

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTSUBMIT IN **ARTESIA** LOCATE*(Other instructions on
reverse side)FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

CISE

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLES
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

HUDSON OIL COMPANY OF TEXAS

(RANDALL HUDSON 817-676-2266)
(JON B. SMITH 505-382-4400)

3. ADDRESS AND TELEPHONE NO.

616 TEXAS STREET FORT WORTH, TEXAS 76102-4612

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

At surface

1295' FNL & 1880' FEL SEC. 24 T17S-R31E EDDY CO. NM

At proposed prod. zone

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

Approximately 12 miles East of Loco Hills New Mexico

15. DISTANCE FROM PROPOSED*

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

1295

16. NO. OF ACRES IN LEASE

1122±

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.

300'±

19. PROPOSED DEPTH

4200'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3900'

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20" conductor	NA	40'	Cement to surface with Redi-mix
12 1/4"	J-55 8 5/8"	24	500' 330'	500 Sx. circulate to surface
7 7/8"	J-55 5 1/2"	15.5	4200'	750 Sx. circulate to surface

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

2. Drill 12 1/4" hole to 500'. Run and set 500' of 8 5/8" 24# J-55 ST&C casing. Cement with 500 Sx. of Class "C" cement + 2% CaCl + 1/4# Flocele/Sx. circulate cement to surface.

3. Drill 7 7/8" hole to 4200'. Run and set 4200' of 5 1/2" 15.5# J-55 ST&C casing. Cement with 500 Sx. of Halco Light cement + additives, tail in with 250 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.

Reservoir Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 Agent

DATE 06/22/01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

/S/ JOE G. LARA

TITLE FIELD MANAGER

DATE

SEP 28 2001

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED
JUN 25 2001
BLM
ROSNELL, NM

State of New Mexico

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

P.O. Box 2088, Santa Fe, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
		43329	MALJAMAR-GRAYBURG, SAN ANDRES
Property Code	Property Name		Well Number
5313	PUCKETT A		31
OGRID No.	Operator Name		Elevation
25111	HUDSON OIL COMPANY OF TEXAS		3900'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	24	17-S	31-E		1295	NORTH	1880	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill		Consolidation Code		Order No.			
40									

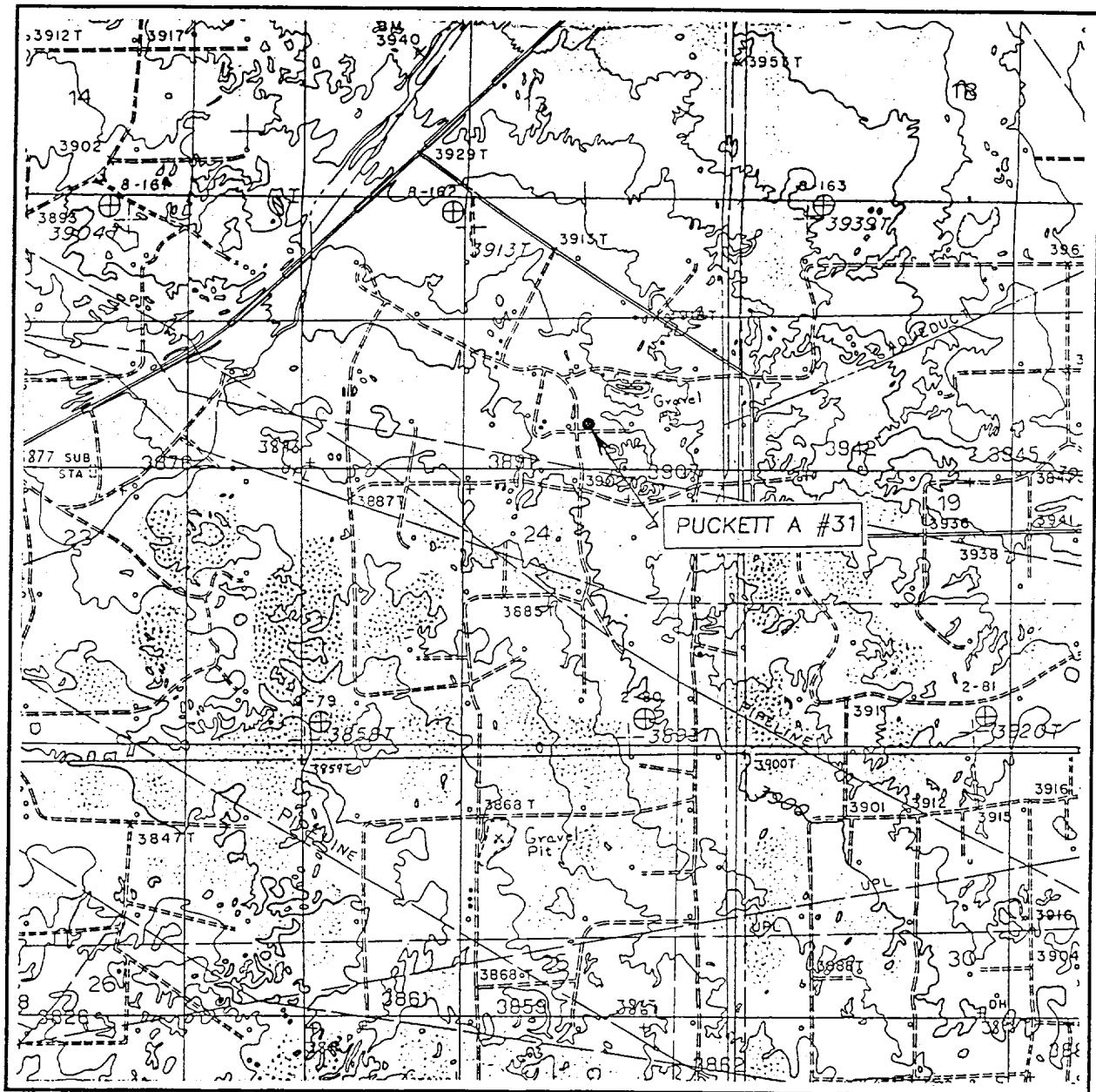
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature Joe T. Janica Printed Name Agent Title 06/22/01 Date
	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 belief. MAY 11, 2001 Date Surveyed Signature & Seal of Professional Surveyor 01-11-0566 Certificate No.
	AWB 3239 12641
	RONALD L. EIDSON GARY EIDSON

EXHIBIT "A"

RECEIVED
JUN 25 2001
BLM
ROSWELL, NM

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
MALJAMAR N.M.

SEC. 12 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1295' FNL & 1880' FEL

ELEVATION 3900'

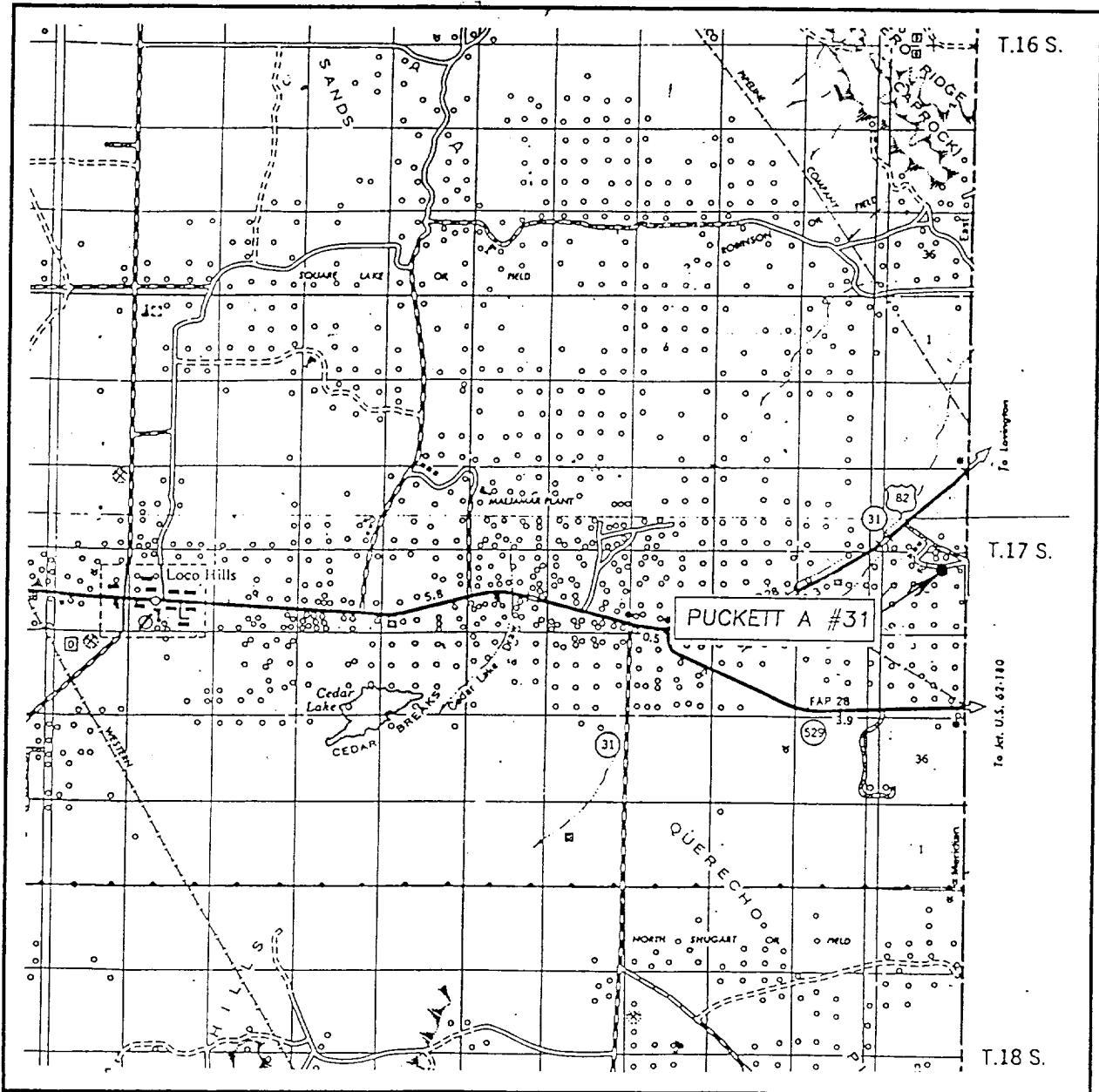
OPERATOR HUDSON OIL COMPANY OF TEXAS

LEASE PUCKETT A

U.S.G.S. TOPOGRAPHIC MAP
MALJAMAR N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 12 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1295' FNL & 1880' FEL

ELEVATION 3900'

OPERATOR HUDSON OIL COMPANY OF TEXAS

LEASE PUCKETT A

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

HUDSON OIL COMPANY OF TEXAS

PUCKETT "A" # 31

UNIT "B" SECTION 24

T17S-R31E EDDY CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 1295' FNL & 1880' FEL SEC. 24 T17S-R31E EDDY CO. NM
2. Elevation above sea level: 3900' GR.
3. Geologic name of surface formation: Quaternary Aeolian Deposits
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
5. Proposed drilling depth: 4200'
6. Estimated tops of geological markers:

Rustler Anhydrite	610'		
Queen	3135'	San Andres	3950'
San Andres	3640'		

7. Possible mineral bearing formation:

Queen	Oil
Grayburg	Oil
San Andres	Oil

8. Casing program:

<u>Hole size</u>	<u>Interval</u>	<u>OD casing</u>	<u>Weight</u>	<u>Thread</u>	<u>Collar</u>	<u>Grade</u>
25"	0-40	20"	NA	NA	NA	Conductor
12½"	0-500'	8 5/8"	24	8-R	ST&C	J-55
7 7/8"	0-4200'	5½"	15.5	8-R	ST&C	J-55

APPLICATION TO DRILL

HUDSON OIL COMPANY OF TEXAS
 PUCKETT "A" # 31
 UNIT "B" SECTION 24
 T17S-R31E EDDY CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe cement to surface with Redi-mix
8 5/8"	Surface	Set 500' of 8 5/8" 24# J-55 ST&C casing. Cement with 500 Sx. of Class "C" cement + additives, circulate cement to surface.
5½"	Production	Set 4200' of 5½" 15.5# J-55 ST&C casing. Cement with 750 Sx. of Class "C" cement. 500 Sx. of Halco Light + additives and tail in with 250 Sx. of Class "C" + additives, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E". A Series 900 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. The B.O.P. unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. The B.O.P. will be nipped up on 8 5/8" casing and will be operated at least once each 24 hour period while drilling and blind rams will be operated when out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

11. PROPOSED MUD CIRCULATING SYSTEM:

Depth	Mud Wt.	Visc.	Fluid Loss	Type Mud System
40-500'	8.6-8.8	30-36	NC	Fresh water Spud mud add paper to control seepage.
500-4200'	10.2-10.7	30-40	NC	Brine water add Salt water Gel to increase viscosity in order to clean hole, add paper to control seepage. If water loss control is needed add starch.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing the viscosity and/or water loss may have to be adjusted to meet these needs.

HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM

12. Testing, Logging and Coring Program:

A. Open hole Logs: Dual Latero-log , Compensated Neutron, Gamma Ray, Caliper from TD to 500'. Run gamma Ray back to surface.

B. No DST's , no cores are planned.

13. Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H₂S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 2150 PSI, estimated BHT 120° .

14. Anticipated Starting Date and Duration of Operation:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 12 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15. Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Grayburg-San Andres pay will be perforated and stimulated. The well will be swab tested and potentialized as an oil well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E" & "E-1"
6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If the location is near to a dwelling a closed DST will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

HUDSON OIL COMPANY OF TEXAS

PUCKETT "A" # 31

UNIT "B"

SECTION 24

T17S-R31E

EDDY CO. NM

1. EXISTING ROADS: Exhibit "B" is a reproduction of the New Mexico General Hi-way Co. map. Exhibit "C" is a reproduction of a topographic map. Existing roads and proposed roads are shown on each exhibit. All roads will be maintained in a condition equal to or better than existed prior to start of construction.
 - A. Exhibit "A" shows the proposed development well as staked.
 - B. From Maljamar New Mexico take U.S. Hi-way 82 West 4.5 miles turn Left go .4 miles turn Left go .3 miles to office then turn Left go 800' turn Right (South) go 500' to location on the East side of road.
 - C. Construct necessary powerlines and lay necessary flowlines along road R-O-W's, that will be necessary to produce this well. See Exhibit "F"
2. PLANNED ACCESS ROADS: No additional roads will be required.
 - A. The access road will be crowned and ditched to a 12'00" wide travel surface with a 40' right-of-way.
 - B. Gradient on all roads will be less than 5.00%.
 - C. No turnouts will be necessary.
 - D. If needed, road will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
 - E. Centerline for the new access road has been flagged. Earth work will be as required by field conditions.
 - F. Culverts in the access road will not be used. The road will be constructed to utilize low water crossings for drainage as required by the Topography.
3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A-1"
 - A. Water wells - None Known
 - B. Disposal wells - As shown on Exhibit "A-1"
 - C. Drilling wells - None known
 - D. Producing wells - As shown on Exhibit "A-1"
 - E. Abandoned wells - As shown on Exhibit "A-1"

SURFACE USE PLAN

HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM

4. If on completion this well is a producer Hudson Oil Company of Texas will furnish maps and or plats showing on site facilities of off site facilities as needed. Exhibit "F" shows where pipelines or powerlines will be constructed as required to produce this lease.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction will be obtained from the excavation of drill site, if additional material is needed it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quaters will drain into holes with a minium depth of 10'. These holes will be covered during drilling and will be back filled upon completion. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for breaking out. In the event that drilling fluids do not evaporate in a reasonable time they will be hauled off by transports and be disposed of at a state approved disposal facility. Later pits will be broken out to speed drying. Water produced during testing will be put in reserve pits. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES:

- A. No camps or airstrips to be constructed.

SURFACE USE PLAN

HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM

9. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be pits and the reserve pit is proposed to be unlined, unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of sand dunes with a slight dip toward the West. Deep sandy soil tan in color. Vegetation consists of mesquite, shinnery oak, narrow leaf yucca and various native grasses.
- B. The surface is owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. The surface is used for grazing of livestock and the production of oil and gas.
- C. An archaeological survey will be conducted and the report will be filed with The Bureau of Land Management field office in Carlsbad, New Mexico.
- D. There are no dwellings within 2 miles of this location.

12. OPERATORS REPRESENTATIVES:

BEFORE CONSTRUCTION:

TIERRA EXPLORATION, INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PHONE 505-391-8503
JOT T. JANICA

DURING AND AFTER CONSTRUCTION:

HUDSON OIL COMPANY OF TEXAS
616 TEXAS STREET
FORT WORTH, TEXAS 76102
RANDAL HUDSON Ph. 817-336-7190
JON B. SMITH Ph. 505-676-2266
P.O. BOX. 9
MALJAMAR, NEW MEXICO 88264

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 currently exist, that the statements made in this plan are to the best of my knowledge, are true and correct, and that the work associated with the operations proposed herein will be performed by Hudson Oil Company of Texas & it's contractors/subcontractors is in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME :

TITLE:

Agent

DATE :

06/22/01

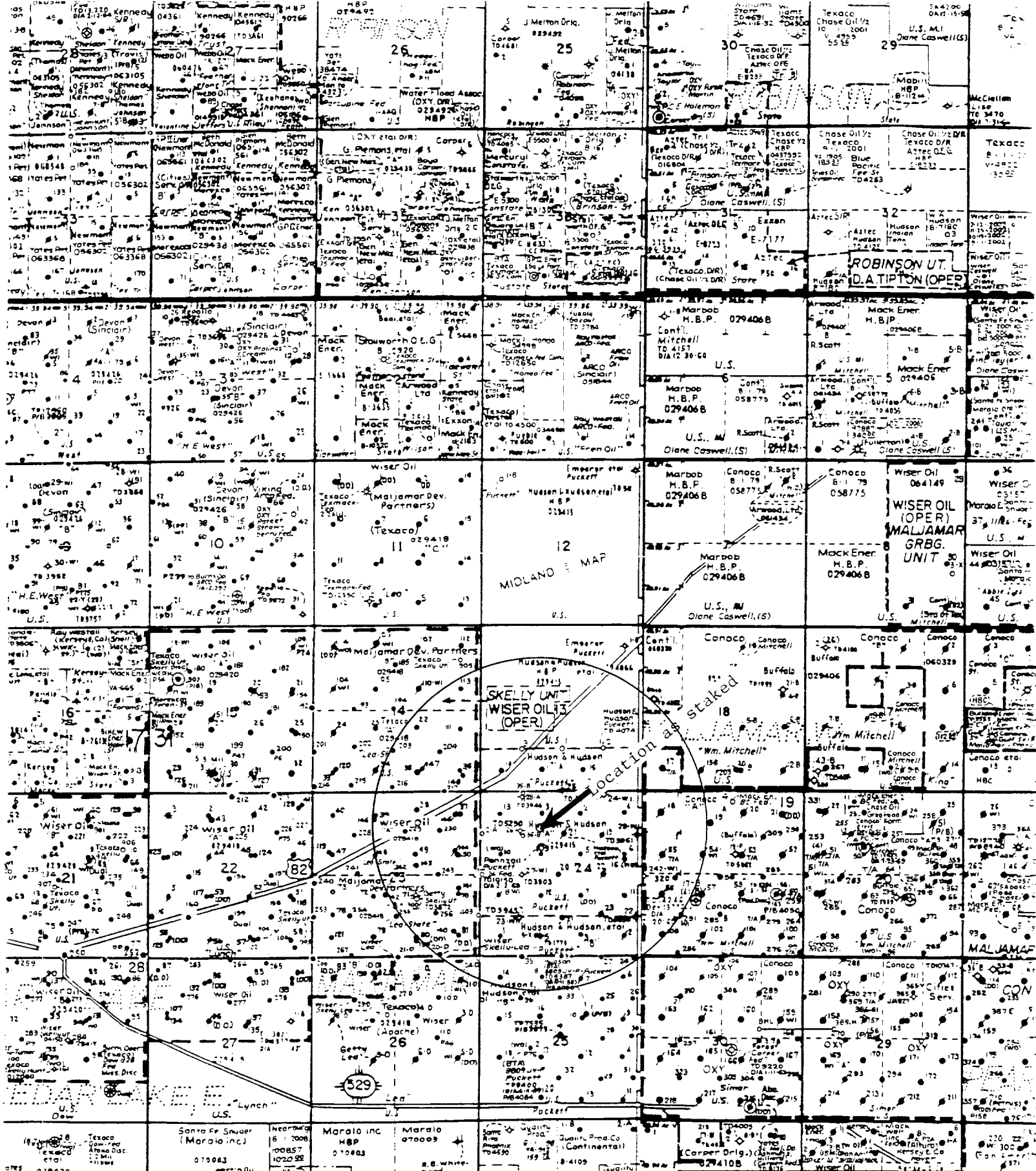


EXHIBIT "A-1"
ONE MILE RADIUS MAP

HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 31
T17S-R31E EDDY CO. NM

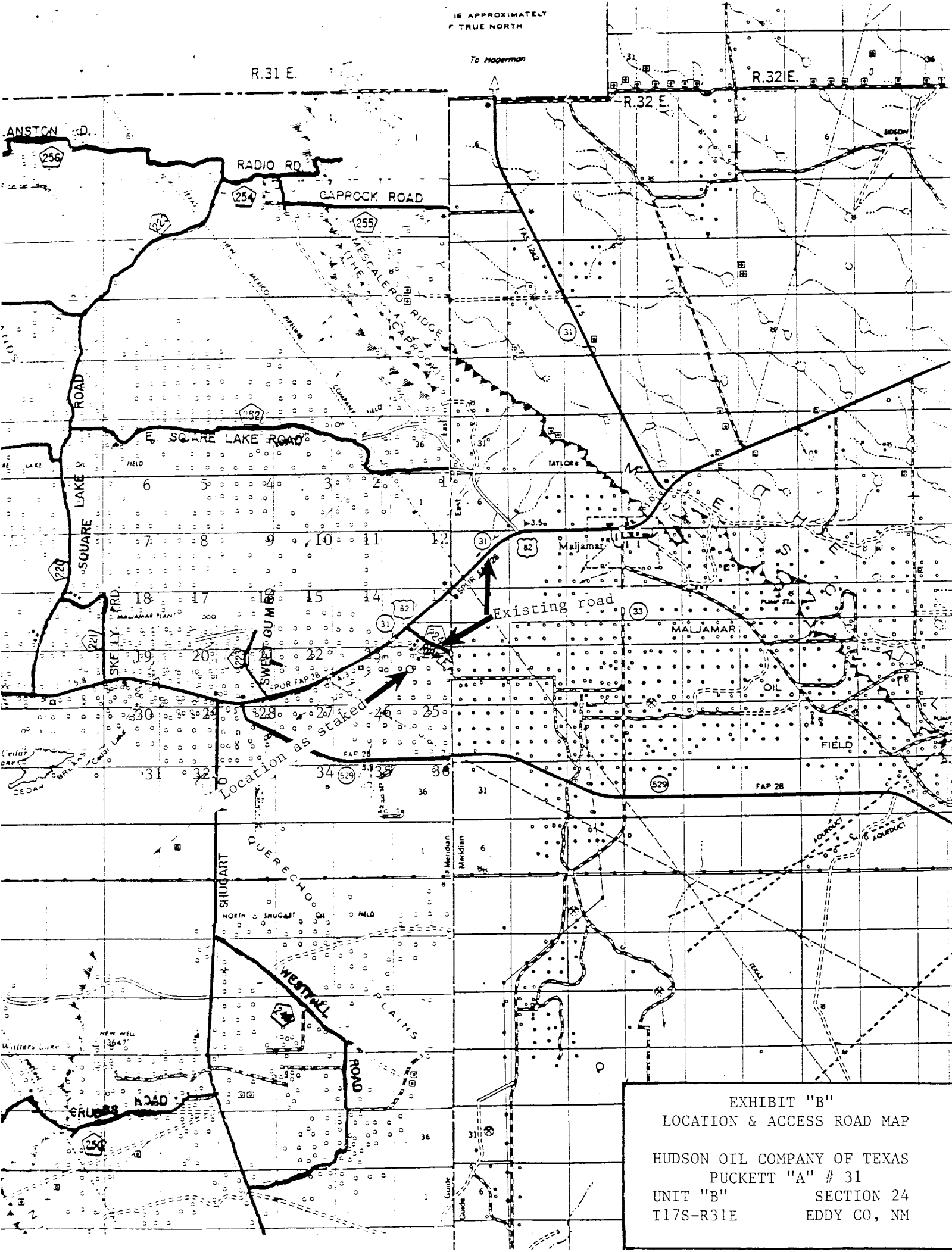
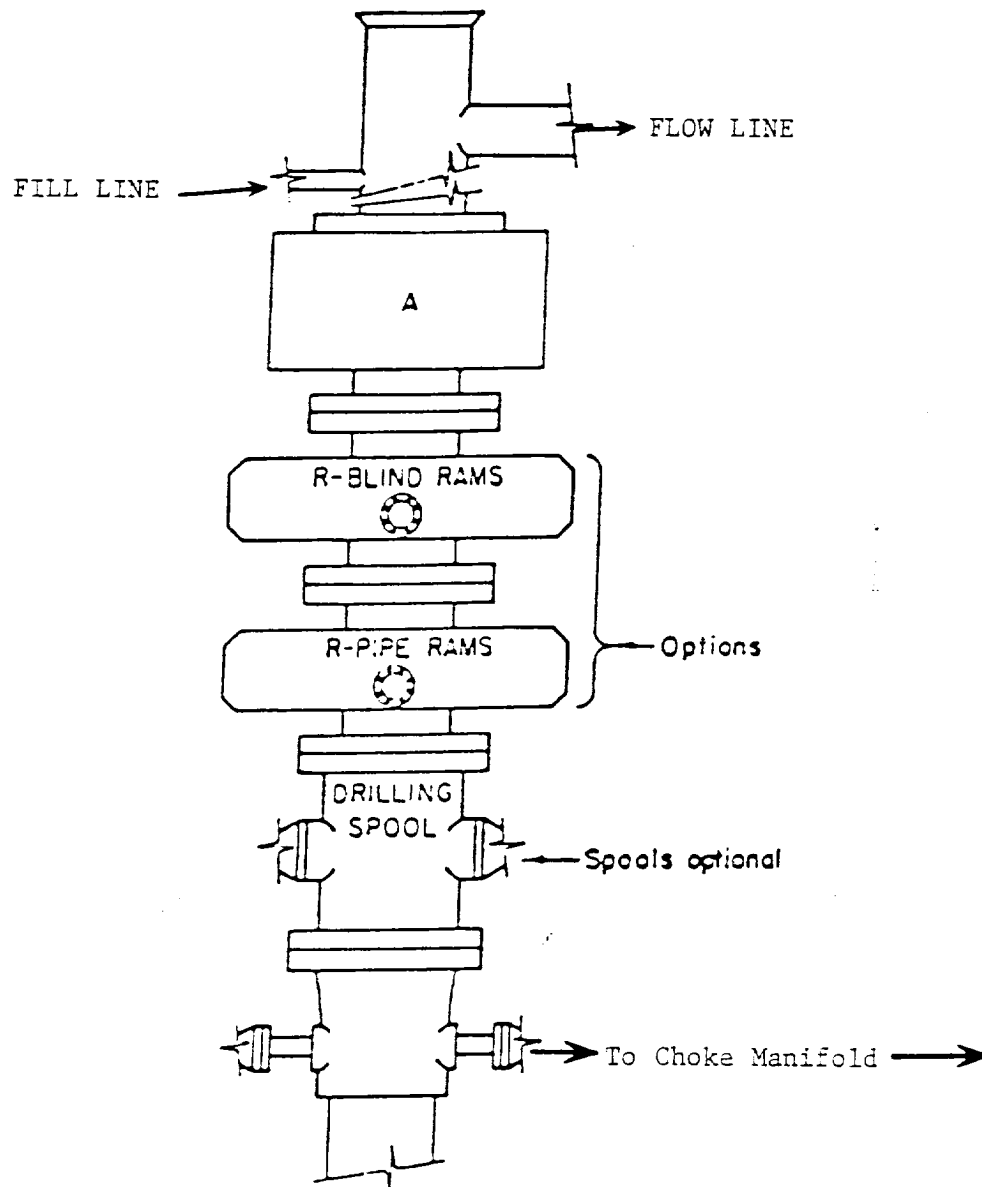


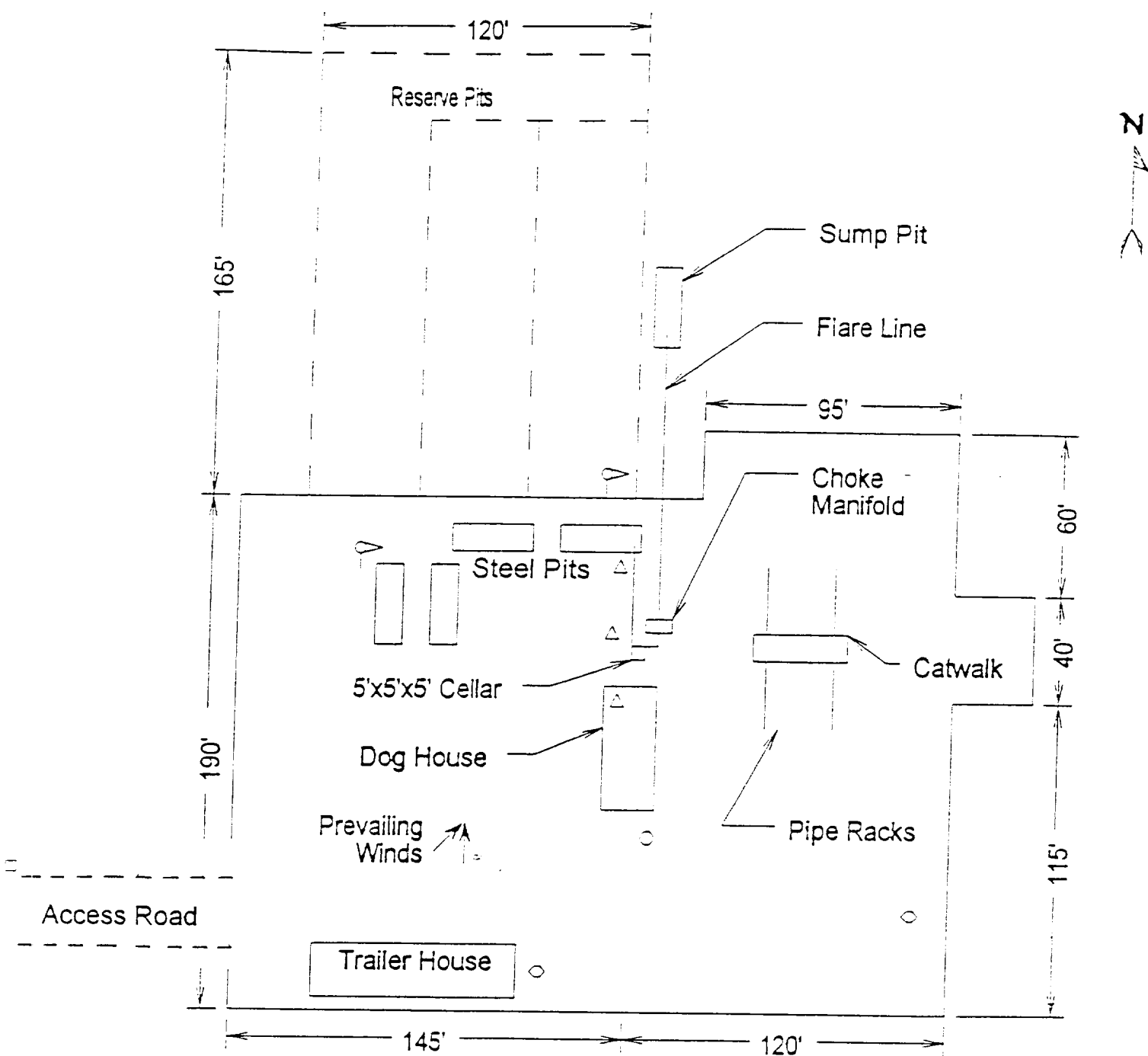
EXHIBIT "B"
LOCATION & ACCESS ROAD MAP
HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO, NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

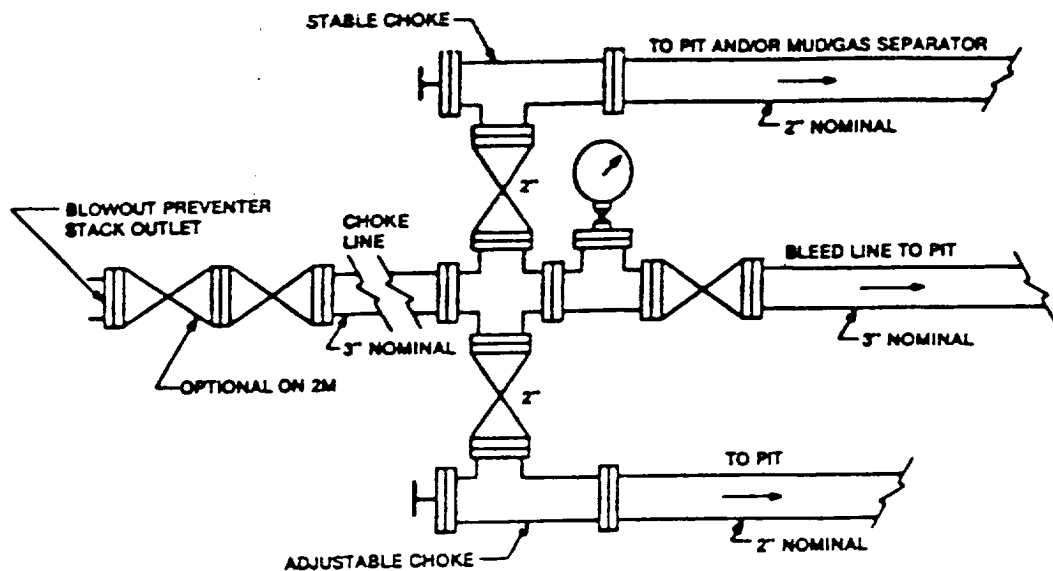
EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON
HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM



- Wind Direction Indicators
(wind sock or streamers)
- △ H2S Monitors
(alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAYOUT PLAT

HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

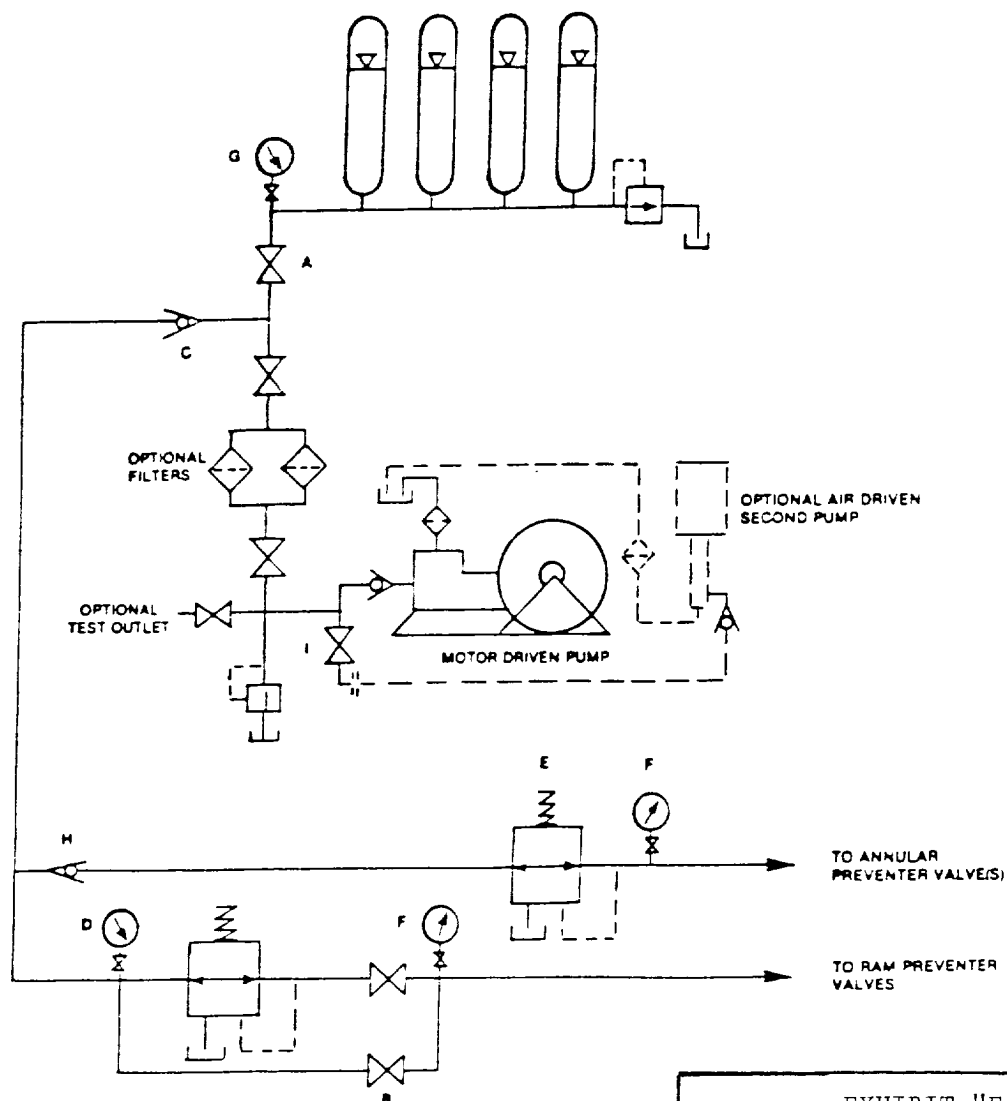


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

HUDSON OIL COMPANY OF EXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM

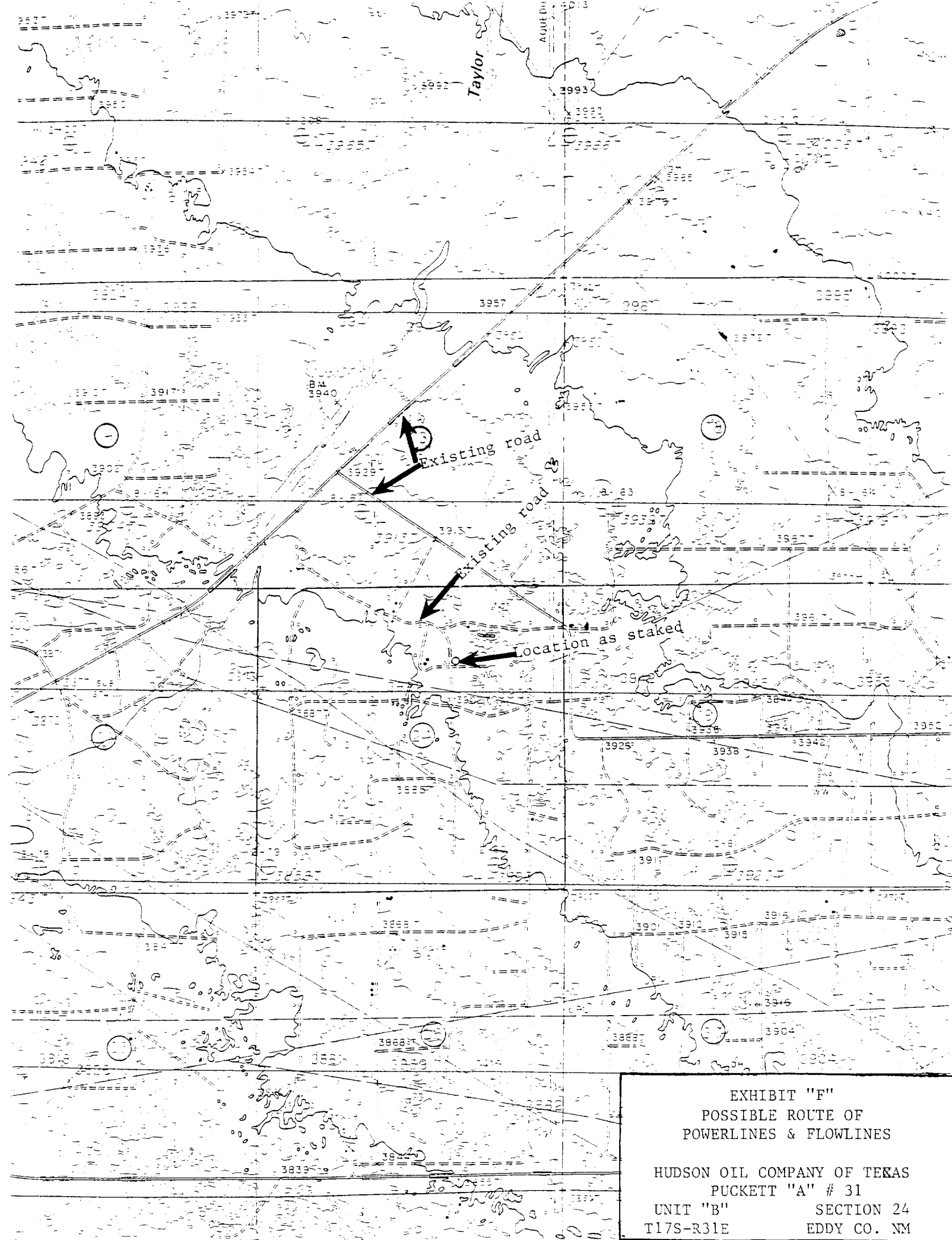


EXHIBIT "F"
POSSIBLE ROUTE OF
POWERLINES & FLOWLINES

HUDSON OIL COMPANY OF TEXAS
PUCKETT "A" # 31
UNIT "B" SECTION 24
T17S-R31E EDDY CO. NM