

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-045-23676  
5. LEASE DESIGNATION AND SERIAL NO.

NM 048569

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

Mexico-Federal K

9. WELL NO.

#1E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

Sec. 8 T28N R10W

12. COUNTY OR PARISH

San Juan

13. STATE  
New Mexico

## 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

Getty Oil Company

## 3. ADDRESS OF OPERATOR

Drawer 510, Farmington, New Mexico 87401

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

At surface

1190' FSL & 1850' FWL  
2120At proposed prod. zone  
Same

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

6.6 miles Southeast of Bloomfield, New Mexico

## 15. DISTANCE FROM PROPOSED\*

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

1190'

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

2460'

## 16. NO. OF ACRES IN LEASE

319.67

## 19. PROPOSED DEPTH

6550'

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL

160 319.67

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5709' GR

## 22. APPROX. DATE WORK WILL START\*

July 1, 1979

## 23.

## 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" new	24# K-55	300'	250 cu. ft. Class "B"
7-7/8"	5-1/2" new	14# K-55	5410'	180 cu. ft. 65-35 pozmix &
	5-1/2" new	15.5# K-55	6550'	470 cu. ft. 50-50 pozmix; 355 cu. ft. 65-35 pozmix; 980 cu. ft. 50-50 pozmix.

1. Drill 12-1/4" hole and set 8-5/8" casing to 300' with good returns.
2. Log B.O.P. checks daily and drill 7-7/8" hole to 6550'.
3. Run tests, if warranted, and run 5-1/2" casing if productive.
4. Run logs as needed, and perforate and stimulate as needed.

## EXHIBITS ATTACHED:

- "A" Location and Elevation Plat
- "B" The Ten-Point Compliance Program
- "C" The Blowout Preventer Diagram
- "D" The Multi-Point Requirements for A.P.D.
- "E" Access Roads into Location
- "F" Radius Map of Field
- "G" Drill Pad Layout, Cut-Fill Cross Section, Production Facilities

- "H" Drill Rig Layout
- "K" Acidizing & Fracing Layout

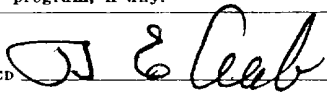
JUN 24 1979

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N.M.

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

Area Superintendent

DATE June 25, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

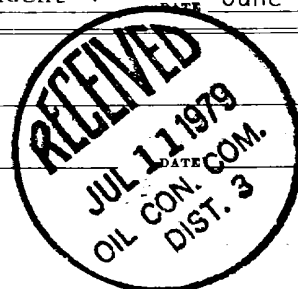
CONDITIONS OF APPROVAL, IF ANY:

ok Frank

NWU R-1814

\*See Instructions On Reverse Side

AMOC



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

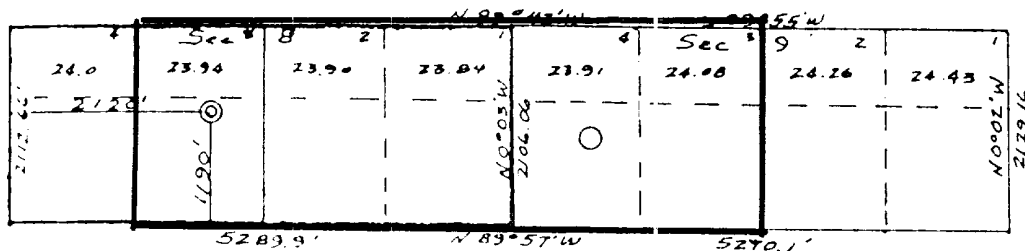
Operator <b>GETTY OIL COMPANY</b>			Lease <b>MEXICO-FEDERAL "K"</b>		Well No. <b>1-E</b>
Unit Letter <b>N</b>	Section <b>8</b>	Township <b>28N</b>	Range <b>10W</b>	County <b>SAN JUAN</b>	
Actual Footage Location of Well: <b>1190</b> feet from the <b>South</b> line and <b>2120</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5713</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>320 (319.67)</b> 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 Communitization

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.



SCALE: 1"=2000'

Re-staked to conform to spacing requirements of non-standard acreage

CERTIFICATION

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

*George Lapaseotes*  
Name George Lapaseotes

Position  
Vice President

Company  
Powers Elevation

Date  
July 26, 1979

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  
July 26, 1979  
Registered Professional Engineer and Land Surveyor  
Fred B. Kerr Jr.  
Certificate No.  
3950

EXHIBIT "B"  
TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
Getty Oil Company  
#1E Mexico - Federal K  
1190' FSL & 1850' FWL  
Sec. 8 T28N R10W  
San Juan County, New Mexico

1. The Geologic Surface Formation

The surface formation is an unnamed shale.

2. Estimated Tops of Important Geologic Markers

Fruitland	1716'
Pictured Cliffs	1908'
Chacra	3000'
Cliff House	3489'
Point Lookout	4200'
Gallup	5431'
Dakota	6300'
TD	6550'

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

1716' - 1908'	gas
1908' - 1956'	gas
3000' - 3016'	gas
4200' - 4406'	gas
6300' - 6525'	gas

4. The Proposed Casing Program

Hole Size	Interval	Section Length	Size (OD)	Weight, Grade & Joint	New or Used	Mud * Weight
12 1/4"	0-300'	300'	8 5/8"	24# K-5 ST&C 8rnd.	New	8.8#
7 7/8"	0-5410'	5410'	5 1/2"	14# K-55 " "	New	
7 7/8"	5410'-6550'	1140'	5 1/2"	15.5# k-55 " "	New	9.2#

\* at casing setting

SF T	SF c	SF b
36.5	9.1	15.1
2.0	1.1	1.7
12.4	1.2	1.9

Cement ProgramSurface - 8 5/8" - 250 cubic feet, Class "B", with 2% CaCl<sub>2</sub>.Production - 5 1/2" - First stage lead: 180 cubic feet 65-35 Pozmix with 12% gel, 1/4#/sack cellophane.

First stage tail: 470 cubic feet 50-50 Pozmix with 4% gel, 1/2#/sack cellophane, and .4% Halad-9.

Second stage lead: 355 cubic feet 65-35 Pozmix with 12% gel, 1/4#/sack cellophane.

Second stage tail: 980 cubic feet 50-50 Pozmix with 4% gel, 1/4#/sack cellophane and .4% Halad-9.

5. The Operator's Minimum Specifications for Pressure Control

BOP will be a shaeffer rotating head or the equivalent.  
 EXHIBIT "C" is a schematic diagram of the blowout preventer equipment.  
 The BOP's will be hydraulically tested to the full working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period, as will blind rams each time pipe is pulled out of the hole. Such checks of BOP will be noted on daily drilling reports.

Accessories to BOP will include an upper and lower kelly cock, floor safety valve, and choke manifold with pressure rating equivalent to the BOP stack.

6. The type and Characteristics of the Proposed Circulating Muds

Mud system will be gel-chemical with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Heavier muds will be on location to be added if pressure requires.

<u>Interval</u>	<u>Type</u>	<u>Weight/Gal.</u>	<u>Viscosity (Sec.)</u>	<u>Water Loss</u>	<u>Additives</u>
0-300'	water-gel	8.5-8.8	28-32	NC	gel
300'-5000'	water-gel	8.5-8.8	30-34	8-12cc	celox & gel
5000'-6550'	LSND	8.6-9.2	34-36	8cc	gel, cypan, soda, ash, LCM

7. The Auxiliary Equipment to be Used

- (a) A kelly cock will be kept in the string.
- (b) A float will be used at the bit.
- (c) The mud system will be monitored visually.
- (d) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly is not in the string.

8. The Testing, logging and Coring Programs to be Followed

- (a) No DST's will be run.
- (b) The logging program will consist of DILL from 300'-6550'; detail scale (5" to 100') from 100' to 2700' and from 5400'-6550', compensated neutron, formation density log from 2700'-4500' and 5400'-6550', GR from 0-2700'.
- (c) No coring is anticipated
- (d) Completion Program - 1000 gal. 15% Hydrochloric acid, frac with 35000' gal. treated water; 30,000# 20-40 sand, 40,000# 10-20 sand.

9. Any Anticipated Abnormal Pressures or Temperatures

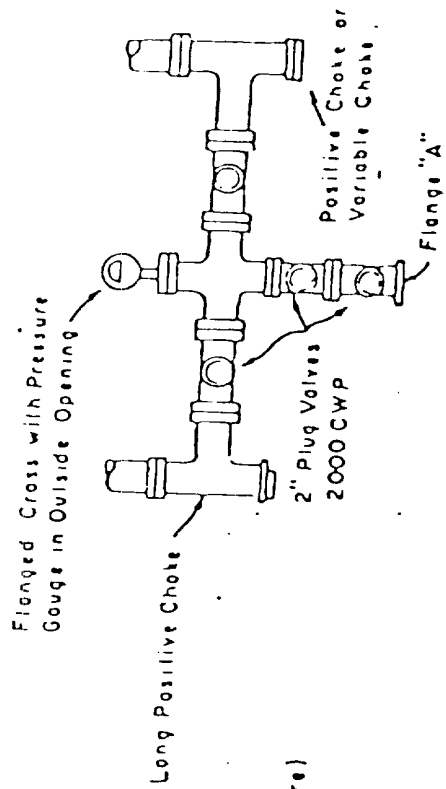
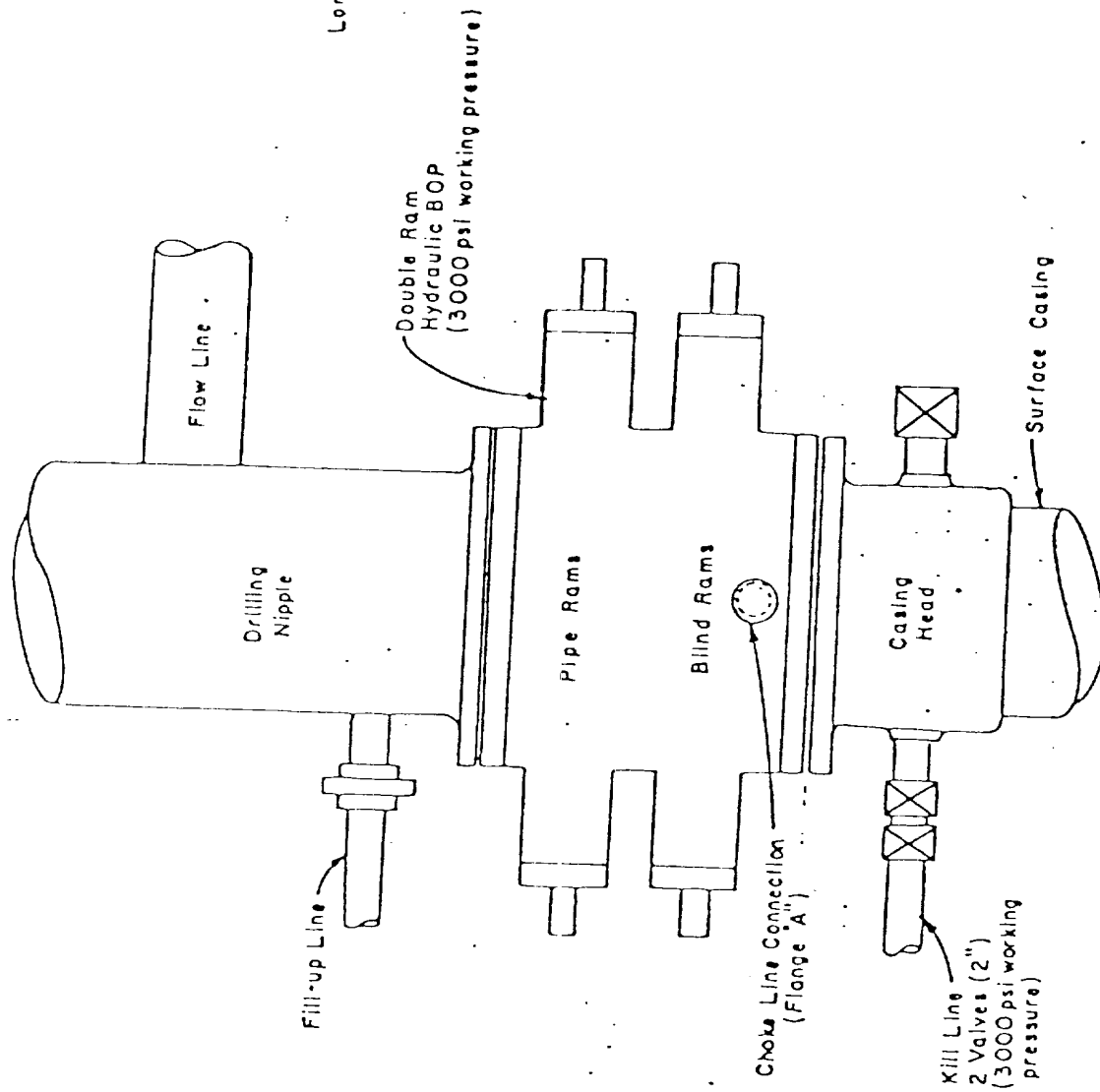
No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is 2000 psi.

No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for July 1, 1979, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 15 days.

Blowout Preventer  
Diagram



PLAN VIEW - CHOKES MANIFOLD

EXHIBIT "D"

MULTI-POINT REQUIREMENTS TO ACCOMPANY A.P.D.

Attached to Form 9-331C  
Getty Oil Company  
#1E Mexico-Federal K  
1190' FSL & 1850' FWL  
Sec. 8 T28N R10W  
San Juan County, New Mexico

1. Existing Roads

- A. The proposed well site and elevation plat is shown as EXHIBIT "A".
- B. The distance from Bloomfield, New Mexico is 6.6 miles. Proceed South on Highway #44 for 1.6 miles, thence Southeast on paved highway 1.9 miles, thence on oil field road 3.1 miles to location, as shown on EXHIBIT "E".
- C. All roads to location are color-coded on EXHIBIT "E". No new access road will be required.
- D. N/A
- E. This is a development well. All existing roads within a three-mile radius are shown on EXHIBIT "E".
- F. The existing roads need no improvement. Maintenance will be performed as required.

2. Planned Access Roads

Existing roads will require no improvement. There will be no new access road constructed. See EXHIBIT "E".

3. Location of Existing Wells

For all existing wells within one mile radius of development well, see EXHIBIT "F".

- (1) There are no water wells within a one mile radius of this location.
- (2) There is one abandoned well in this one mile radius.

- (3) There are no temporarily abandoned wells.
- (4) There are no disposal wells.
- (5) There are no wells presently being drilled.
- (6) There are 21 producing wells within this one mile radius.
- (7) There are no shut-in wells.
- (8) There are no injection wells.
- (9) There are no monitoring or observation wells for other uses.

4. Location of Existing and/or Proposed Facilities

- A. Within one-mile radius of location, the following existing facilities are owned or controlled by lessee/operator:
  - (1) Tank Batteries: None
  - (2) Production Facilities: None
  - (3) Oil Gathering Lines: None
  - (4) Gas Gathering Lines: None
  - (5) Injection Lines: None
  - (6) Disposal Lines: None
- B. If production is obtained, new facilities will be as follows:
  - (1) Production facilities will be located on solid ground of cut area of drill pad, as shown on EXHIBIT "G".
  - (2) All well flow lines will be buried and will be on the well site and battery site.
  - (3) Facilities will be 300 feet long and 150 feet wide.
  - (4) All construction materials for battery site and pad will be obtained from site. No additional material from outside sources is anticipated.
  - (5) Any necessary pits will be fenced and flagged to protect livestock and wildlife.



- C. Rehabilitation, whether well is productive or dry, will be made on all unused areas in accordance with BLM stipulations.

5. Location and Type of Water Source

- A. The source of water will be the San Juan River, 3 miles North of the location, as shown on EXHIBIT "E".
- B. Water will be transported by truck over existing roadways.
- C. No water well is to be drilled on this lease.

6. Construction Materials

- A. No construction materials are needed for drilling and access roads into the drilling location unless production is obtained. The surface soil materials will be sufficient or will be provided by the Dirt Contractor as needed.
- B. No construction materials will be taken off Federal land.
- C. All surface soil materials for construction of access roads are sufficient.
- D. All major access roads presently exist as shown on EXHIBIT "E".

7. Handling of Waste Materials and Disposal

- (1) Drill cuttings will be buried in the reserve pit and covered.
- (2) Drilling fluids will be handled in the reserve pit.
- (3) Any fluids produced during drilling test or while making production test will be collected in a test tank. If a test tank is not available during drilling, fluids will be handled in reserve pit. Any spills of oil, gas, salt waters or other noxious fluids will be cleaned up and removed.
- (4) Chemical facilities will be provided for human waste.
- (5) Garbage and non-flammable waste and salts and other chemicals produced during drilling or testing will be handled in trash pit. Flammable waste will be disposed of in burn pit. Drill fluids, water drilling mud and tailings will be kept in reserve pit, as shown on EXHIBIT "H". The trash and/or burn pit will be totally enclosed with small mesh wire to prevent wind scattering trash before being burned or buried. Reserve pit will be fenced on three sides and the fourth side fenced upon removal of the rig.

- (6) After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location. Any dangerous open pit will be fenced during drilling and kept closed until such time as the pit is leveled.

#### 8. Ancillary Facilities

No air strip, camp or other facilities will be built during drilling of this well.

#### 9. Well Site Layout

- (1) EXHIBIT "G" is the Drill Pad Layout as staked, with elevations by Kerr Land Surveying of Farmington, New Mexico. Cuts and fills have been drafted to visualize the planned cut across the locations spot and to the deepest part of the pad. Topsoil will be stockpiled per BLM specifications determined at time of pre-drill inspection.
- (2) EXHIBIT "H" is a plan diagram of the proposed rig and equipment, reserve pit, burn and trash pit, pipe racks and mud tanks. No permanent living facilities are planned. There will be a trailer on site.
- (3) EXHIBIT "G" is a diagram showing the proposed production facilities layout.
- (4) The reserve pits will not be lined. Steel mud tanks may be used during drilling operations.

#### 10. Plans for Restoration

- (1) Backfilling, leveling and contouring are planned as soon as all pits have dried. Waste disposal and spoils materials will be buried or hauled away immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.
- (2) The soil banked material will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula provided by the BLM. Revegetation is recommended for road area, as well as around drill pad.
- (3) Three sides of the reserve pit will be fenced during drilling operations. Prior to rig release, the reserve pit will be

fenced on the fourth side to prevent livestock or wildlife from becoming entrapped; and the fencing will be maintained until leveling and cleanup is accomplished.

- (4) If any oil is on the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with wire mesh.
- (5) The rehabilitation operations will begin immediately after the drilling rig is removed. Removal of oil or other adverse substances will begin immediately or area will be flagged and fenced. Other cleanup will be done as needed. Planting and revegetation is considered best in Spring, 1980 unless requested otherwise.

11. Other Information

- (1) The soil is a sandy-clay loam. No distinguishing geological features are present. The area is covered with cactus, sagebrush, native grass, Yucca and a few Cedar trees. There are livestock and rabbits in the area. The topography is gently sloping Northwesterly.
- (2) The primary surface use is for grazing. The surface is owned by the U.S. Government.
- (3) The closest live water is the San Juan River, 3 miles North of the location, as shown on EXHIBIT "E".

The closest occupied dwellings are at the gas plant 2 miles West of the location, as shown on EXHIBIT "E".

There are no known archaeological, historical, or cultural heritages that will be disturbed by this drilling.

- (4) Restrictions: Drilling will be allowed only to the Dakota Formation.
- (5) Drilling is planned for on or about July 1, 1979. Operations should be completed within 15 days.

12. Lessee's or Operator's Representative

George Lapaseotes  
Agent Consultant for  
Getty Oil Company  
600 South Cherry Street  
Suite 1201  
Denver, Colorado 80222  
(303) 321-2217


Dick Hergenreter  
Getty Oil Company  
Drawer 510  
Farmington, New Mexico 87401  
(505) 325-9682

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 Getty Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date

6-25-79

  
George Lapaseotes  
Agent Consultant for  
Getty Oil Company

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

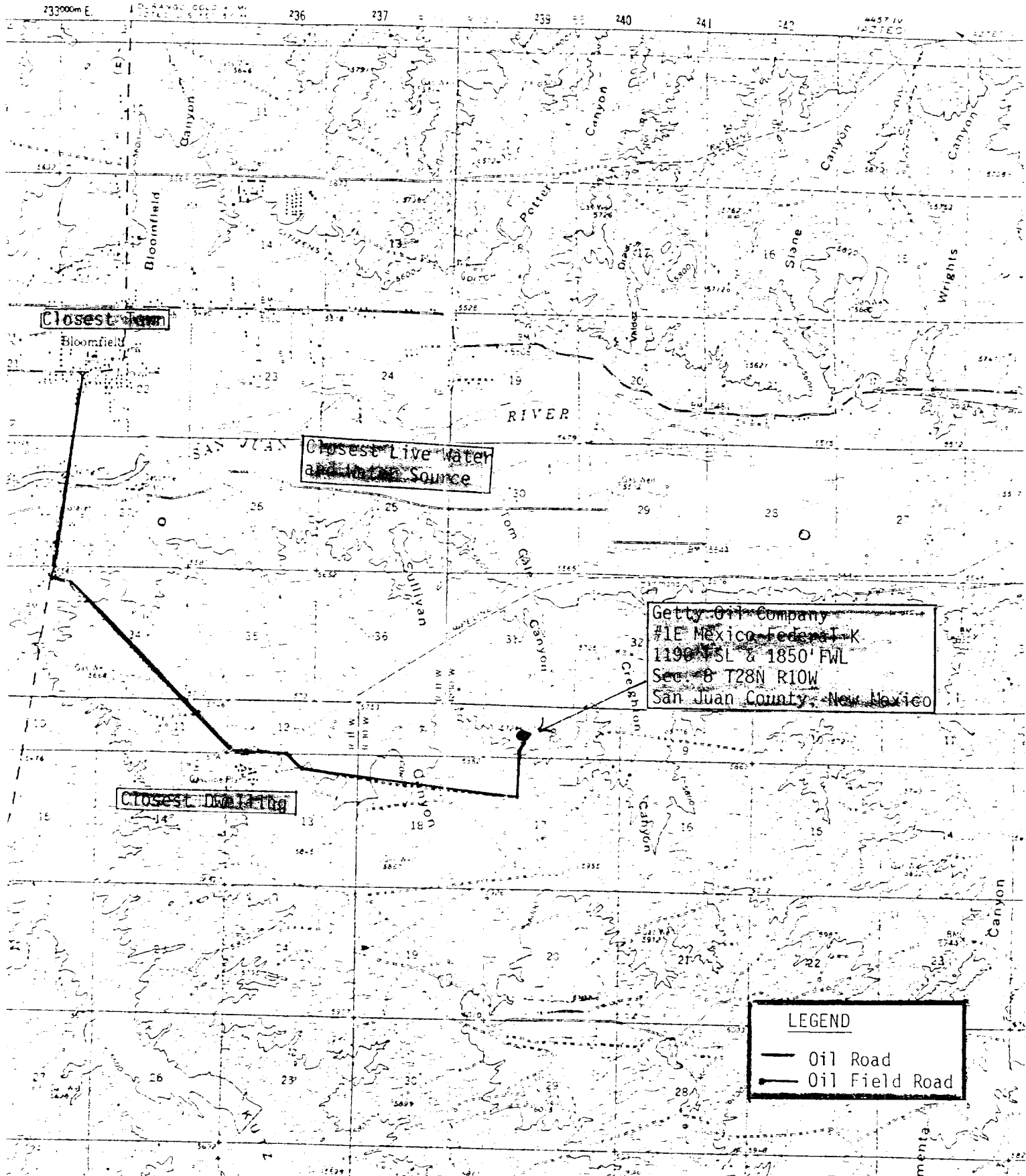


EXHIBIT "F"  
Radius Map of Location

LEGEND

- LOCATION
- ◇ DRY HOLE
- OIL WELL
- ▲ TRIANGULATION POINT
- ✱ ABANDONED OIL WELL
- ✱ GAS WELL
- ✱ ABANDONED GAS WELL
- ✱ WATER WELL

ONE-MILE RADIUS

Getty Oil Company  
#1E Mexico-Federal K  
1190' FSL & 1850' FWL  
Sec. 8 T28N R10W  
San Juan County, New Mexico

T  
28  
N  
R 10 W

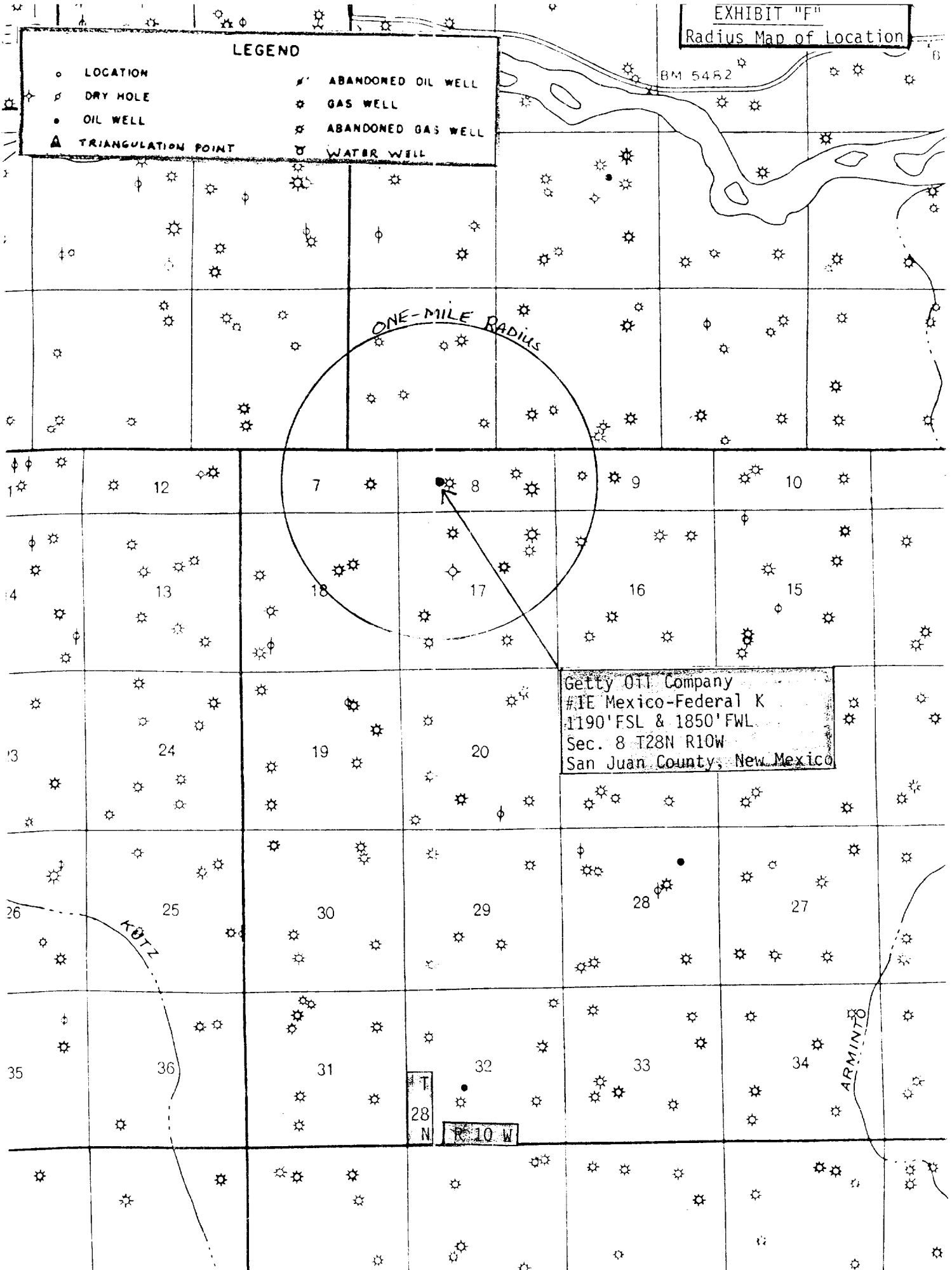
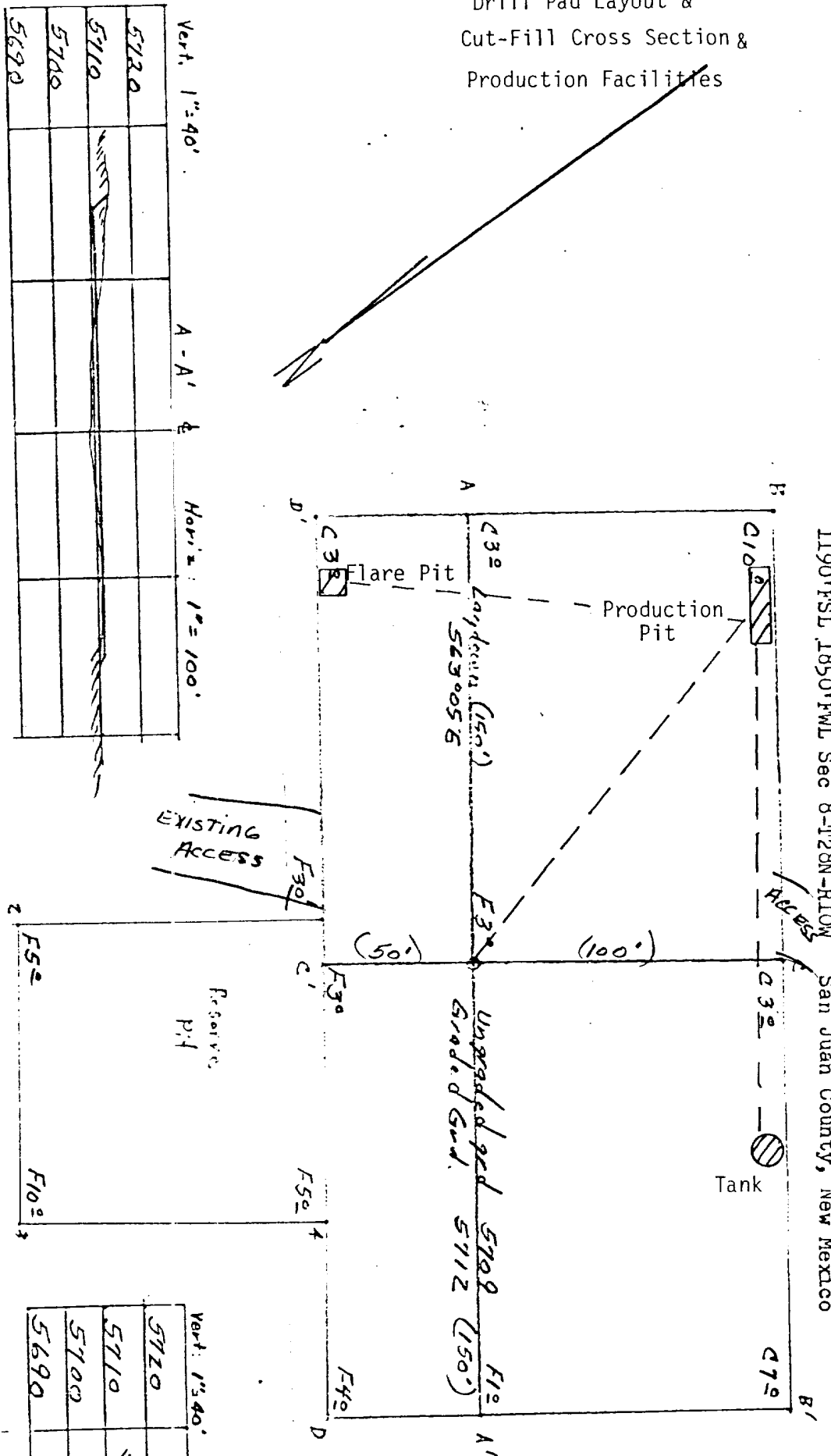


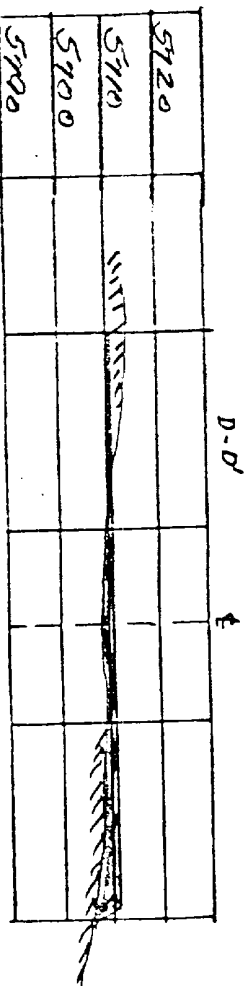
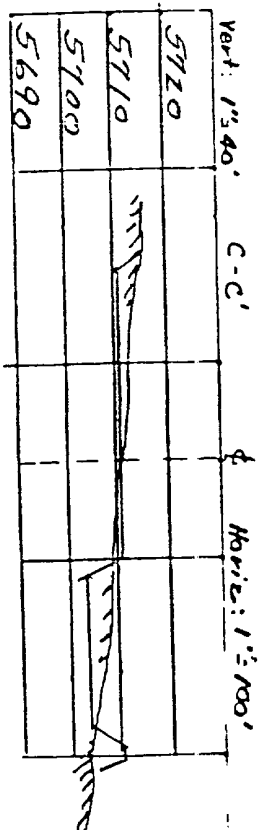
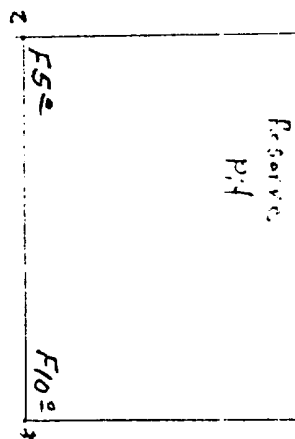
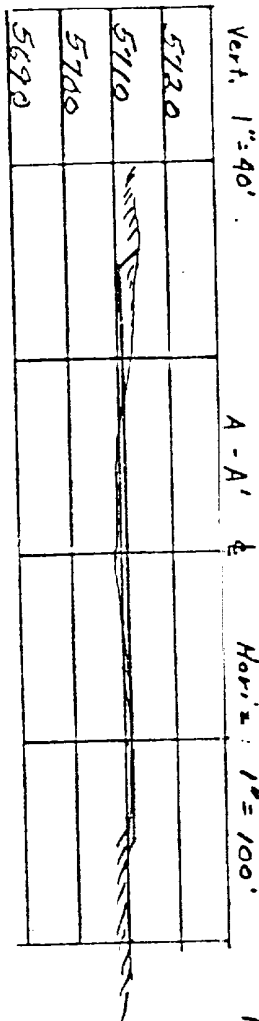
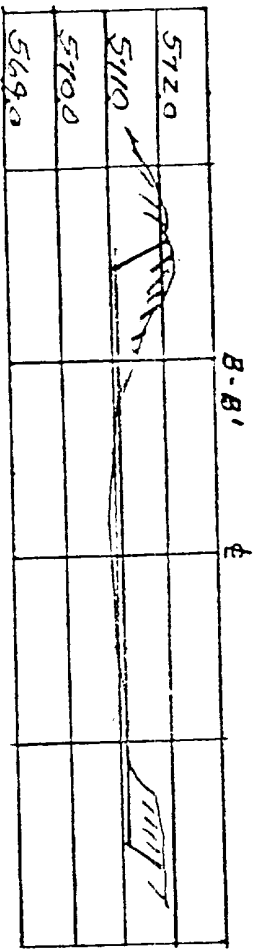
EXHIBIT "G"

Drill Pad Layout &  
Cut-Fill Cross Section &  
Production Facilities

1190' FSL 1850' FWL Sec 8-T28N-R10W San Juan County, New Mexico



Production Facilities: 210bb1 storage tank, Olman-Heath type HLP-13-80 combination production-separator, flowline.



KERR LAND SURVEYING  
Date: 5/31/79

*[Signature]*

Getty Oil Company  
#1E Mexico-Federal K  
1190' FSL & 1850' FWL  
Sec. 8 T28N R10W  
San Juan County, New Mexico

EXHIBIT "H"  
Drill Rig Layout

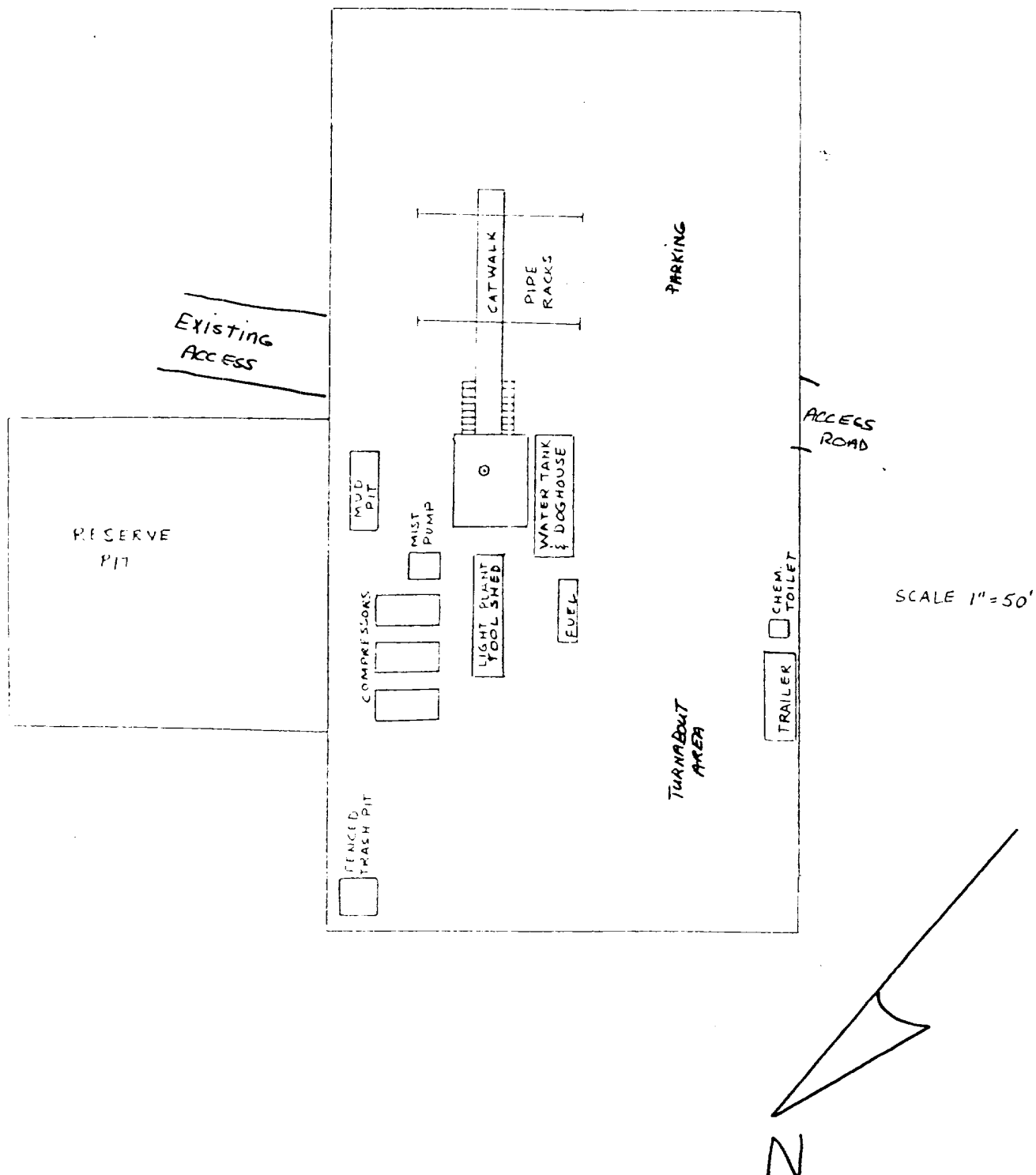
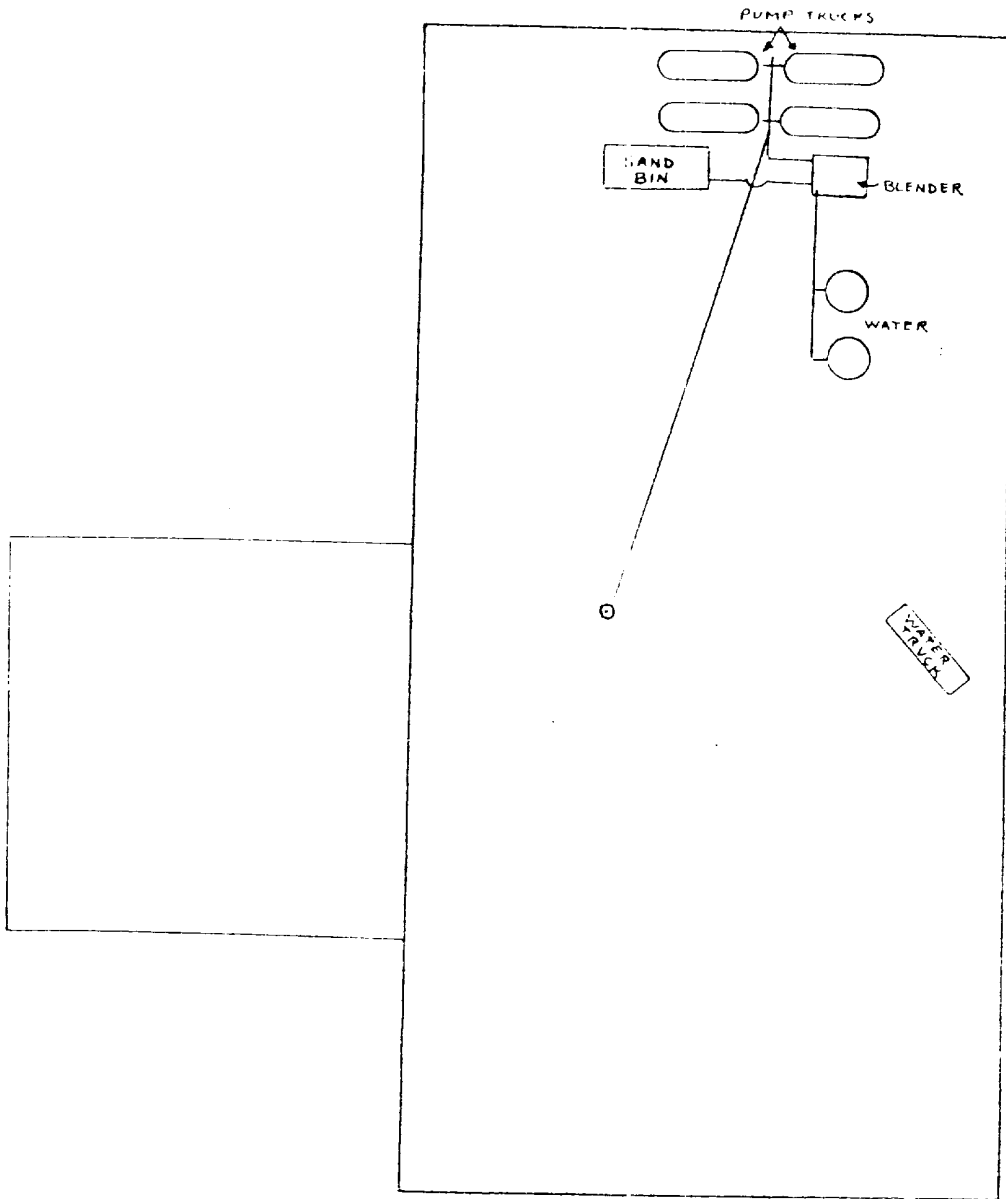




EXHIBIT "K"  
Fracing Program  
Layout



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
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OTHER

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ZONE ☐

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6.6 miles Southeast of Bloomfield, New Mexico

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LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

1190'

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2640' +

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6550'

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Rotary

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

5713' GR

22. APPROX. DATE WORK WILL START\*  
as soon as approved

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Production Facilities

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"K" Casing & Fracing  
Layout

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

J. E. Galt

TITLE

Area Supt

DATE

7/26/79

(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