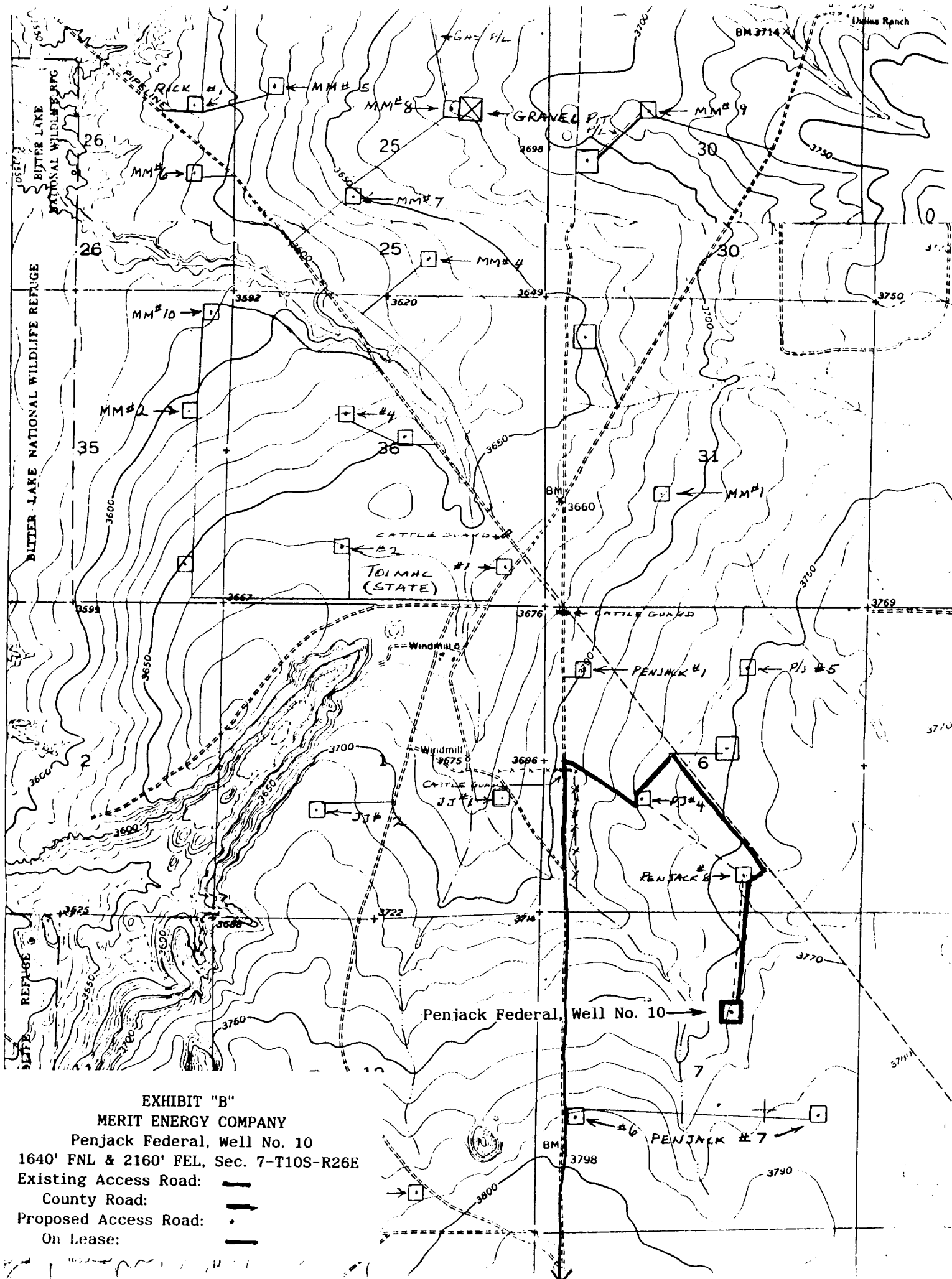
R. 24 E. SE-8

R. 25 E.

R. 26 E.







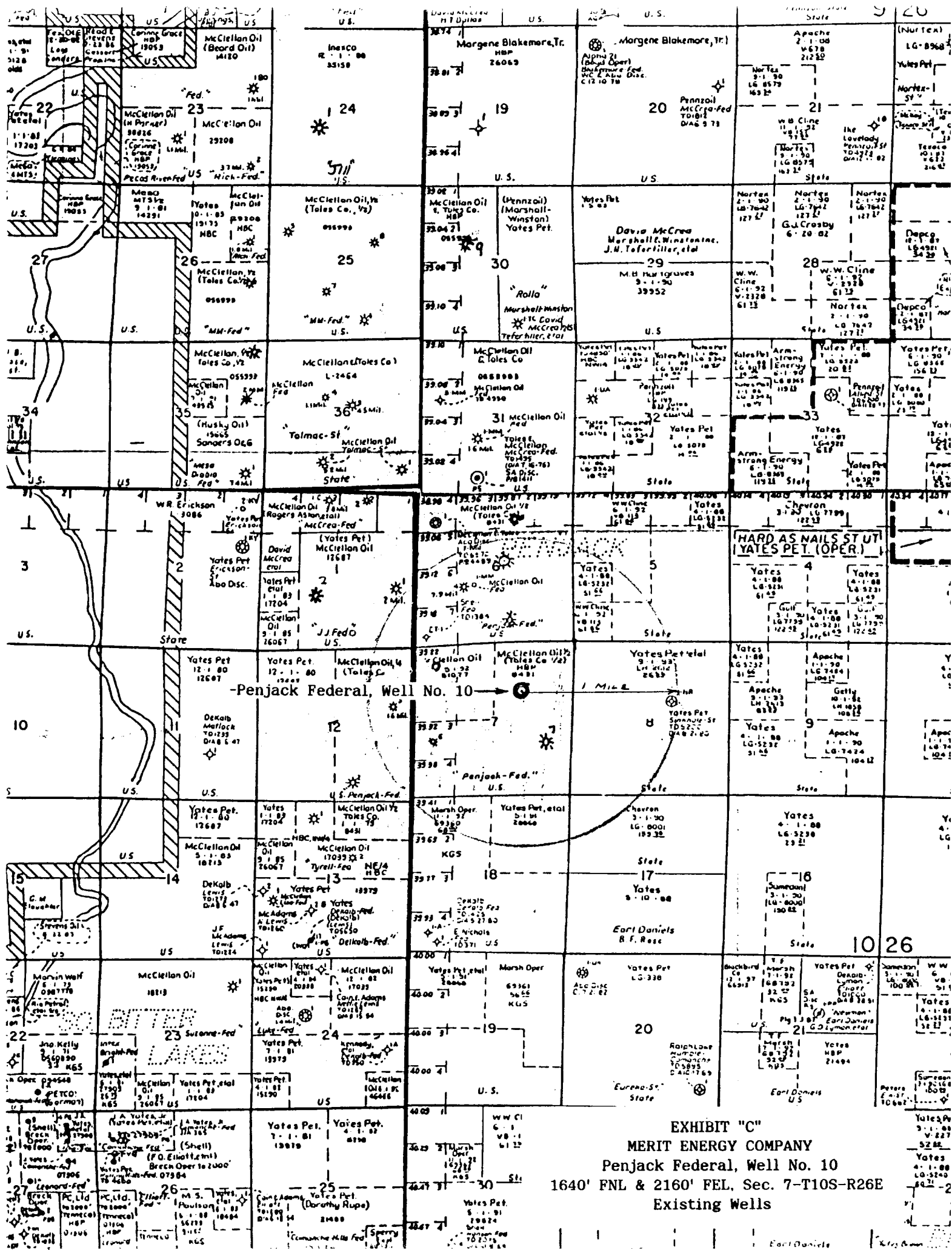


EXHIBIT "C"
MERIT ENERGY COMPANY
Penjack Federal, Well No. 10
1640' FNL & 2160' FEL, Sec. 7-T10S-R26E
Existing Wells

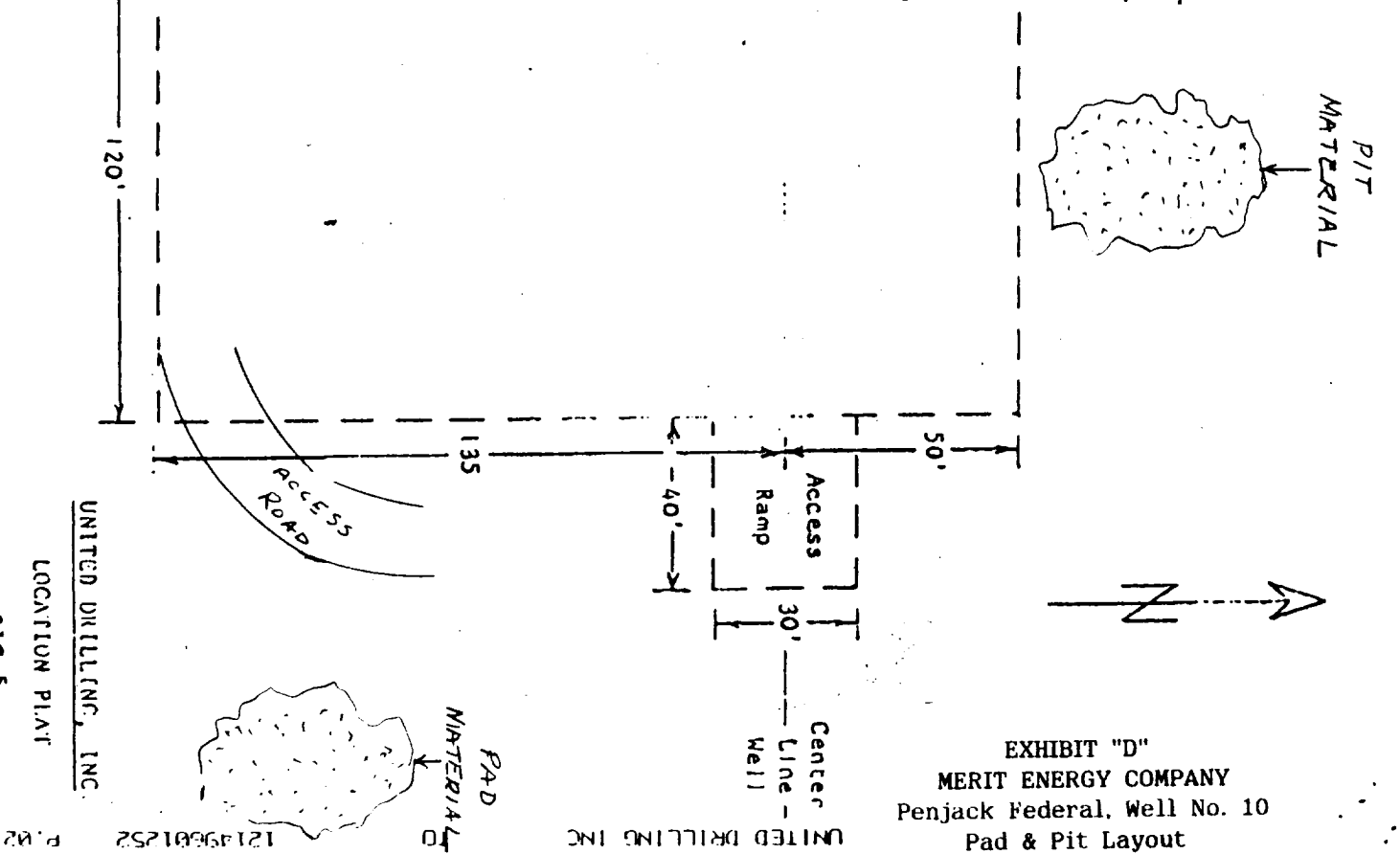
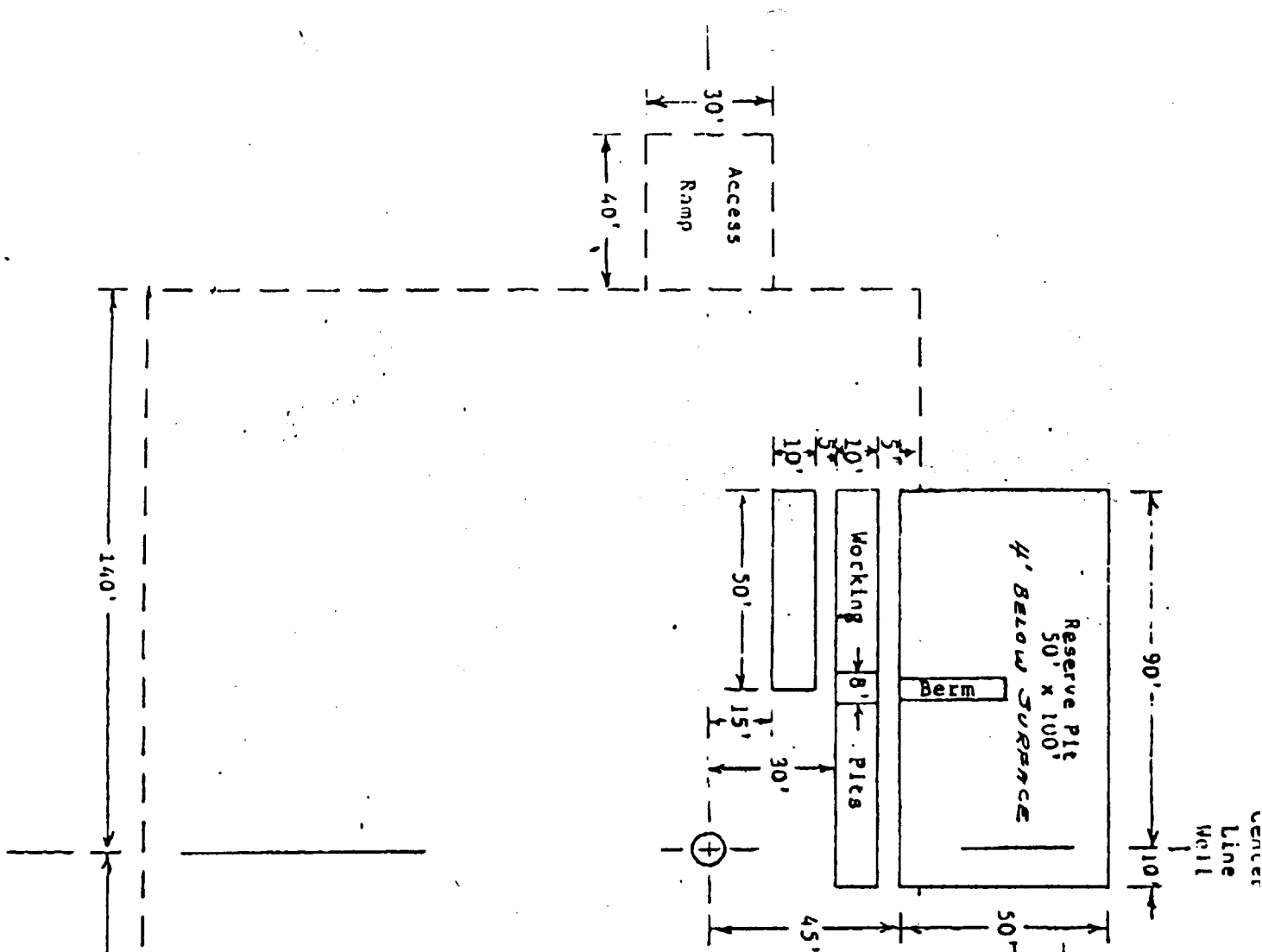


EXHIBIT "D"
MERIT ENERGY COMPANY
Penjack Federal, Well No. 10
Pad & Pit Layout

UNITED DRILLING, INC.
LOCATION PLAT
RIG 5
Scale: 1"=40' 1-15-92

P.02

121495601252

UNITED DRILLING INC



BLOWOUT PREVENTOR ARRANGEMENT

2M SYSTEM

10" SHAFFER TYPE "E", 3000 psi WP -
80 GALLON, 4 STATION KOOMEY ACCUMULATOR
3000 psi WP CHOKE MANIFOLD

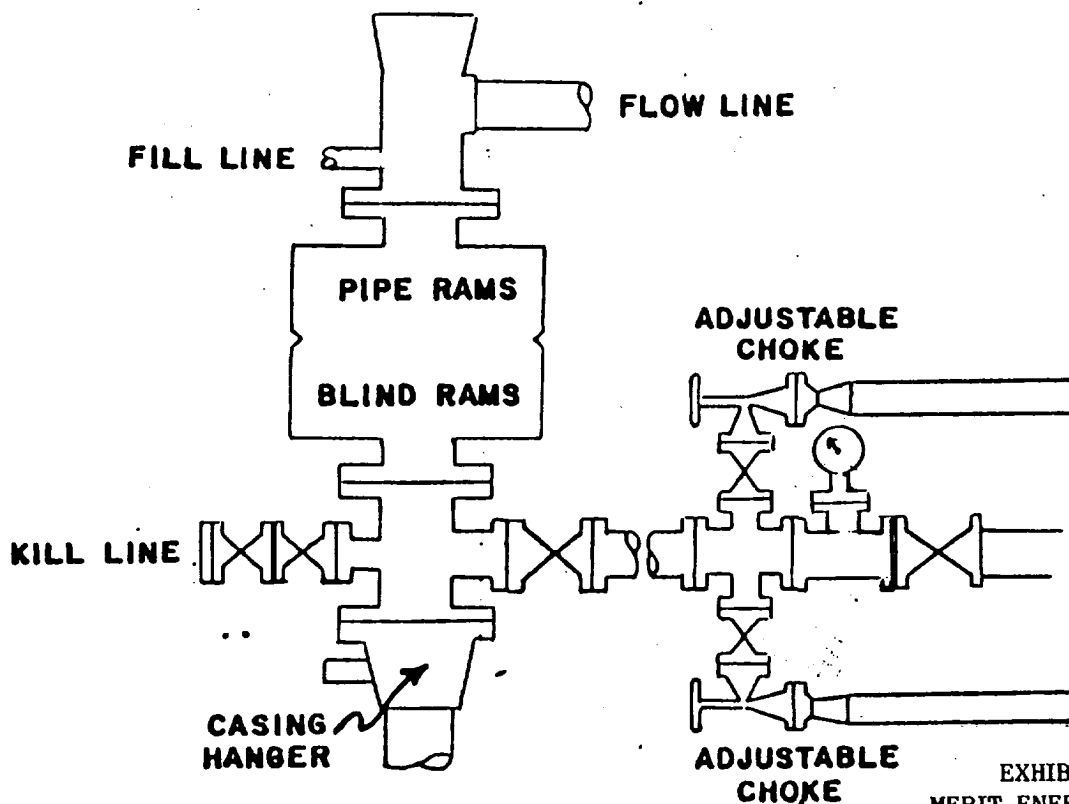


EXHIBIT "E"
MERIT ENERGY COMPANY
Penjack Federal, Well No. 10
BOP Specifications

