Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

30-015-26177

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

FILE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Artesia, NM 88210

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-0522

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

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

RECEIVED
AUG 31 '89
O. C. D.
ARTESIA, OFFICE

7. UNIT AGREEMENT NAME: Poker Lake

8. FARM OR LEASE NAME: Poker Lake Unit

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

9. WELL NO.: 73

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

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

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

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 28-T24S-R31E

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

12. COUNTY OR PARISH: Eddy

13. STATE: New Mexico

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
660'	160	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
1180'	6950'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3464.2 GR

22. APPROX. DATE WORK WILL START*: As soon as possible.

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"	32#	600'	See Exhibit F and G
7 7/8"	5 1/2"	17#	6950'	(see stips)

Post ID-1
9-1-89
New Loc & API

Mud Program: See Exhibit G.

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

Gas Not Dedicated

SUBJECT TO ... AND ... ATTACHED

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 Dale W. Hanley TITLE Production Manager DATE 7/31/89

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Conv. Signed by Richard L. Manus

APPROVED BY _____ TITLE AREA MANAGER CARLSBAD RESOURCE AREA DATE 8-30-89

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

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	POKER LAKE UNIT	#73

Unit Letter	Section	Township	Range	County
0	28	24 SOUTH	31 EAST NMPM	EDDY

Actual Footage Location of Well:
660 feet from the SOUTH line and 1980 feet from the EAST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3464.2'	Delaware	Poker Lake, South - Delaware	40 Acres

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

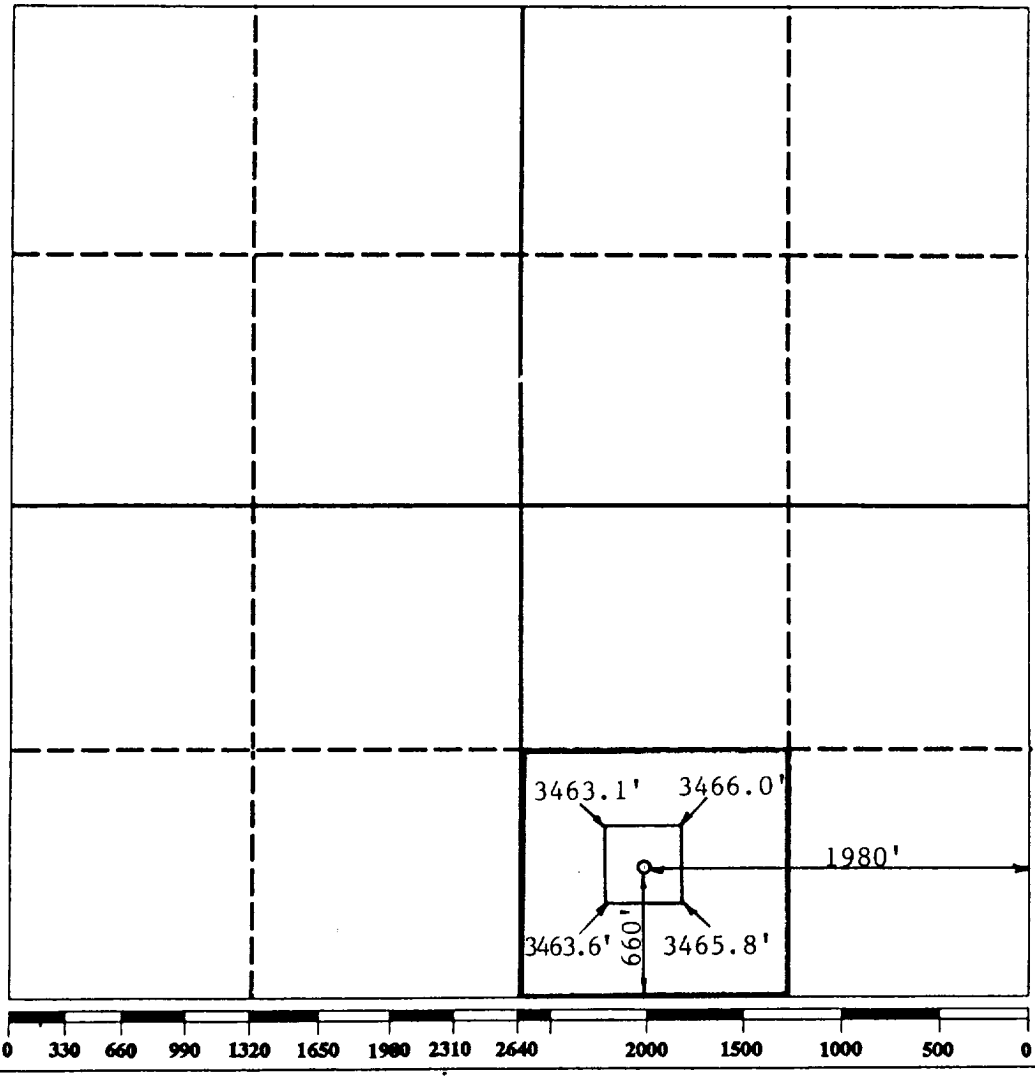
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if neccessary. _____

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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature: David W Hastings

Printed Name: David W. Hastings

Position: Production Manager

Company: Charles B. Gillespie, Jr.

Date: 7/31/89

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: 7-29-89

Signature & Seal of Professional Surveyor: Ronald J. Eidson

REGISTERED LAND SURVEYOR No. 3239 RONALD J. EIDSON

Certificate No. JOHN W. WEST 676 RONALD J. EIDSON 3239

125630

APPLICATION FOR DRILLING

Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, 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	580'
Salado	970'
Lamar	4340'
Bell Canyon	4370'
Cherry Canyon	5270'
Brushy Canyon	6550'

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. 4370' to 5270'
Cherry Canyon: Approx. 5270' to 6550'
Brushy Canyon: Approx. 6550' to 6950'

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 4340' (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. 73
660' FSL and 1980' FEL
Section 28, 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 show 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 .8 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 County Road 791 to the wellsite. The proposed new access will be approximately 800 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 covered with the necessary depth of caliche. The surface will be crowned, with drainage on both sides. 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 five wells within a one-mile radius, two of these have been plugged and abandoned.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

   A. There is one producing well on this lease at the present time, the Poker Lake Unit No. 70 (SE/4 SE/4 of same section).

   B. In the event that the well is productive, the existing production facilities at the Poker Lake Unit No. 70 wellsite 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 approximately 1/2 mile south 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:

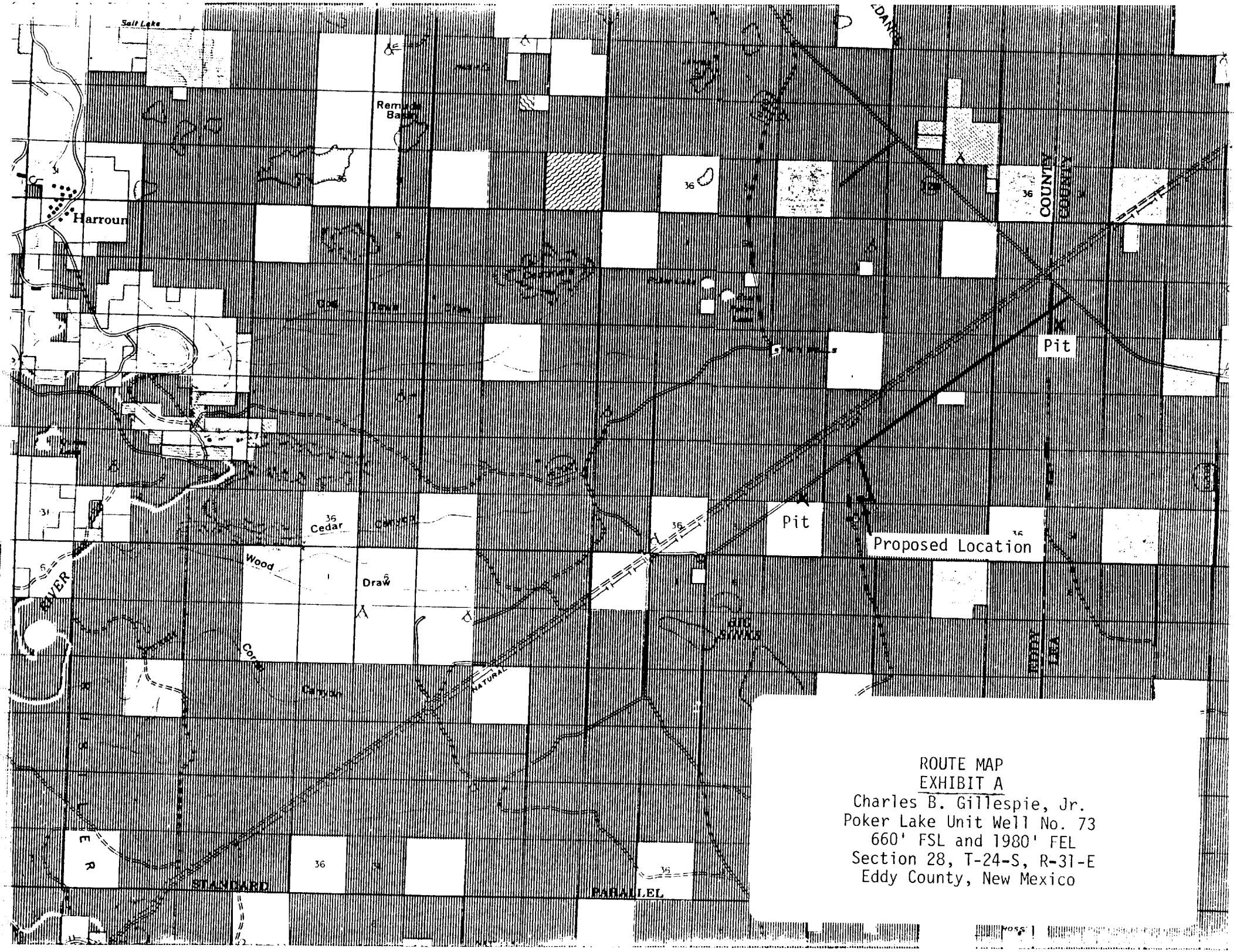
David Hastings
Production Manager
Charles B. Gillespie, Jr.
P. O. Box 8
Midland, Texas 79702
Phone: 915-683-1765 (office)
915-697-9817 (home)

William R. Crow
Exploration Manager
Charles B. Gillespie, Jr.
P. O. Box 8
Midland, Texas 79702
Phone: 915-683-1765 (office)
915-697-4312 (home)

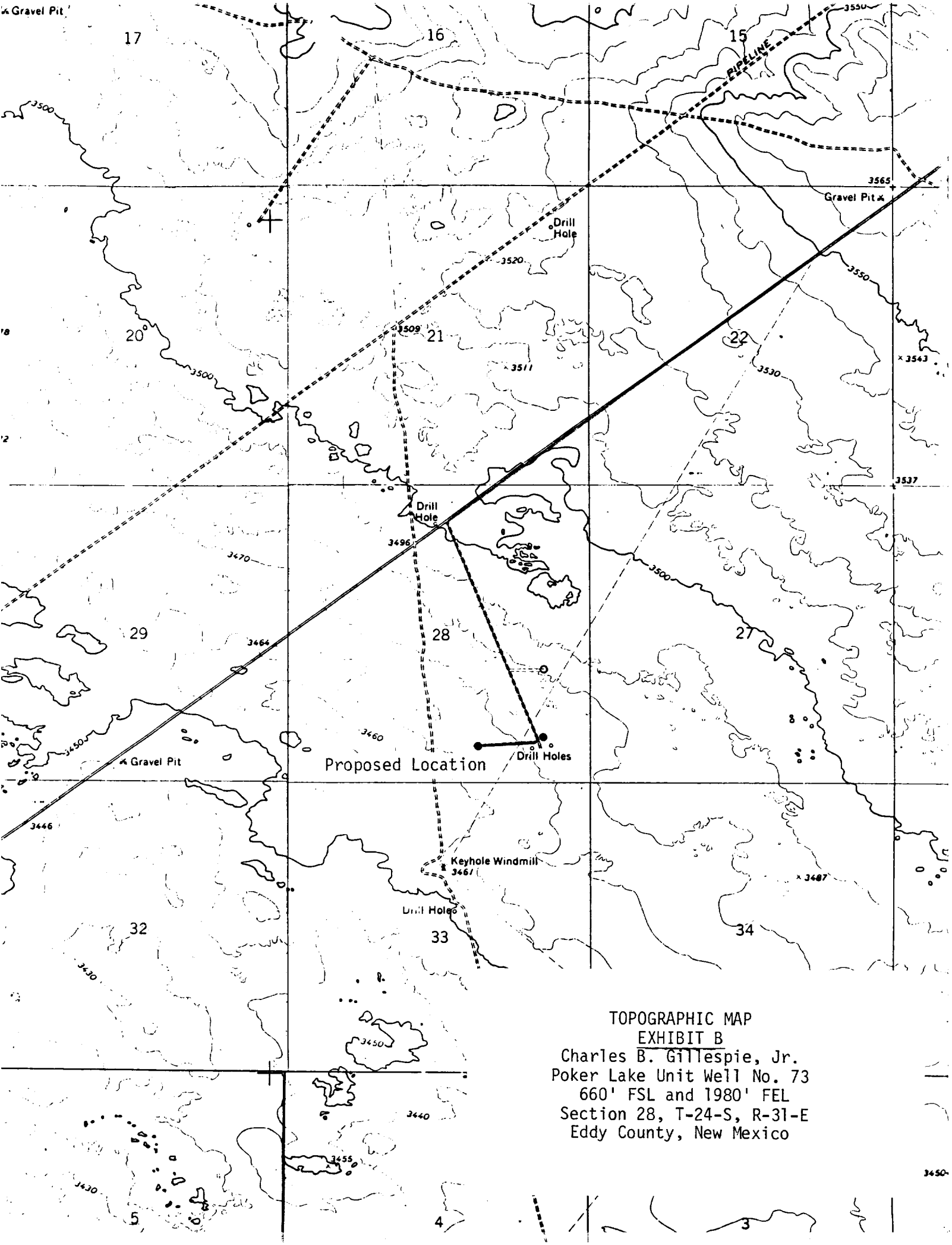
13. CERTIFICATION.

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.

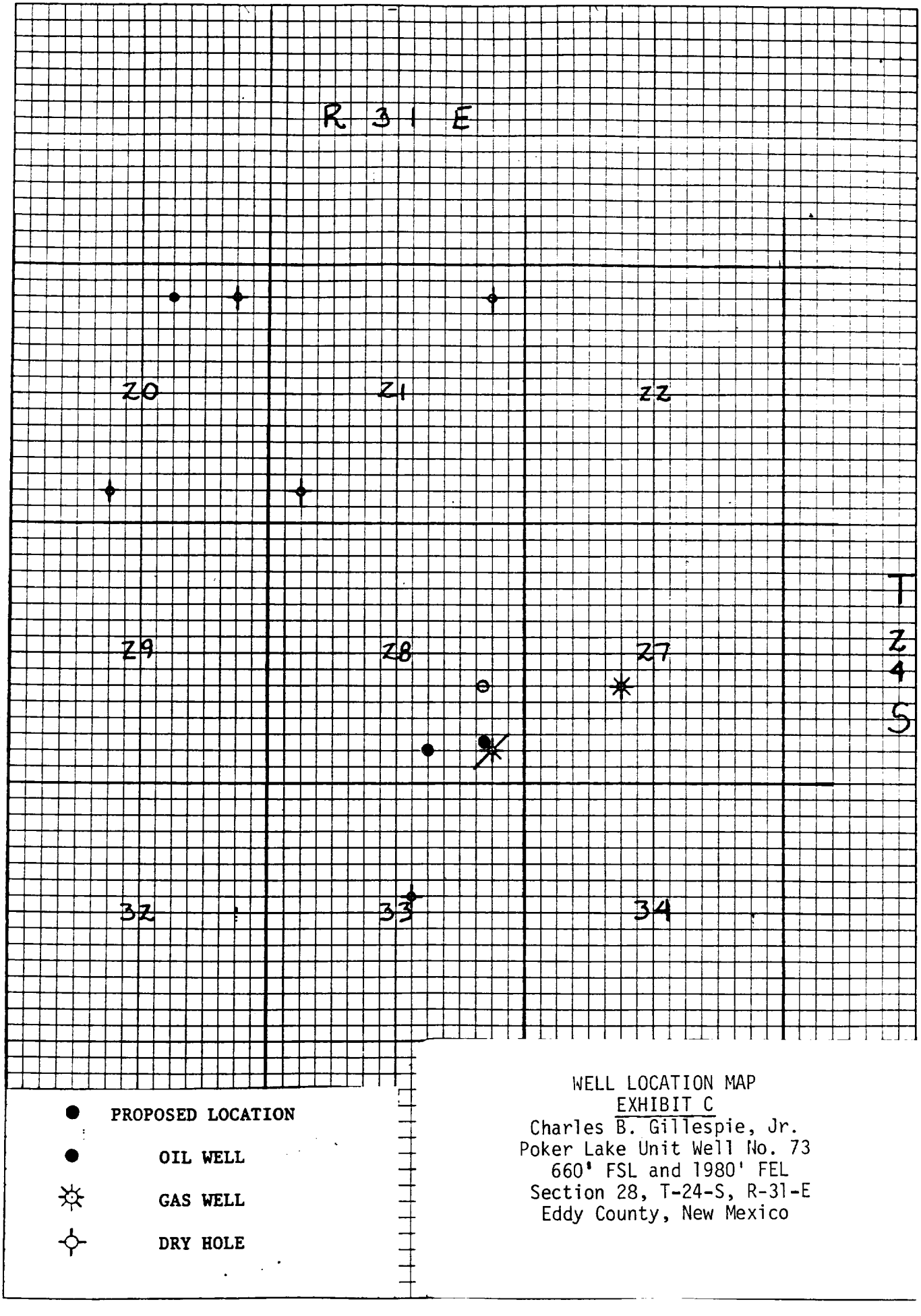
July 31, 1989
Date



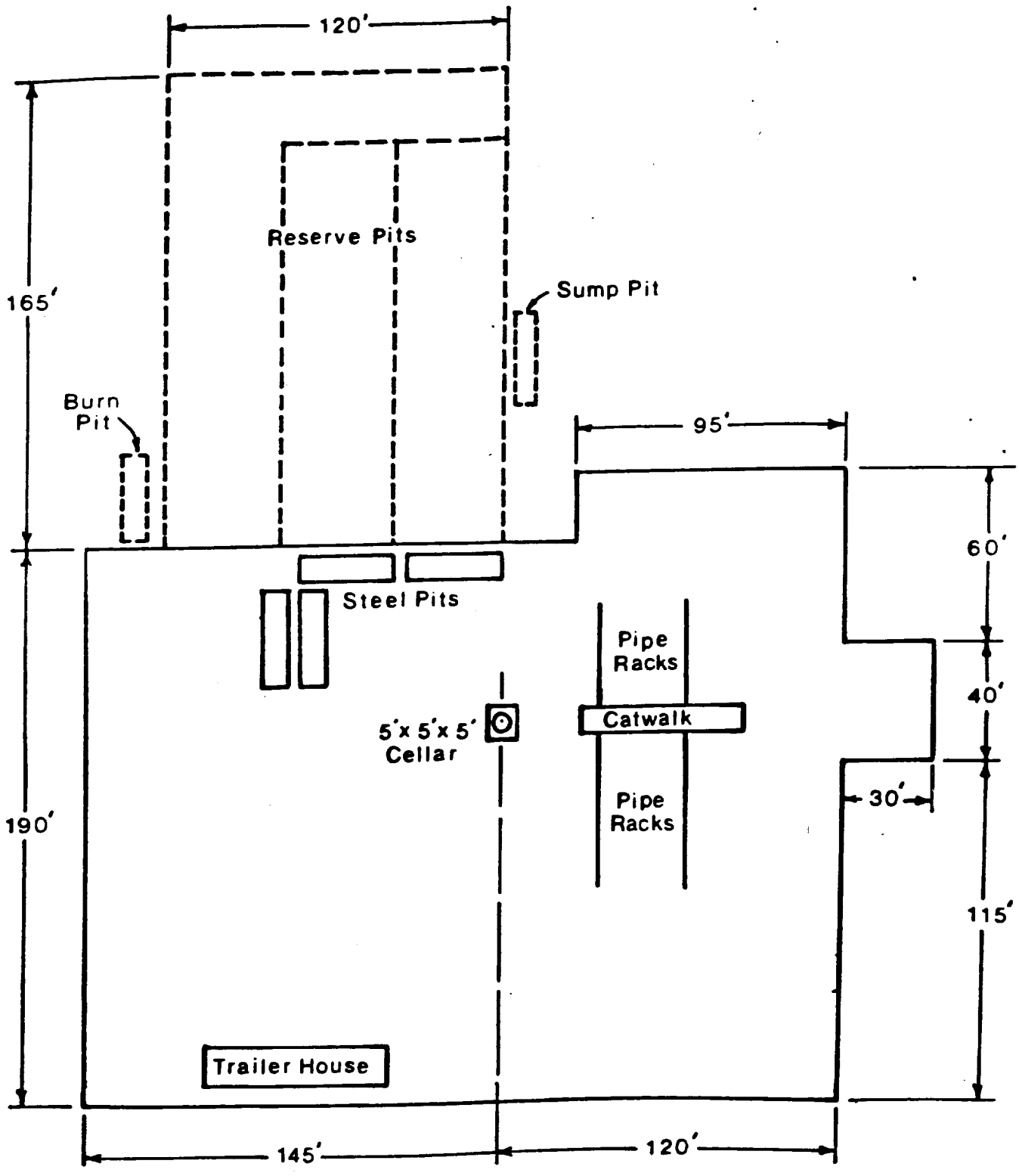
ROUTE MAP
EXHIBIT A
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico



TOPOGRAPHIC MAP
EXHIBIT B
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico



WELL LOCATION MAP
EXHIBIT C
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico



PAD LAYOUT
EXHIBIT D
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico

LOW OUT PREVENTER
EXHIBIT E
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico

Charles B. Gillespie, Jr.

SUMMARY

DRILLING, CASING AND CEMENTING PROGRAM

1. Drill 12 1/4" hole to 600'±. Will be in the Rustler at this depth.

2. Cement 8-5/8", 32# J-55 casing with 350 sx. Class 'C' Premium Plus containing 2% $CaCl_2$. Run Texas Pattern Guide Shoe with an insert float valve in top of shoe joint. Use plug to displace cement.

3. Release pressure, nipple up and install BOP's. Test casing to 1000 psi after 18 hours and drill out cement.

4. Drill 7-7/8" hole to TD at 6950'±. A brine mud system will be used. Pit levelers and flowline sensors will be utilized on the pits. A mudlogging unit will be on location at 4340' to assist in evaluating samples and shows. Run Compensated Density Dual Spaced Neutron Gamma Ray Log, Dual Laterolog Microguard Log.

5. Run 5-1/2", 15.50# J-55 and 17# J-55 casing and cement with 600 sx. Class 'C' cement containing 2% gel, .4% Halid 4. Use Guide Shoe and Float Collar, and 12-15 centralizers where necessary. Use rubber plug, displace cement with clean, fresh water.

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

EXHIBIT F
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico

CEMENT PROGRAM (Also, See Exhibit G)

8 5/8" Casing: 350 sx. Class 'C' Premium Plus containing 2% $CaCl_2$.

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

EXHIBIT F
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico

SUGGESTED DRILLING FLUID PROGRAM

Surface: 600' of 8 5/8"
Spud with fresh water gel to which lime is added to a 36-40 vis. Paper can be added for seepage.

Production: 6950' of 5 1/2"
Drill out below surface with brine/starch, adding Zeogel (salt gel) for viscosity. Mud weight and viscosity may be altered as hole conditions dictate. This type of drilling fluid should be sufficient to drill, test or log to TD.

EXHIBIT G
Charles B. Gillespie, Jr.
Poker Lake Unit Well No. 73
660' FSL and 1980' FEL
Section 28, T-24-S, R-31-E
Eddy County, New Mexico