| Form 9-331 C (May 1963) | | M.O.C.D. D STATES | COPY | SUBMIT IN (Other i. reve: | ctions o | n Budget Bureau No. 42-R1425. | | |
|--|---|----------------------|----------------------|---------------------------------|----------------|---|--|--|
| DEPARTMENT OF THE INTERIOR | | | | | | 50-005-6/056 5. LEASE DESIGNATION AND SEBIAL NO. | | |
| | | | | | | NM 38343 | | |
| APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK | | | | | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME | | |
| APPLICATION | - NA | | | | | | | |
| 1a. TYPE OF WORK | .L 🛛 | deepen [| | PLUG B | | 7. UNIT AGREEMENT NAME NA | | |
| b. TYPE OF WELL OIL GAS WELL WE | LL X OTHER | | SINGLE ZONE | X ZON | | 8. FARM OR LEASE NAME | | |
| 2. NAME OF OPERATOR | | | | D T (C) | | Michael Eric | | |
| BILL G. IS | LER | | | Kell | EIVED | | | |
| 3. ADDRESS OF OPERATOR | | | | | | NO.1 MEDIMOTOR LIPES | | |
| 4. LOCATION OF WELL (Re | port location clearly and | ell, N.M. | 88201 h any State | reguAUG.s.O. | 5-19 81 | X Wildcat | | |
| At surface 660 '/N | 11. SEC., T., B., M., OR BLK. AND SURVEY OR AREA | | | | | | | |
| At proposed prod. zone ARTESIA, OFFICE Same | | | | | | 22-7S-26E | | |
| 14 DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* | | | | | | 12. COUNTY OR PARISH 13. STATE | | |
| | ortheast of | | | | | Chaves NM | | |
| 15. DISTANCE FROM PROPO. | SED* | | 16. NO. OF | ACRES IN LEASE | E 17. | NO. OF ACRES ASSIGNED TO THIS WELL | | |
| LOCATION TO NEAREST PROPERTY OR LEASE LI (Also to nearest drig | 640 | | | 160 | | | | |
| 18. DISTANCE FROM PROPO TO NEAREST WELL, DI | 19. PROPOSED DEPTH 20. ROT | | | ROTARY OR CABLE TOOLS | | | | |
| OR APPLIED FOR, ON THI | 5000 | ABO | | otary | | | | |
| 21. ELEVATIONS (Show whe | 22. APPROX. DATE WORK WILL START* | | | | | | | |
| 3739 GL | | | | | | September 1, 1981 | | |
| 23. | Р | ROPOSED CASIN | NG AND CE | MENTING PRO | OGRAM | | | |
| SIZE OF HULE | SIZE OF CASING | WEIGHT PER F | 00 T | SETTING DEPTH | | QUANTITY OF CEMENT | | |
| 17 1/2" | 13 3/8" | 48# H4C |) | 300' | | 300sx Class C (Circ.) | | |
| 11" | 8 5/8" | 24# K55 | 5 | 1750' | | 400HLW+200 "C" (Circ.) | | |
| 7 7/8" | 4 1/2" | 10.5# F | (55 | 5000' | | 500HLW+450 POZ | | |

p. F. . . .

Gas is not dedicated to a pipeline.

IN ABOVE SPACE DESCRIPT I ROPOSED 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.

| preventer program, in any. | | |
|---|-----------------------------------|--------------------|
| signed Levry M. France | Agent for: TILE_BILL G. ISLER | DATE July 24, 1981 |
| (This space for Federal or State office use) | APPROVAL DATE | |
| APPROVED BY APPROVED | | DATE |
| (Orig. Szd.) GEORGE HL STE | WARI | |
| AUG 4 1981 FOR JAMES A. GILLHAM DISTRICT SUPERVISION | *See Instructions On Reverse Side | |

N MEXICO OF CONSERVATION COMMISS 4 WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | All distances must be | from the curer to undarges of t | he Section | |
|---|---------------------------------------|---|--|---|--|
| entri | 1 | | Michael E | ric | Well (St. 1 |
| Bill G. Isler | | | han Michael E | N mts | <u> </u> |
| D | 22 | 7-S | 26-E | Chaves | |
| 1. s. Frintage Linea | NC | ישטאס | 660 | WEST | |
| 660 and Level Elev. | Freducing For | RTH | | ······································ | line dicated Acreage: |
| 3739 | ABO | | Undesigna | ted | 160 Acres |
| 1. Outline the | · acreage dedica | ted to the subject | well by colored pencil of | hachure marks on the p | olat below. |
| | an one lease is | | ell, outline each and ider | | |
| If more that dated by contract. | n one lease of d ommunitization, 1 | ifferent ownership i anitization, force-po | s dedicated to the well. I bling.etc? | nave the interests of al | l owners been consoli- |
| Yes | No If a | nswer is "yes," type | of consolidation | | |
| | | 1 | tation of the barrows | muliu huan canaalidata | d (lles reverse side of |
| | s "no;' list the necessary.) | owners and tract de | scriptions which have ac | tuany been consondate | u. (Use reverse side of |
| No allowab forced-pool | le will be assign | ed to the well until)or until a non-stand | all interests have been c lard unit, eliminating suc | onsolidated (by commu h interests, has been ap | nitization, unitization, pproved by the Commis- |
| sion. | | T. 7 S., R.26 E | | | CERTIFICATION |
| ى MICI | I HEAL∔ERIC #I | | | toined herein | ify that the information con- n is true and complete to the |
| 660' ELE | EV. 37 39 | | N | best of my k | nawledge and belief. |
| | 1 | | | Name | _ |
| | | | | Position | w. Long |
| | ł | | | Agent | for: |
| | 1 | | 1 | Company | |
| - | i | | | Bill_(| G. Isler |
| | 1 | | l I | | 24, 1981 |
| | | | | | |
| | 1 | | | | |
| | 1 | | 1 | | ertify that the well location is plat was plotted from field |
| | 1 | | • | 11 | tual surveys made by me or |
| | 1 | | 1 | | pervision and that the same |
| | | | 1 | A TOPROF | South the best of my |
| | 1 | | | | ST 507 540 |
| | + | | | Le si si | 13/21 |
| | 1 | | | Par surveyed | H0. 271 |
| | ł i | | | anal anota | stessiontit Engine |
| | 1 | | | Thomas | T. Mann, P.E. & |
| | | | - parata da serie da | Certificate No | |
| 330 660 | 90 1320 1650 1 | 980 2310 2640 | 2000 1500 1000 | 000 0 N.M. Li | cense No. 277 |

SUPPLEMENT TO APPLICATION TO DRILL

BILL G. ISLER No.1 Michael Eric NW\%NW\% Sec.22-7S-26E Chaves County, N.M.

LEASE: NM 38343

The following items supplement Form 9-331C in accordance with NTL-6 instructions.

- 1. SURFACE FORMATION: Permian System
- 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

| Artesia | Group - | • | Surface | Sar | andres | | 1100' |
|---------|---------|---|---------|-----|--------|---|-------|
| Salt | - | • | 250' | Glo | rietta | - | 2200' |
| Queen | - | • | 650' | Tub | b | - | 3700' |
| Penrose | - | - | 750' | Abo |) | | 4400' |

- 3. ESTIMATED DEPTH TO WATER, OIL OR GAS: Fresh water - In surface formations above 250'. Salt water - In San Andres below 1100'. Gas - In Abo formation below 4400'.
- 4. PRIMARY OBJECTIVE: Gas from Abo formation. No fresh water expected below 300'.
- 5. CASING AND CEMENTING PROGRAM:
 - Surface: 300' of 48#, 13 3/8", H40, ST&C casing cemented with 300 sx Class"C" + 2% CaCl mixed at 14.8 ppg. Cement will be circulated, using Redimix down the annulus, if necessary. Drill out cement inside the casing after WOC for about 8 hours.
 - Intermediate: 1750' of 8 5/8", 24#, K55, ST&C casing cemented with 400 sx HLW + 1/4# flocele + 2% CaCl mixed to 12.4 ppg. Tail in with 200 sx Class "C" + 2% CaCl mixed to 14.8 ppg.

Cement will be circulated to the surface. If necessary, cement will be circulated to the surface using 1" pipe down the annulus. If severe lost circulation has been encountered while drilling the 11" hole, the cementing job will be preceded with 200 sx thickset cement mixed to 14.8 ppg. Install 8 5/8 x 10" API 3000# casinghead. Nipple up 10" API 3000# WP double ram BOP to drill 7 7/8" hole to total depth. Choke, kill, and fill lines will be installed. The BOP system and casing will be tested to 1500 psi before drilling out the 8 5/8" casing. A full opening safety valve, to fit the drill pipe in use, will be kept available on the rig floor. Working condition of BOP rams will be checked at least daily. See Exhibit "D" for BOP diagram.

- Production: 5000' of 4 1/2", 10.5#, K55, ST&C casing will be cemented with 500 sx HLW + 1.4% flocele + 10# salt mixed to 12.7 ppg. Tail in with 400 sx 50/50 POZ + 2% gel + 8# salt + 3/10% CFR-2 mixed to 14.1 ppg to raise cement to intermediate casing shoe.
- 6. CIRCULATING MEDIUM:
 - 0' 1750' Use fresh water spud mud with fresh water gel and soda ash or lime. Treat with lost circulation material as recommended by mud contractor. If total lost circulation occurs, mix 2 or 3 viscous slugs with LCM and attempt to regain circulation. If unsuccessful, will attempt drilling without returns to casing point and spot about 150 barrels viscous slug treated with LCM on bottom before running pipe.
 - 1750'-3200' Drill out 8 5/8" casing with fresh water. Add caustic soda for pH 9.0-9.5 and chemicals for corrosion control. Add LCM as needed to control lost circulation or to sweep the hole.
 - 3200'-TD Maintain mud weight less than 10 ppg with additions of fresh water while keeping chloride ion concentration of 40,000-50,000 ppm and KCL at 3%. At top of Abo mud up with starch and soda ash to control water loss to 20-25cc to TD. Salt Water Gel will be added to clean hole to log and run casing.
- 7. <u>CORING TESTING AND LOGGING</u>: No coring or testing is planned for this well. It is proposed to run a gamma ray log from TD to

surface, a Compensated Neutron-Density-Caliper log from the intermediate casing shoe to TD.

- 8. <u>SUBSURFACE HAZARDS</u>: Maximum bottom hole pressure is ex-, pected to be about 1500 psi. Mud weight required to offset this pressure would be 9.0 ppg. Bottom hole temperature should not exceed 120°F. No sour gas is expected.
- 9. ANTICIPATED STARTING DATE: Anticipated spud date is September 1, 1981. Drilling operations will be conducted for about 10 days. Completion operations, will follow the drilling operations as soon as a completion unit is available.

PERTINATE INFORMATION

For

BILL G. ISLER No.1 Michael Eric NW\2NW\2 Sec.22-7S-20E Chaves County, N.M.

NM 38343

640

Ranch

NM 38343

LOCATED:

25 miles northeast of Roswell, N.M.

10 Year Primary Term

\$150,000 Nation-wide

Designation of Operator

N¹/₂ Sec.22 is Public Surface

Grazing Permittee is Marley

February 1, 1980

Sun Oil Company

FEDERAL LEASE:

LEASE ISSUED:

RECORD LESSEE:

BOND COVERAGE:

ACRES IN LEASE:

AUTHORITY TO OPERATE:

SURFACE OWNERSHIP:

Undesignated Abo 160 Acre Gas Spacing

POOL RULES:

EXHIBITS:

A. Road MapB. Contour MapC. Rig LayoutD. BOP DiagramE. Surface Ownership Map

BILL G. ISLER No.1 Michael Eric NW\%NW\% Sec.22-7S-26E Chaves County, N.M.

LEASE: NM 38343

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the 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 operation so that a complete appraisal can be made of the environmental effects associated with the operation.

- 1. EXISTING ROADS:
 - A. <u>Exhibit "A"</u> is a portion of a road map showing the location of the proposed well as staked. The well is approximately 25 miles northeast of Roswell, N.M.
 - B. <u>Directions</u>; Travel about 2 miles north from Roswell city limits on Hwy. 285. Turn right on Hwy. 70 and go 13.8 miles. Turn north on County road and go 7 miles. Go 660 feet east on new access road to location.
- 2. PLANNED ACCESS ROAD:
 - A. Length and Width: Access from the County road will necessitate construction of 660 feet of new road. The new road will be bladed 12' wide with 2' shoulders.
 - B. <u>Surfacing Material</u>: If surfacing proves to be necessary, caliche will be purchased from a commercial source.
 - C. Maximum Grade: Essentially flat
 - D. Turnouts: None necessary

- E. Drainage Design: The new road will be bladed with a 6" crown in the center.
- F. Culverts: None necessary
- G. <u>Cuts and Fills</u>: The pad and access road will require a maximum of 2' for cuts and fills. The mud pits will be 8'x24'x6' deep. The reserve pit will be 50'x75'x4'deep.
- H. <u>Gates, Cattle Guards</u>: A cattle guard will be installed where the new access road leaves the County road.
- 3. LOCATION OF EXISTING WELLS:
 - A. Existing wells in the general area are depicted on Exhibit "E".
- 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:
 - A. There are no existing wells or facilities on this lease. If this well proves to be a producer appropriate production equipment will be located on the drill pad after the drilling equipment has been removed.
- 5. LOCATION AND TYPE OF WATER SUPPLY:
 - A. Water for drilling will be obtained from a commercial source and trucked to the location.
- 6. SOURCE OF CONSTRUCTION MATERIALS:
 - A. Any caliche necessary for the road or pad will be obtained from a commercial source.
- 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 the 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 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".
- F. 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 necessary.

- 9. WELL SITE LAYOUT:
 - A. Exhibit "C" shows the relative location and dimensions of the well pad, pits, and major rig components.
 - B. The reserve pit will not be plastic lined unless the drilling contractor decided it is necessary in order to contain the mud.
- 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 the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.
 - B. Any unguarded pits containing fluids will be fenced until they are filled.
 - C. If the well is not productive, all rehabilitation requirements of the appropriate Regulatory Agencies will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough.

11. OTHER INFORMATION:

A. <u>Topography</u>: The well is located on an alluvial plain above the Pecos River and about three miles west of the Caprock. The elevation is about 3740' above sea level.

- B. <u>Soil</u>: The soil is predominantly a sandy loam. Taxinomically it can be classified as a member of the camborthids-calciorthids association.
- C. <u>Flora and Fauna</u>: Density of vegitation in the area is about 60%, consisting primarily of mesquite, desert holly, four wing salt brush, plains yucca, rabbit brush, black grama and broom snakeweed. Fauna consists of typical desert animals such as coyotes, rodents, snakes and lizards.
- D. <u>Ponds or Streams</u>: The well is located about 2 miles east of the Pecos River and 2 miles north of Six Mile Draw.
- E. <u>Residences and other Structures</u>; The nearest residence is about one-half mile north.
- F. Archaeological, Historical and other Cultural Sities:

The Agency for Conservation Archaeology at Eastern New Mexico University has been contracted to conduct a survey of the pad and access road and furnish a report for review by the Bureau of Land Management. Any recommendations of the archaeologist regarding protection of cultural sites will be honored.

- G. Land Use: The land is used for grazing under BLM Grazing Allotment No.5025.
- H. <u>Surface Ownership</u>: The N¹/₂ Sec.22 is Public surface under allotment to Marley Ranch.
- 12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use Plan:

Bill G. Isler 607 Broken Arrow Roswell, N.M. 88201 Ph. (505)623-6792

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 Bill G. Isler and his sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

July 16, 1981 Date:

LONG JERRY W Agent for:

Bill G. Isler





RIG LAYOUT



- 1. Substructure

- Catwalk
 Pipe Rack
 Doghouse
 Mub Pits
 Mud Pumps

- 7. Water Tank 8. Light Plant 9. Reserve Pit 10. Trash Pit 11. Trailer House
- 12. Production Facilities

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