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

CONTACT R ING OFFICE FOR MBER OF COPIES REQUIRED
(Other instructions on reverse side)

30-015-26955

BLM Roswell District
Modified Form No.
NM060-3160-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

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

2. NAME OF OPERATOR
Charles B. Gillespie, Jr. ✓

3a. Area Code & Phone No.
915-683-1765

3. ADDRESS OF OPERATOR
P. O. Box 8 Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1980' FNL & 660' FEL Ut. H
At proposed prod. zone
1980' FNL & 660' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 17 Miles East of Malaga, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660'

16. NO. OF ACRES IN LEASE 1031.87

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. 1320'

19. PROPOSED DEPTH 6150'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3462.7 GR

22. APPROX. DATE WORK WILL START*
As Soon As Possible

5. LEASE DESIGNATION AND SERIAL NO.
NM 030454

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Poker Lake

8. FARM OR LEASE NAME
Poker Lake Unit

9. WELL NO.
77

10. FIELD AND POOL, OR WILDCAT
Poker Lake Delaware, South

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 33-T24S-R-31-E

12. COUNTY OR PARISH
Eddy

13. STATE
NM

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.50#	J-55	ST&C CIRCULATE	600'	See Exhibit F
11"	8 5/8"	24-32#	J-55	ST&C (tie back)	4350'	See Exhibit F
7 7/8"	5 1/2"	15.5-17.0#	J-55	LT&C (tie back)	6150'	See Exhibit F

Mud Program: See Exhibit G.

B.O.P. Program: Series 1500 B.O.P., installed at offset. See Exhibit E.

Gas not dedicated.

Part ID-1
2-38-92
NewDoc # AFI

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 [signature] TITLE Exploration Manager DATE January 15, 1992

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 2-14-92

CONDITIONS OF APPROVAL, IF ANY:
APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

*See Instructions On Reverse Side

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

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

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
Charles B. Gillespie Jr.	Poker Lake Unit	77

Unit Letter	Section	Township	Range	County
H	33	24 South	31 East NMPM	Eddy

Actual Footage Location of Well:
1980 feet from the North line and 660 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3462.7	Delaware	Poker Lake Delaware, South	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

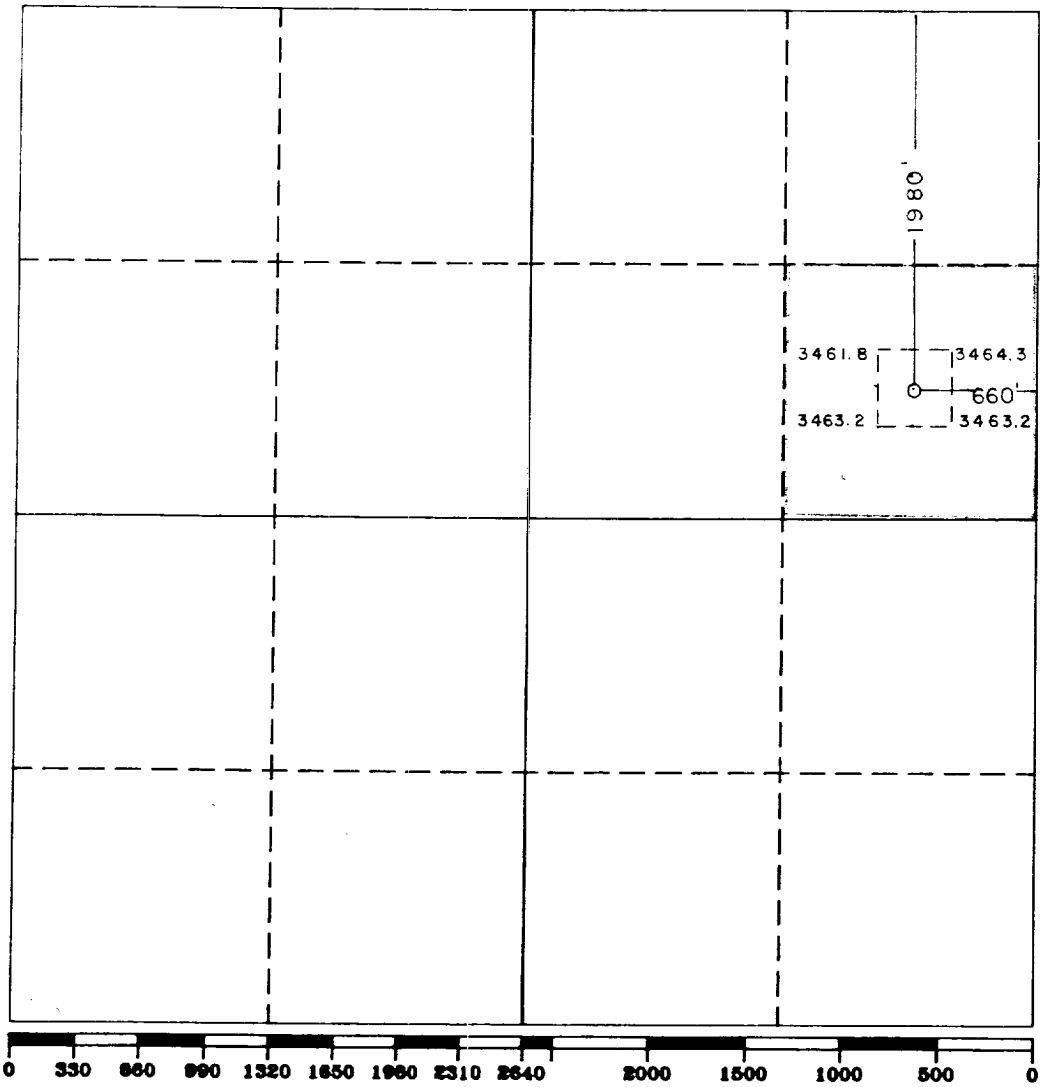
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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: William R. Crow

Printed Name: William R. Crow

Position: Exploration Manager

Company: Charles B. Gillespie, Jr.

Date: January 15, 1992

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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: January 8, 1992

Signature & Seal of Professional Surveyor

Ronald J. Eidson

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. JONES 7977

NO. 92-11-0026

RONALD J. EIDSON

APPLICATION FOR DRILLING

Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Charles B. Gillespie, Jr. submits the following nine items of pertinent information in accordance with USGS requirements.

1. The geologic surface formation is Quaternary.

2. The estimated tops of geologic markers are as follows:

Rustler	600'
Salado	975'
Lamar	4350'
Bell Canyon	4380'
Cherry Canyon	5280'

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

Water: Approximately 200'
Oil or Gas: Bell Canyon: Approx. 4380' to 5280'
Cherry Canyon: Approx. 5280' to 6150'

4. Proposed Casing Program: See Form 3160-3 and Exhibit F.

5. Pressure Control Equipment: See Form 3160-3 and Exhibit E.

6. Mud Program: See Exhibit G.

7. Testing, Logging and Coring Programs:
Drill stem tests: None anticipated
Mudlogging: Two man unit from 4350' (top of the Lamar Lime) to TD
Electric Log Program:
Compensated Density Dual Spaced Neutron Log
Dual Laterolog Microguard Log
Coring: None anticipated

8. No abnormal pressures or temperatures are anticipated.

9. Anticipated starting date: As soon as possible.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico
(Development Well)

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations so that a complete appraisal can be made of the environmental effects associated with the operations.

1. EXISTING ROADS.

   A. Exhibit A is the BLM Quad-Color map no. SE-29. Exhibit B is a portion of a USGS topographic map of the area on a scale of approximately 2.65 inches to the mile, showing the location of the proposed wellsite and roads in the vicinity. The proposed location is situated approximately 17 miles east of Malaga, New Mexico, via the access route shown in red.

      DIRECTIONS:

      1. Proceed east from Loving, New Mexico on Highway 128 for approximately 22 miles.
      2. Turn right (southwest) and continue on caliche road CR 786 for 4.6 miles.
      3. Turn left (south) on existing caliche road CR 791 and continue for 1.2 miles to the drillsite.

2. PLANNED ACCESS ROAD.

   A. The proposed access is an existing caliche road CR 791 which is currently being used.

   B. A new road will be constructed from the County Road 791 to the wellsite. The proposed new access will be approximately 200 feet in length from point of origin to the edge of the drilling pad. The road will lie in an east to west direction.

   C. The new road will be 12 feet in width (driving surface), except at the point of origin, adjacent to the existing road CR 791, at which point enough additional width will be provided to allow heavy trucks and equipment to turn.

   D. The new road will be covered with the necessary depth of caliche. The surface will be crowned, with drainage on both side. No turnouts will be necessary.

   E. The center line of the new road has been staked and flagged and the

route of the road is clearly visible.

3. LOCATION OF EXISTING WELLS.

   A. The well locations in the vicinity of the proposed well are shown in Exhibit C. There are nine wells within a one-mile radius, one of these is plugged and abandoned.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

   A. There are three producing wells on this lease at the present time, the Poker Lake Unit No. 73, No. 75 and No. 76 (N/2 NE/4 of Section 33 and NW/4 NW/4 of Section 34).

   B. In the event that the well is productive, the existing production facilities for the Poker Lake Unit No. 73, No. 75 and No. 76 wells, which are located at the Poker Lake Unit No. 70 wellsite (SE/4 SE/4 of Section 28), will be used. If the well is productive of oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY.

   A. It is planned to drill the proposed well with a fresh water and brine system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing roads shown in Exhibits A and B.

6. SOURCES OF CONSTRUCTION MATERIALS.

   A. Any caliche required for construction of the drilling pad and the new access road will be obtained from an existing pit on federally owned surface shown on Exhibit A.

7. METHODS OF HANDLING WASTE DISPOSAL.

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

   B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

   C. 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 USGS for appropriate approval.

   D. Oil produced during operations will be stored in tanks until sold.

   E. Current laws and regulations pertaining to the disposal of human waste will be complied with.

   F. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

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

8. ANCILLARY FACILITIES.

A. None required.

9. WELLSITE LAYOUT.

A. Exhibit D shows the dimensions of the well pad and reserve pits, and the location of major rig components.

B. The ground surface at the drilling location is sloping down gently towards the southwest. Cutting will be required to level the pad area, which will be covered with at least six inches of compacted caliche.

C. The reserve pits will be plastic lined.

D. The pad and pit area has been staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE.

A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleared of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.

B. Unguarded pits, if any, containing fluids will be fenced until they have been filled.

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. TOPOGRAPHY.

A. The wellsite and access route are located in a relatively flat area with some sand dunes.

B. The top soil at the wellsite is sandy.

C. The vegetation cover at the wellsite is moderately sparse with prairie grasses, mesquite, some yucca and miscellaneous weeds.

D. No wildlife was observed but it is likely that rabbits, lizards, insects and rodents traverse the area. The area is used for cattle grazing.

E. There are no ponds, lakes, streams or rivers within several miles of the wellsite.

F. There is a stock tank located approximatley 1/2 mile southwest of the proposed site.

G. The wellsite is located on federal surface.

H. There is no evidence of any archaeological, historical or cultural sites in the vicinity of the location.

12. OPERATOR'S REPRESENTATIVES.

A. The field representatives responsible for assuring compliance with the approved surface use plan are:

David Hastings
Production Manager
Charles B. Gillespie, Jr.
P. O. Box 8
Midland, Texas 79702
Phone: 915-683-1765 (office)
915-697-9817 (home)

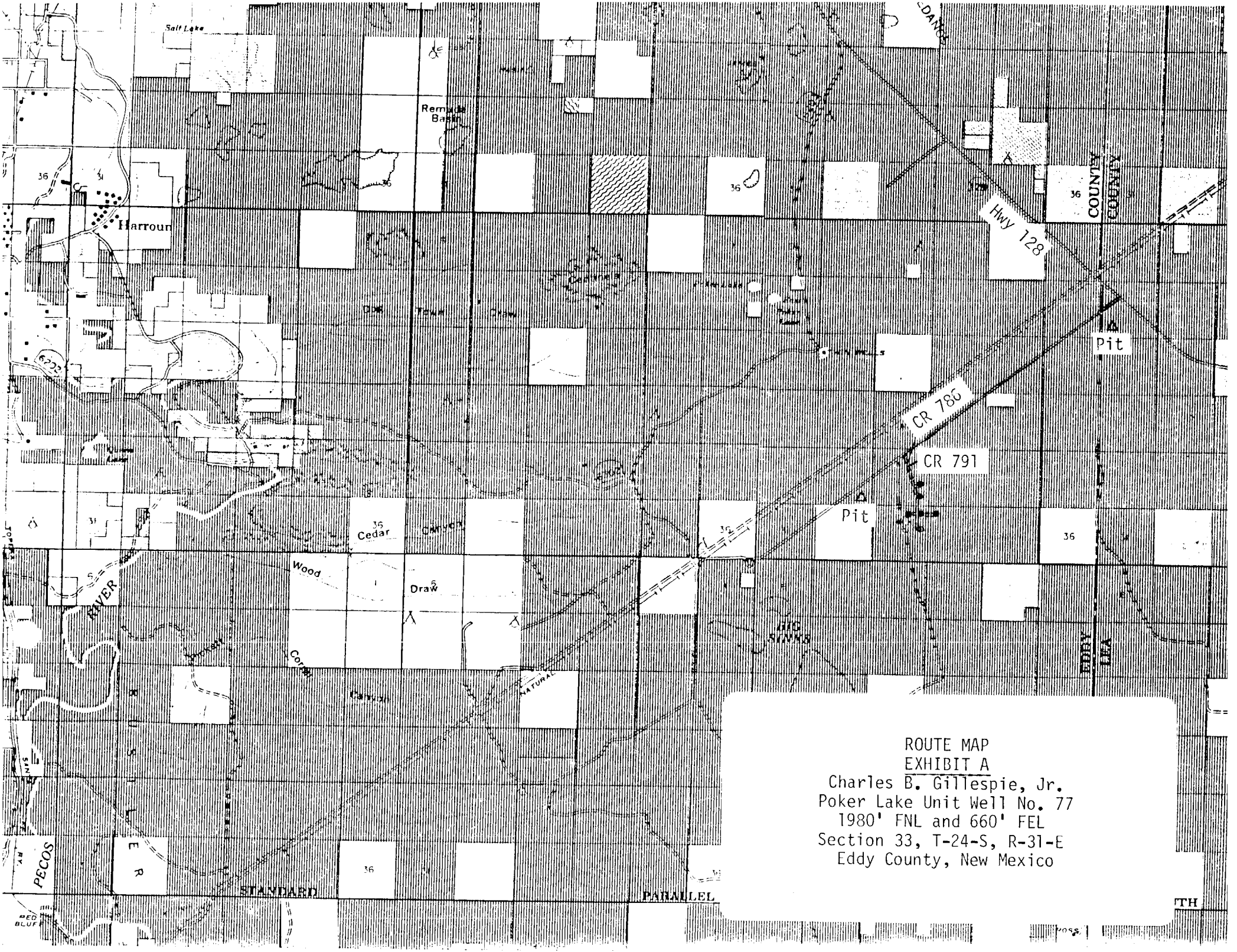
William R. Crow
Exploration Manager
Charles B. Gillespie, Jr.
P. O. Box 8
Midland, Texas 79702
Phone: 915-683-1765 (office)
915-685-1911 (home)

13. CERTIFICATION.

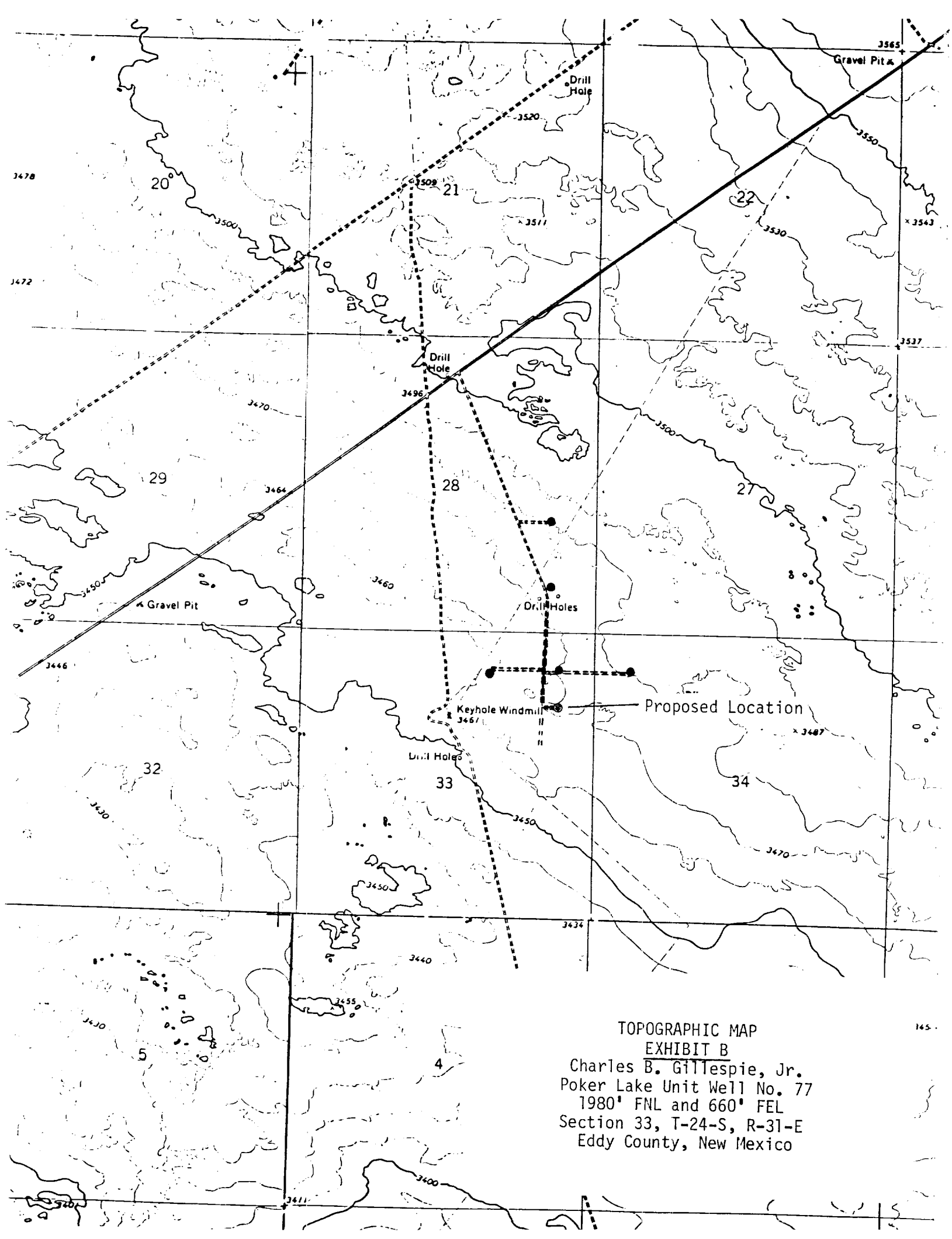
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Charles B. Gillespie, Jr. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

January 15, 1992
Date

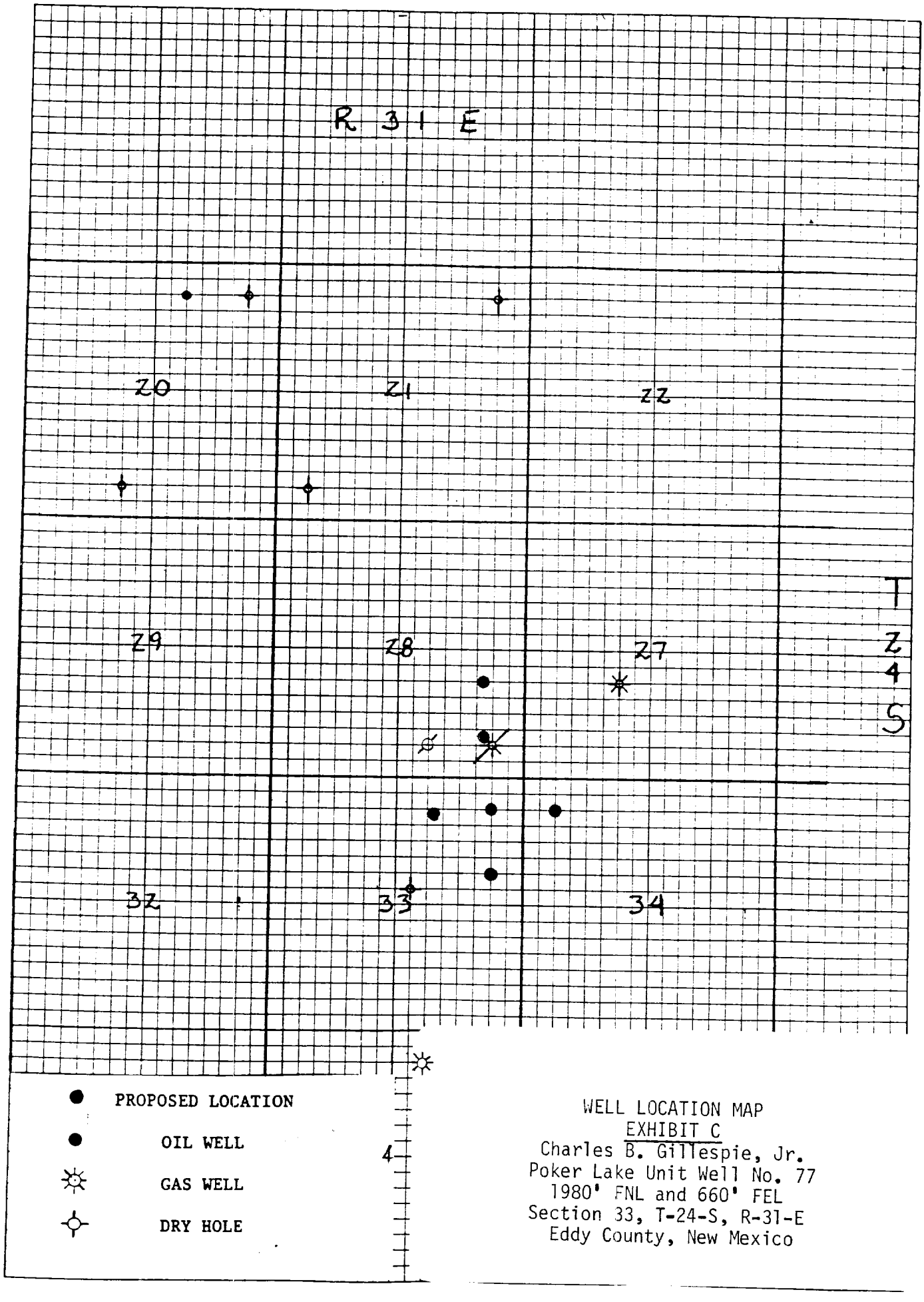
William R. Crow
Name



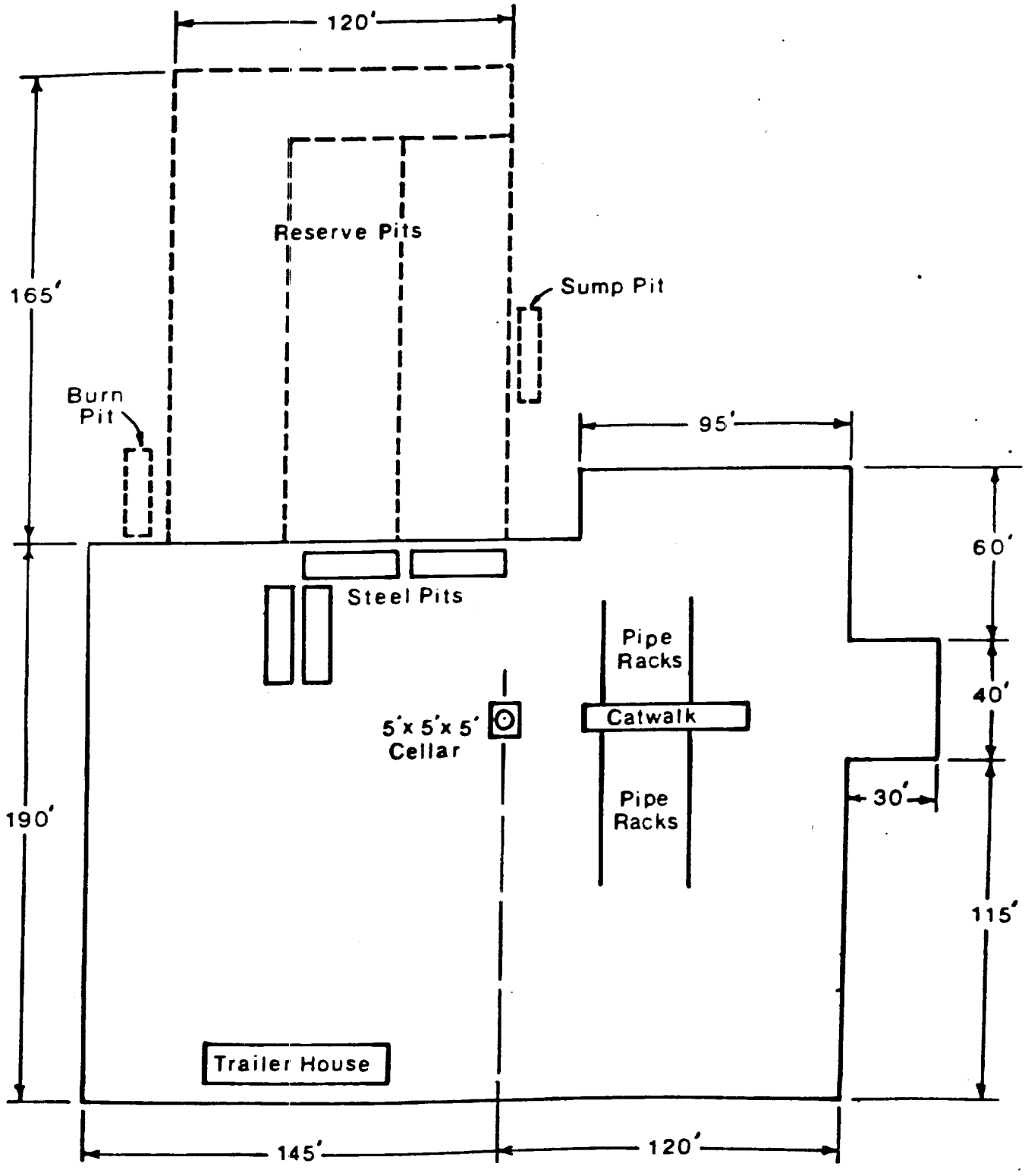
ROUTE MAP
EXHIBIT A
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico



TOPOGRAPHIC MAP
EXHIBIT B
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico



WELL LOCATION MAP
EXHIBIT C
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico



PAD LAYOUT
EXHIBIT D
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico

① 3" SERIES 1500 VALVE

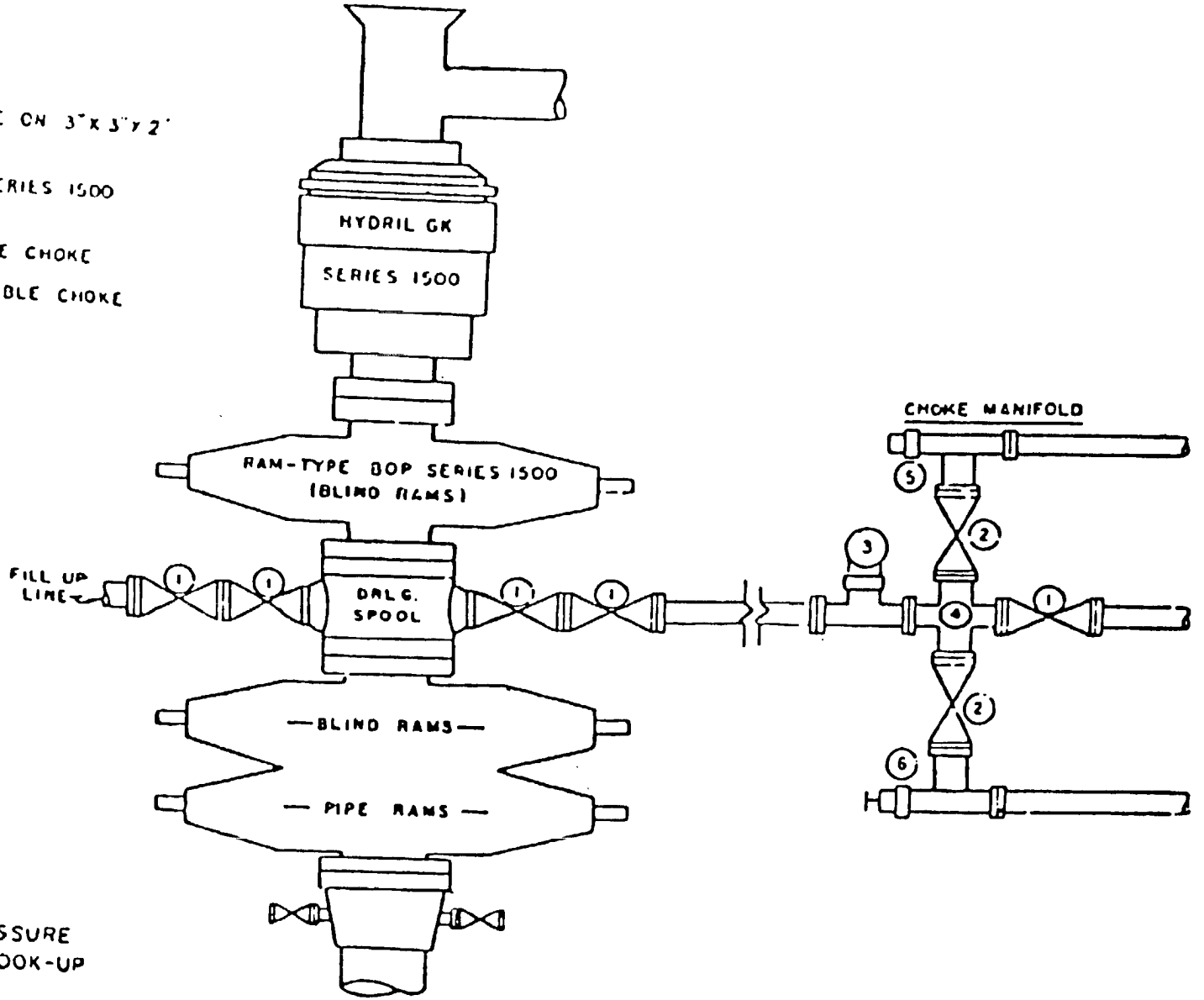
② 2" SERIES 1500 VALVE

③ 2" MUD PRESSURE GAUGE ON 3"X3"X2" SERIES 1500 STEEL TEE

④ 3" SERIES 1500 X 2" SERIES 1500 STEEL CROSS

⑤ 2" SERIES 1500 POSITIVE CHOKE

⑥ 2" SERIES 1500 ADJUSTABLE CHOKE



5000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

(SERIES 1500 FLANGES OR BETTER)

BLOW OUT PREVENTER
EXHIBIT E
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico

Charles B. Gillespie, Jr.

SUMMARY

DRILLING, CASING AND CEMENTING PROGRAM

1. Drill 17-1/2" hole to 600'±. Will be in the Rustler at this depth.

2. Cement 13-3/8", 54.50# J-55 casing with 650 sx. Class 'C' Premium Plus, containing 2% $CaCl_2$. Run Texas Pattern Guide Shoe with an insert float valve in top of shoe joint. Centralizers will be run on every other joint. Use plug to displace cement. Cement will be circulated to surface.

3. Release pressure, nipple up, and install BOP's. Test casing to 600 psi after 18 hours and drill out cement.

4. Drill 11" hole to 4350'±. Will be in the Lamar at this depth.

5. Cement 8-5/8", 24# J-55 and 32# J-55 casing with 900 sx. Howco Lite containing 12#/sk salt and 1/4#/sk Flocele, and tail in with 200 sx. Class 'C' containing 1/4#/sk Flocele. Run guide shoe and insert float on bottom joint, and 12 - 15 centralizers. Use plug to displace cement.

6. Release pressure, nipple up, and install BOP's. Test casing to 1500 psi for 30 minutes after WOC 18 hours and drill out cement.

7. Drill 7-7/8" hole to TD at 6150'±. A fresh water, cut brine mud system will be used. Pit levelers and flowline sensors will be utilized on the pits. A mud logging unit will be on location at 4350' to assist in evaluating samples and shows. Run Compensated Density Compensated Neutron Gamma Ray Log, Dual Laterolog with MSFL.

8. Run 5-1/2", 15.50# J-55 and 17# J-55 casing, use 12 - 15 centralizers to centralize all prospective pay zones. Cement 5-1/2" casing with 600 sx. Class 'C' containing 2% Gel. Cement volume will be adjusted according to calipered hole volume obtained from electric log.

9. Perforations, acid job and additional stimulation to be determined after completion.

EXHIBIT F
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico

CEMENT PROGRAM (Also, See Exhibit G)

13-3/8" Casing: 650 sx. Class 'C' Premium Plus containing 2% $CaCl_2$. Cement circulated to surface.

8-5/8" Casing: 900 sx. Howco Lite containing 12#/sk salt and 1/4#/sk Flocele and tail in with 200 sx. Class 'C' containing 1/4#/sk Flocele.

5-1/2" Casing: 600 sx. Class 'C' containing 2% gel, .4% Halad-4.

EXHIBIT F
Charles B. Gillespie, Jr.
Poker Lake Unit #77
1980' FNL and 660' FEL
Section 33, T-24-S, R-31-E
Eddy County, New Mexico