Form 9-331 C
(May 1963)

NMOCC COPY

Copy to S. F.

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-22430

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM - 6034

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

RECEIVED
FEB 28 1978
O. C. C.
ARTESIA, OFFICE

8. FARM OR LEASE NAME: "Shearn "D" Federal Com

2. NAME OF OPERATOR: Gulf Oil Corporation

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P. O. Box 670, Hobbs, NM 88240

10. FIELD AND POOL, OR WILDCAT: Undes Strawn

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1980' FSL & 1980' FEL, Sec 15, T-23-S,R-25-E, Eddy Co, NM
At proposed prod. zone

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 15, T-23-S, R-25-E

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

12. COUNTY OR PARISH: Eddy 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320

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

19. PROPOSED DEPTH: 11,500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3754' GL

22. APPROX. DATE WORK WILL START*: 2-13-78

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	400	Circ
12 1/4"	9 5/8"	40.5	2500'	Circ
7 7/8"	5 1/2"	17#	11,500'	Approx TOC 9200'

Mud: 0-400' - Fresh water spud mud
400-2500'- Cut Brine
2500-11,500- Polymer; 9.5-10.1 wt

Gas is not Dedicated

Note: See attached BOP drawings #2 and #4

RECEIVED
FEB 1 1978
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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 C. A. Borland TITLE Area Production Manager DATE 1-31-78

(This space for Federal or State office use)

PERMIT NO. ______ APPROVAL DATE oral 2-17-78

APPROVED BY Joe D. Lara TITLE ACTING DISTRICT ENGINEER DATE FEB 27 1978
CONDITIONS OF APPROVAL, IF ANY:

DECLARED WATER BASIN

NOTIFY USGS IN SUFFICIENT TIME TO WITNESS CEMENTING THE 9 5/8" CASING

*See Instructions On Reverse Side

CEMENT BEHIND THE 13 3/8" / 9 5/8" CASING MUST BE CIRCULATED

NEW MEXICO OIL CONSERVATION COMMISSION

WE. LOCATION AND ACREAGE DEDICATIC PLAT

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

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Gulf Oil Corp.	Shearn "D" Federal Com	1

Unit Letter	Section	Township	Range	County
J	15	23 South	25 East	Eddy

Actual Footage Location of Well				
1980 feet from the South line and 1980 feet from the East line				

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3753.5	Strawn	Undes. Strawn	320 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).

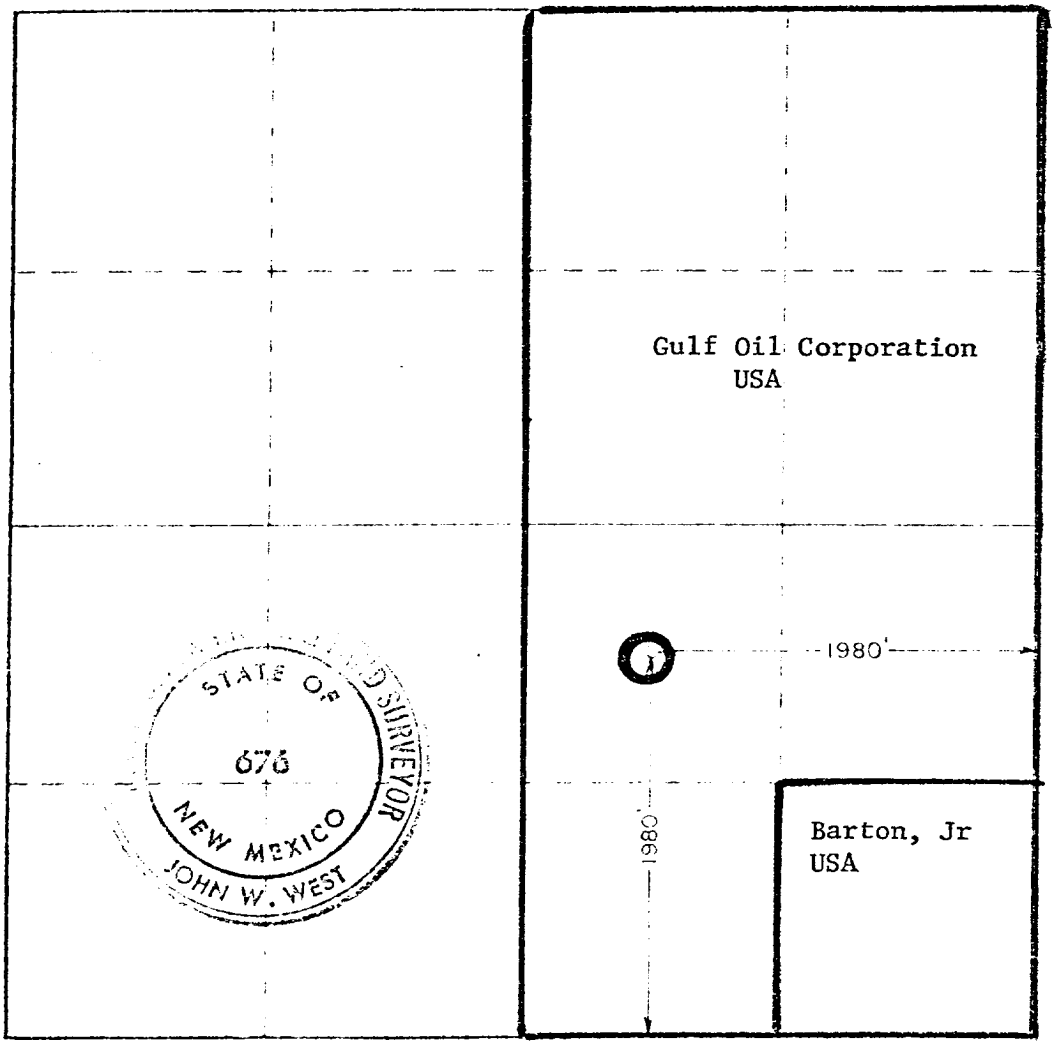
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

RECEIVED
FEB 1 1978
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

[XX] Yes [ ] No If answer is "yes," type of consolidation communization

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.

C. D. Borland

Name: C. D. Borland

Position: Area Production Manager

Company: Gulf Oil Corporation

Date: 1-31-78

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: Jan. 27, 1978

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. John W. West 676
Ronald J. Eidson 3239

Gulf Energy and Minerals Company-U.S.

SOUTHWEST DIVISION
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

P. O. Box 670
Hobbs, NM 88240

January 31, 1978

Re: Application for Permit to Drill
Proposed Shearn "D" Federal Com
Well No. 1, Eddy County, New Mexico

U. S. Geological Survey
P. O. Drawer "U"
Artesia, New Mexico 88210

Gentlemen:

We are submitting the information requested in NTL-6 which should accompany application for permit to drill.

Well: Shearn "D" Federal Com No. 1

1. Location: 1980' FSL & 1980' FEL of Section 15, T-23S, R-25E, Eddy County, NM

2. Elevation of Unprepared Ground: 3754'

3. Geologic Name of Surface Formation: Quarternary Alluvium

4. Type of Drilling Tools: Rotary

5. Proposed Drilling Depth: 11,500'

6. Estimated Tops of Geologic Markers: Yates, 600'; Delaware, 2450';
Bone Springs, 4930'; Wolfcamp, 8500';
Atoka, 10300'; Morrow, 10910'; Barnett, 11500'

7. Estimated Depths at which Anticipated Gas or Oil-Bearing Formations are expected:

a.	Bone Springs	5,500' - 6,500'
b.	Wolfcamp	8,970' - 9,060'
c.	Atoka	10,625' - 10,700'
d.	Morrow	11,150' - 11,350'

8. Casing Program and Setting Depths:

	SIZE	WEIGHT	GRADE	SETTING DEPTH
Surface	13-3/8"	48#	H-40	400' - 0'
Intermediate	9-5/8"	40#	K-55	2,500' - 0'
Production	5-1/2"	17#	N-80	11,500' - 8,200'
	5-1/2"	17#	K-55	8,200' - 800'
	5-1/2"	17#	N-80	800' - 0'

9. Casing Setting Depth and Cementing Program:

   a. Surface casing will be 13-3/8" set at 400' and cemented with 300 sacks of Class "C" with 4% $CaCl_2$.

   b. Intermediate casing will be 9-5/8" set at 2500' and cemented with 600 sacks of Class "C" with 16% gel Gulfmix and 200 sacks of Class "C" with 2% $CaCl_2$.

   c. Production casing will be 5-1/2" set at 11,500' and cemented with Class "H" with 5# KCL per sack with 0.75% CFR-2 with volume necessary to bring cement top to 9800' using caliper survey to determine volumes.

10. Pressure Control Equipment: The minimum requirement for control equipment can be seen on the attached Drawing No. 4 of Gulf's blowout preventer hook-up for 5000 psi working pressure.

11. Circulating Media: 0' - 3000', fresh water spud mud and fresh water; 3000' - 8400', brackish water (9 - 10 ppg); 8400' - TD, salt water polymer with the following properties: Weight, 10.0-10.8 ppg; Viscosity, 34-38 sec.; Water loss, 5 cc's or less.

12. Testing, Logging and Coring Programs:

   a. Formation testing may be done at any depth where samples, drilling rate, or log information indicate a possible show of oil or gas.

   b. Open hole logs will be run at total depth.
   c. No cores are planned.

13. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas: We do not anticipate any abnormal pressure or temperature; however, BOP's with remote control and choke manifold as shown on Drawing No. 4 will be installed prior to drilling below intermediate casing.

    The presence of hydrogen sulfide gas is not anticipated.

14. Anticipated Starting Date: February 10, 1978

15. Other Facets of the Proposed Operation: None

C. D. BORLAND
Area Production Manager

Attachments

Gulf Energy and Minerals Company-U.S.

SOUTHWEST DIVISION
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

January 31, 1978

P. O. Box 670
Hobbs, NM 88240

Re: Surface Development Plan
Proposed Shearn "D" Federal Com
Well No. 1, 1980' FSL & 1980' FEL,
Section 15, T-23-S, R-25-E,
Eddy County, New Mexico

U. S. Geological Survey
P. O. Drawer "U"
Artesia, New Mexico 88210

Gentlemen:

The surface use and operations plan for the proposed well are as follows:

1. Existing Roads

   A. Exhibit "A" is a portion of a general highway map showing location of proposed well as staked. Go south out of Carlsbad, New Mexico on U.S. Highway 62 and 180 approximately one (1) mile past the Port of Entry. Turn right on Highway 118 and go approximately 3-1/2 miles. Turn right and go approximately 1/4 mile to lease road. Turn left onto lease road and go approximately 2 miles, then turn right onto caliche road and follow to location.

   B. Exhibit "B" is a plat showing all existing roads within a one mile radius of the well site and the planned access road.

2. Planned Access Roads

   A. Length and Width: Required new road will be 2000 feet long and 12 feet wide and constructed of caliche compacted and watered to a depth of six inches. The new road is labeled and color-coded red on Exhibits "A" and "B".

   B. Turnouts: None required.

   C. Culverts: None required.

   D. Cuts and Fills: A cut of ten (10) feet through the center and fills of 10' - 15' on the north, east, and south sides of proposed new location will be required. No major cuts or fills will be required on the proposed new road.

   E. Gates and Cattleguards: None required. Locked gate is shown on Exhibit "A".

3. Location of Existing Wells:

   A. The nearest producing well is the Hanagan No. 1 North Horseshoe Bend which is approximately 1/2 mile south of the proposed location.

4. Tank Batteries, Production Facilities and Lease Pipe Lines

   A. Should production be encountered, the tank battery and other required production equipment will be located on the well pad. All production lines will be constructed on the well pad and above ground. Refer to Exhibit "C".

5. Water Supply: Water for drilling will be purchased from a supplier and transported by truck to the well site over the existing and proposed roads shown in Exhibits "A" and "B".

6. Source of Construction Material: The caliche for the drilling pad will be obtained from cuts of the surface at the proposed location site.

7. Methods of Handling Waste Disposal

   A. Drill cuttings will be disposed of in the drilling pits.

   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" of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown on Exhibit "C".

   F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities: None required.

9. Well Site Layout

   A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit and location of major rig components.

   B. A cut of ten (10) feet through the center and fills of 10-15 feet on the north, south and east sides will be necessary.

   C. Reserve pit will be plastic-lined.

9. Well Site Layout (Continued)

D. The well site and work area (400' X 400') have been staked.

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 location will be cleaned of all trash and junk to leave the well site in an aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and location will be cleaned . The pit area, well pad and all unneeded access road will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment.

11. Other Information

A. Topography: Land surface is a rocky side of a hill.

B. Soil: Soil is caliche rocks with a small amount of sand.

C. Flora and Fauna: Vegetative cover is generally various cactus types with small amounts of grass. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, and birds.

D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the immediate area.

E. Residences and Other Structures: The nearest occupied dwelling is the Hamann ranch house approximately 3/4 of a mile northwest of the proposed location.

F. Land Use: Land is used for hunting in season and grazing.

G. Surface Ownership: Well site is on Federal surface.

12. Operator's Representative:

The field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

Gulf Energy and Minerals Company - U.S.
A Division of Gulf Oil Corporation
P. O. Box 670
Hobbs, New Mexico 88240
Telephone: (505) 393-4121
Area Production Manager: C. D. Borland

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 Gulf Oil Corporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

2-1-78
Date

C. D. BORLAND
Area Production Manager

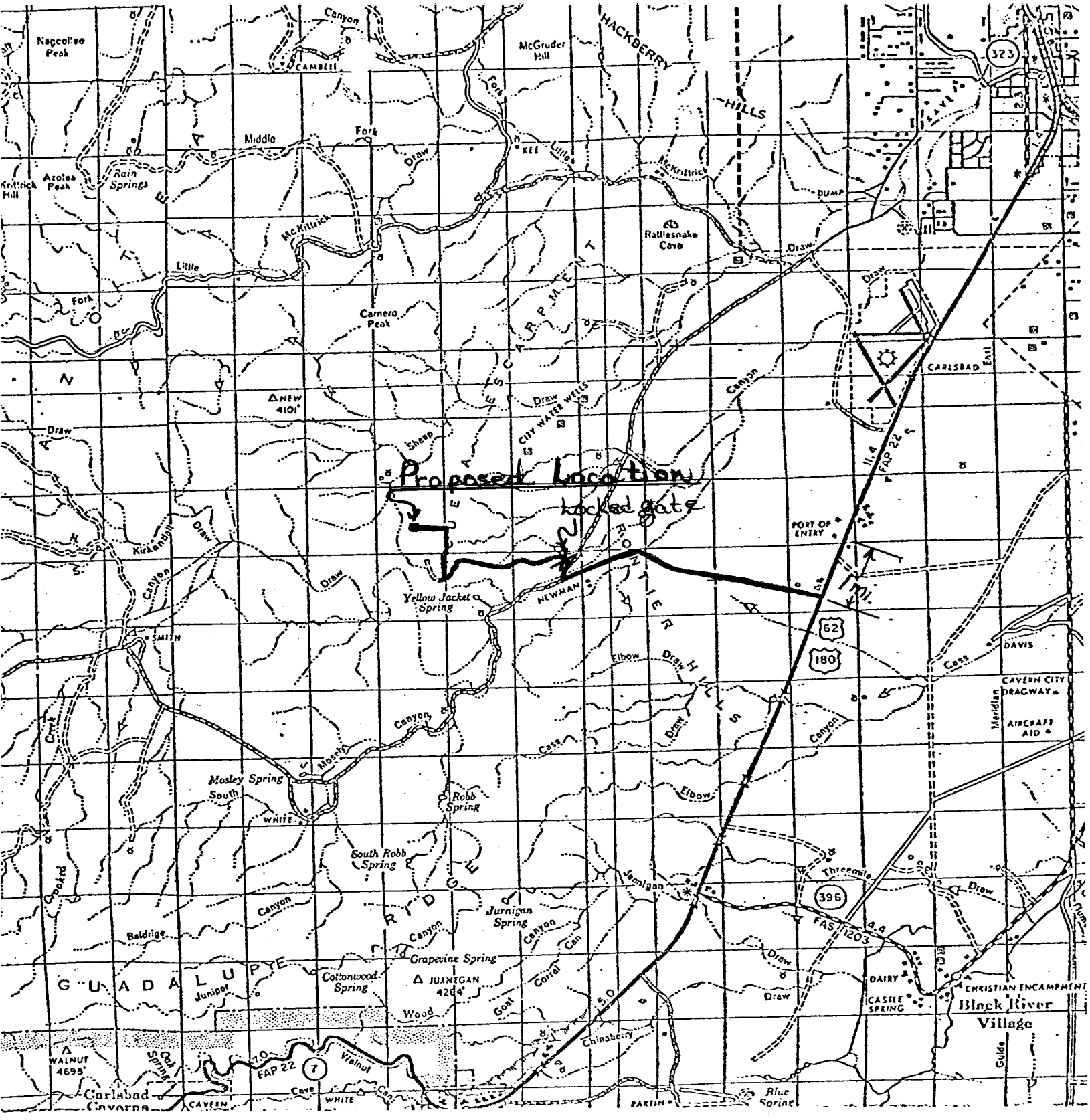


Exhibit A

Shearn "D" Federal Com #1
Gulf Oil Corp.
Sec. 15, T 23 S, R 25 E.
Eddy Co., New Mexico

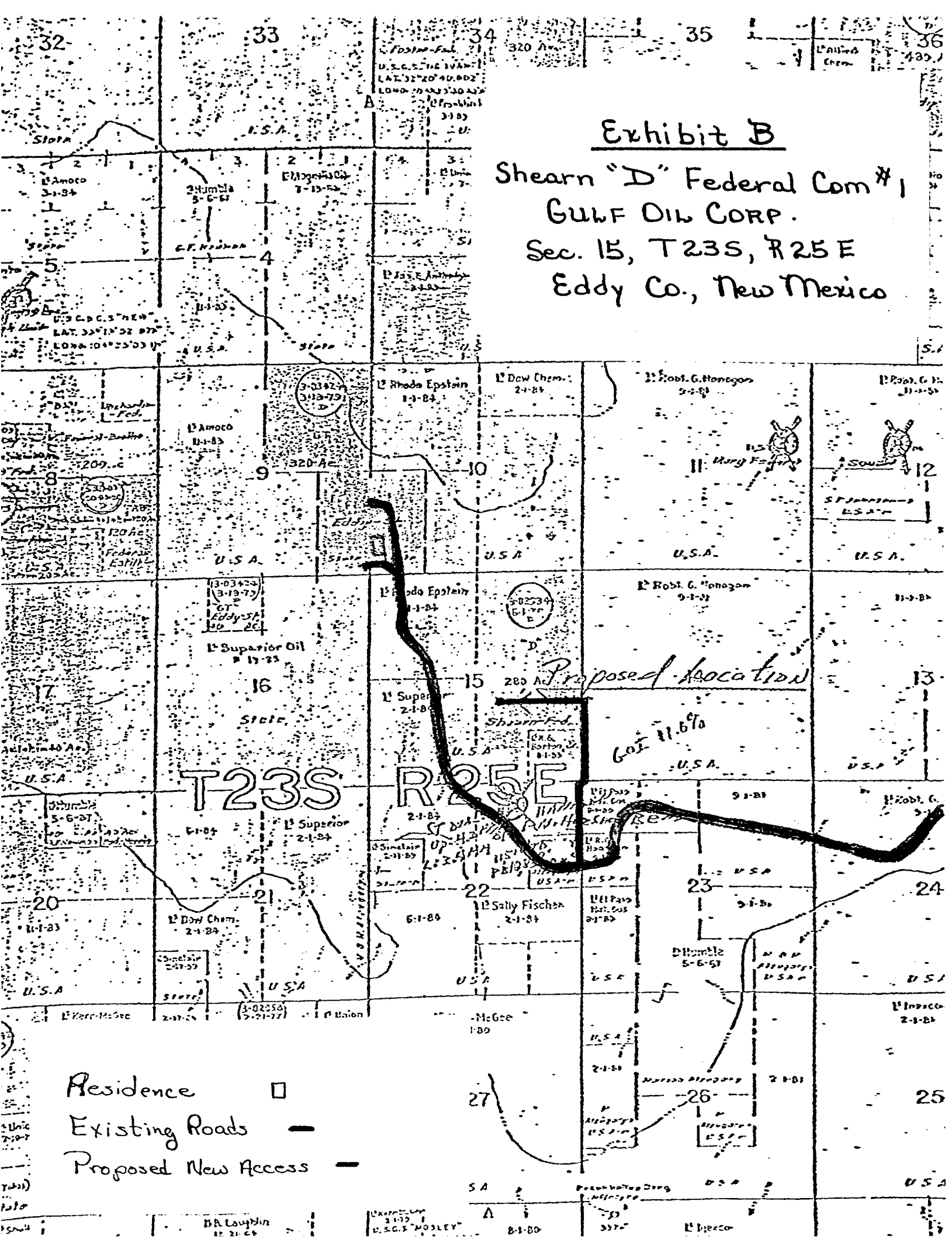


Exhibit B
Shearn "D" Federal Com #1
Gulf Oil Corp.
Sec. 15, T23S, R25E
Eddy Co., New Mexico
Proposed Location
T23S
R25E
Residence
Existing Roads
Proposed New Access

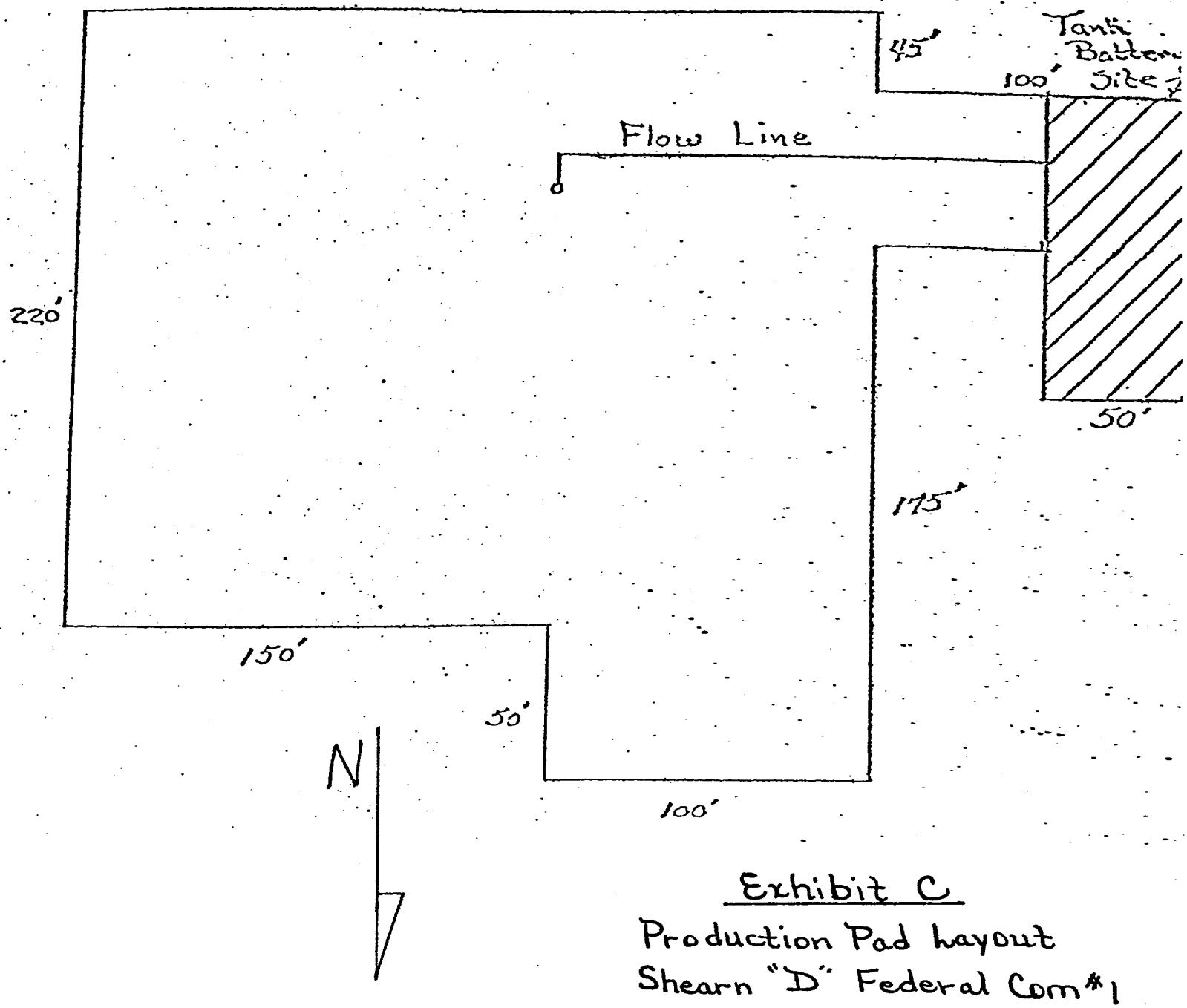


Exhibit C

Production Pad layout
Shearn "D" Federal Com #1
GULF OIL CORP.
Sec. 15, T 23 S, R 25 E
Eddy Co., New Mexico

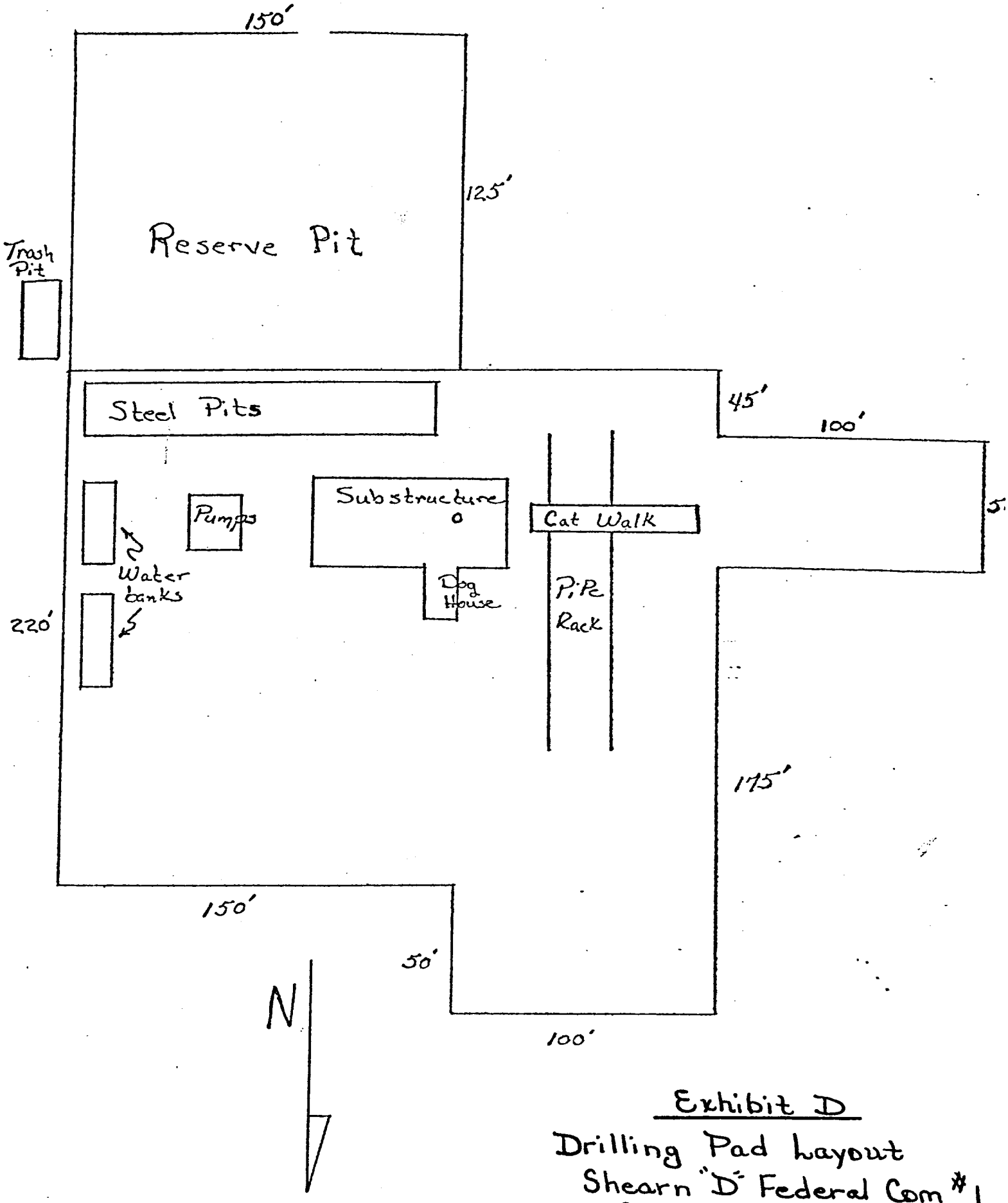
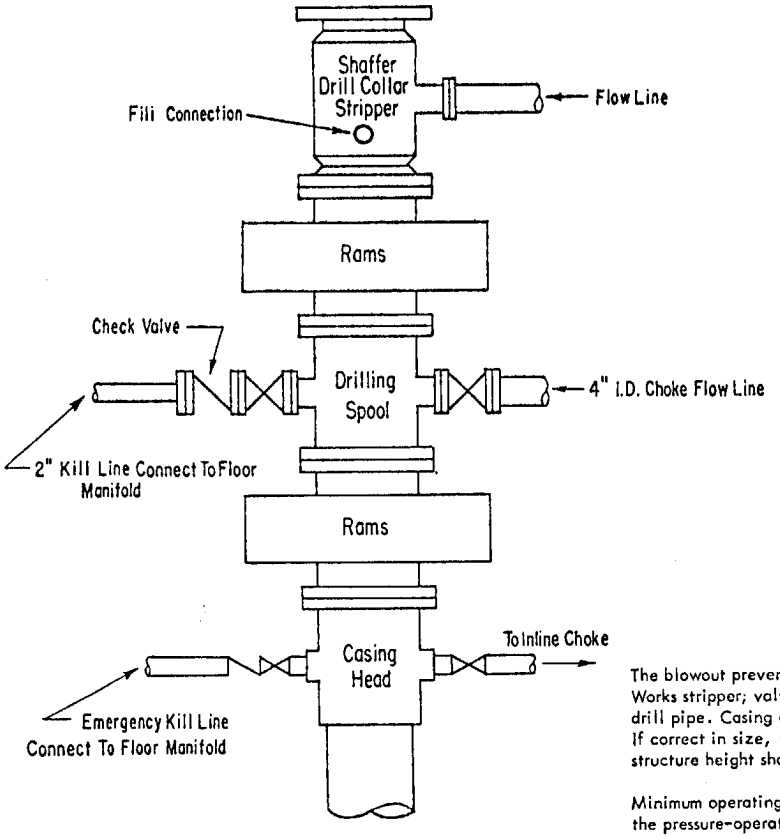


Exhibit D

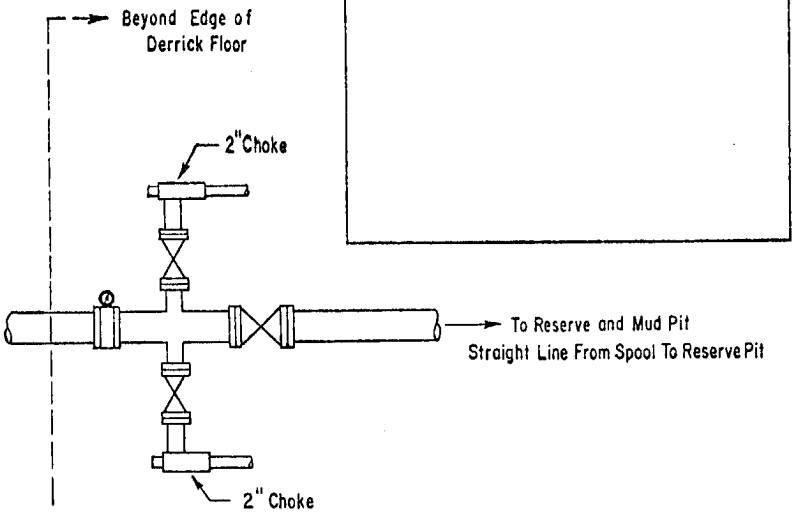
Drilling Pad Layout
Shearn "D" Federal Com #1
Gulf Oil Corp.
Sec. 15, T 23 S, R 25 E
Eddy Co., New Mexico

DRAWING NO. 2
Revised April, 1970

ADDITIONS – DELETIONS – CHANGES SPECIFY



3000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP



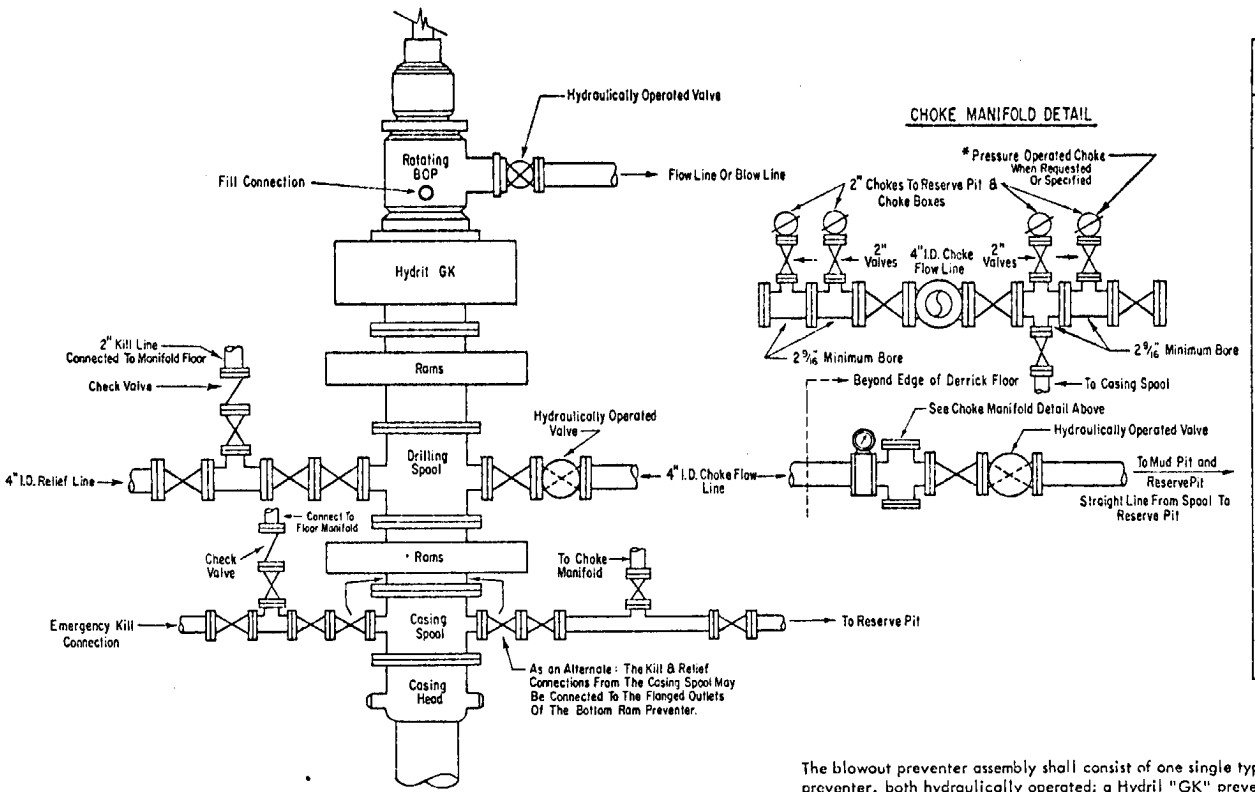
The blowout preventer assembly shall consist of one blind ram preventer and one pipe ram preventer, both hydraulically operated; a Shaffer Tool Works stripper; valves ; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. The ram preventers may be two singles or a double type. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and kill line. The substructure height shall be sufficient to install a rotating blowout preventer.

Minimum operating equipment for the preventers shall be as follows: (1) Pump (s), driven by a continuous source of power, capable of closing all the pressure-operated devices simultaneously within____seconds. The pump (s) is to be connected to a closed type hydraulic operating system. (2) When requested, accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive a fluid charge from the above pump (s). With the charging pump (s) shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least____percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pump (s); or there shall be an additional pump (s) operated by separate power and equal in performance capabilities.

The closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided if a Hydril preventer is used. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valve connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

DRAWING NO. 4
Revised April, 1971



5000# PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

ADDITIONS - DELETIONS - CHANGES SPECIFY

The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1)Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within_____ minutes. Also, the pumps are to be connected to the hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within_____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least_____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.