# SUBMIT IN TRIPLICATE.

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

| i | 30- | CYS-27364<br>THE DENIGNATION AND SERIAL NO. |
|---|-----|---|
|   |     | 078415                                      |

| GEOLOGICAL SURVEY  |  |                           |                          |  |                                  | SF 078415   |  |
|--|--|---------------------------|--------------------------|--|----------------------------------|---|--|
| APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK            |  |                           |                          |  |                                  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  |  |
| 1a. TYPE OF WORK   |  |                           |                          |  | 7. UNIT AGREEMENT NAME           |   |  |
| b. Type of wall  | RILL 🗵   | DEEPEN                    | LJ.                      | PLUG BAC   | _K 📋                             | Name of the state |  |
| 011.   | CAS X OTHER  |                           |                          | UNGLE E MULTIP   | LE 🗌                             | S. FARM OR LEASE NAME   |  |
| 2. NAME OF OPERATOR  |  |                           |                          |  |                                  | Roelofs   |  |
|  | atural Gas Com   | npany                     |                          |  |                                  | 9. WELL NO.   |  |
| 3. ADDRESS OF OPERATOR   |  |                           |                          |  | į.                               | 2A  |  |
|  | ), Farmington,   |                           |                          | St. A  |                                  | 10. FIELD AND POOL, OB WILDCAT  |  |
| At surface   | Report location clearly and 1140'S, 17   |                           | th any                   | State requirements.*)  | ].                               | Blanco Mesa Verde   |  |
|  | •  | 10 15                     |                          |  |                                  | Sec. I5, T-29-N, R-8-W  |  |
| At proposed prod. zo   | ne   |                           |                          |  |                                  | NMPM  |  |
| 14. DISTANCE IN MILES  | AND DIRECTION FROM NEAR  | EST TOWN OR POS           | T OFFIC                  | ;E•  |                                  | 12. COUNTY OR PARISH   13. STATE  |  |
|  |  |                           |                          |  |                                  | San Juan NM   |  |
| 15. DISTANCE FROM PROI<br>LOCATION TO NEARES                     |  |                           | 16. N                    | O. OF ACRES IN LEASE   |                                  | F ACRES ASSIGNED IS WELL  |  |
| PROPERTY OR LEASE  |  |                           |                          | •  |                                  | 320.00  |  |
| 18. DISTANCE FROM PRO<br>TO NEAREST WELL, OR APPLIED FOR, ON THE | DRILLING, COMPLETED,   |                           | 19. PROPOSED DEPTH 6020' |  | 20. BOTABY OR CABLE TOOLS ROTARY |   |  |
| 21. ELEVATIONS (Show w)  | nether DF, RT, GR, etc.)   |                           | ·                        |  | <del> </del>                     | 22. APPROX. DATE WORK WILL START*   |  |
| 6726'GL  |  |                           |                          |  |                                  | <u> </u>  |  |
| <b>23</b> .  | P  | ROPOSED CASI              | NG AN                    | D CEMENTING PROGRA   | M                                |   |  |
| SIZE OF HOLE   | SIZE OF CASING   | WEIGHT PER F              | 00Т                      | SETTING DEPTH  |                                  | QUANTITY OF CEMENT  |  |
| 13 3/4"  | 9 5/8"   | 32.3#                     |                          | 200'   | 224c                             | u.ft.to circulate   |  |
| 8 3/4"   | 7"   | 20.0#                     |                          | 3715'  | 300c                             | u.ft.to cover Ojo Ala   |  |
| 6 1/4"   | 4 1/2"   | 10.5#                     |                          | 3565-6020'   | 427c                             | u.ft.to fill to3565'  |  |
| A 3000 psiblind and This gas i The E/2 of IN ABOVE SPACE DESCRIB | WP and 6000 pipe rams will s dedicated.  Section 15 is From the process of the pr | psi test l be use dedicat | dou<br>d fo              | able gate preor blow out poor blow out poor blow out poor blow out poor blow out property of the property of t | venter                           | equipped with ion on this well.   |  |
| preventer program, if an 24.                                     | ny Bradfe  | eld m                     | rleI                     | Orilling Cler  | κ                                | PATE March 1,1977   |  |
| (This space for Federal  | eral or State office use)  |                           |                          |  |                                  |   |  |
| PERMIT NO.   |  |                           |                          | APPROVAL DATE  |                                  |   |  |
|  |  |                           |                          |  |                                  |   |  |
| APPROVED BY CONDITIONS OF APPROV                                 | VAL, IF ANY :  | TIT                       | 'LE                      |  | <del></del>                      | DATE  |  |
|  | • <del>-</del>   |                           |                          |  |                                  |   |  |

Obal

\*See Instructions On Reverse Side .

# NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Total C+102 Supervedes C+128 Lifective 14-65

All distances must be from the outer boundaries of the Section Operator Well He. Fl Paso Natural Gas Company Reeloffs (SF-078415) Unit Letter Section Township Range County 15 29N W8 San Juan Actual Footage Location of Well: 1140 South 1710 feet from the East feet from the line Ground Level Elev. Producing Formation Pool Dedicated Acreage: 6726 Mesa Verde Blanco 320.00 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? 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 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 Drilling Clerk Fosition El Paso Natural Gas Co. March 1, 1977 Sec 15 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 true and correct to the best of my

3950

1320 1650

1980 2310

2000

1500

1000



P O. BOX 990 FARMINGTON, NEW MEXICO 87401 PHONE: 505-325-2841

# Multi-Point Surface Use Plan Roelofs #2A

- 1. Existing Road Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map.
  All existing and new roads will be properly maintained during the duration of this project.
- 2. Planned Access Roads Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed thirty feet (30') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if
- 3. Location of Existing Wells Please refer to Map No. 1
- 4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines Please refer to Maps No. 1 and No. 2.

  Map No. 2 shows the existing and proposed gas gathering lines. Map No. 1 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
- 5. Location and Type of Water Supply Water for the proposed project will be obtained from a water hole located SW/4 Section 9, T-29-N, R-8-W (Manzaneras Mesa Water Well)
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

- 7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1 will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.
- 8. Ancillary Facilities No camps or airstrips will be associated with this project.
- 9. Wellsite Layout Please refer to the attached Plat No. 1.
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed Mixture #2 will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted green.
- 11. Other Information The terrain is sandstone ledges with cedar and sagebrush growing on the proposed site.

  There are some deer around the proposed project site.

- 12. Operator's Representative W. D. Dawson, Post Office Box 990, Farmington, New Mexico 87401
- 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 El Paso Natural Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

March 1, 1977

D. R. Read

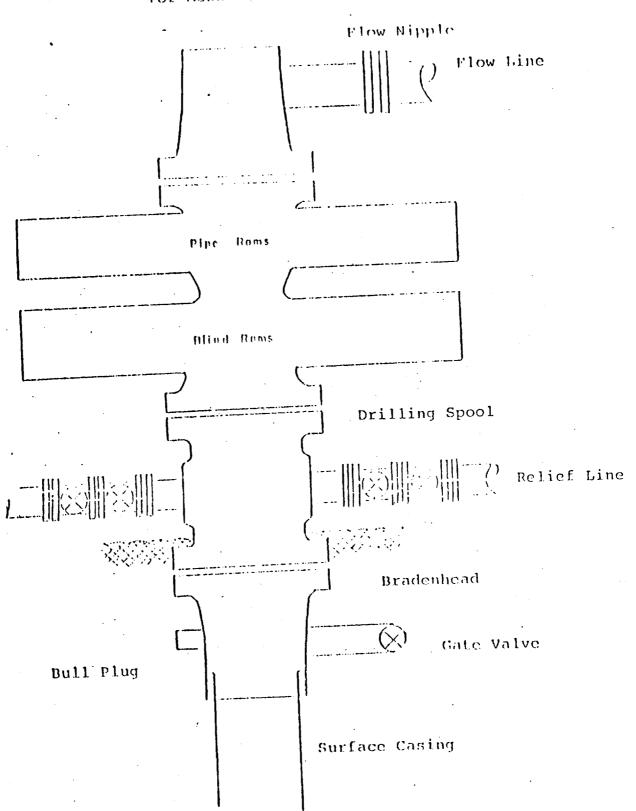
Division Drilling Engineer

pb

250 Natural bus Company from wellhoad to from From wellhon side = 130° 3 St. Fill Typical Lucation Mat for Mosa Virale ROELOFS #2A 4ft cut 300' 75. 8.... Trailer E1 Paso Drow Works Mud Tonk , 281 las Fuel Tank B. X8

MORTH

# Typical B.O.P Indialiation for Mesa Verde Well



Series 900 Double Gate BOP, rated at 3000 psi Working Pressure
When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line

#### Operations Plan Roelofs #2A

I. Location: 1140'S, 1710'E, Section 15, T-29-N, R-8-W, San Juan County, NM

Field: Blanco Mesa Verde Elevation: 6736'DF

#### II. Geology:

| Α. | Formation Tops: | Ojo Alamo  | 2375' | Lewis         | 3515' |
|----|-----------------|------------|-------|---------------|-------|
|    | _               | Kirtland   | 2530' | Mesa Verde    | 4975' |
|    |                 | Fruitland  | 3165' | Menefee       | 5210' |
|    |                 | Pic.Cliffs | 3415' | Point Lookout | 5620' |
|    |                 |            |       | Total Depth   | 6020' |

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4965', 5200', 5610' and at Total Depth.
  Also gauge any noticeable increase in gas. Record all gauges in
  daily drilling report and on morning report.

#### III. Drilling:

A. Mud Program: mud from surface to 3715'. Gas from intermediate casing to Total Depth.

#### IV. Materials:

| Α. | Casing Program: | Hole Size | Depth      | Casing Size | Wt.&Grade   |
|----|-----------------|-----------|------------|-------------|-------------|
|    |                 | 13 3/4"   | 200'       | 9 5/8"      | 32.3 # H-40 |
|    |                 | 8 3/4"    | 3715'      | 7"          | 20.0# K-55  |
|    |                 | 6 1/4"    | 3565-6020' | 4 1/2"      | 10.5# K-55  |

B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

- 4 1/2" liner T.I.W. liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F).
- C. Tubing: 6020' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.
- D. Wellhead Equipment: 10" 900 x 9 5/8" OCT casing head. 10" 900 x 6" 900 OCT xmas tree.

### V. Cementing:

9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 83 sks. of 65/35 Class "B" Poz with 12% gel (15.52 gallons of water per sack) followed by 70 sks. of Class "B" with 2% calcium chloride (300 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 237 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (427 cu.ft. of slurry, 70% excess to circulate liner).

DRR:pb

T

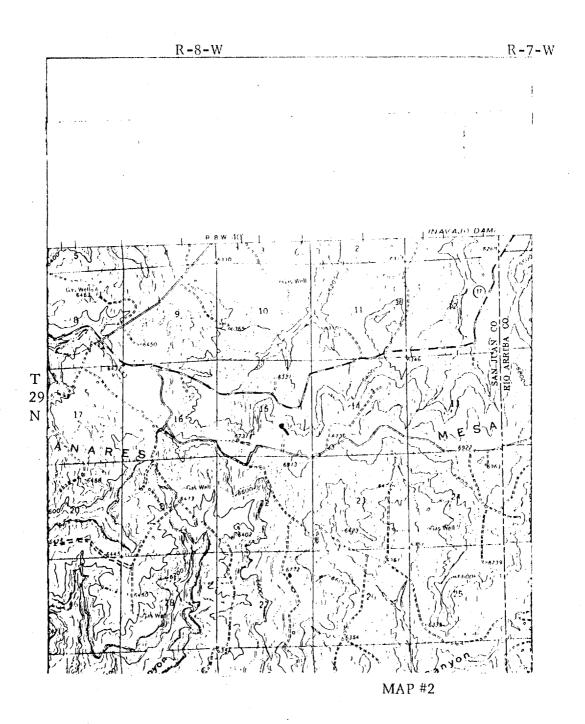
Allec PNG Tenneco Union Tex I(PM) 3 Lively LIVETU 0 4 State Com ztec EPNG Tenned PNG 31(MD (S) ĪΑ 10 Hill Tenneco  $\phi^3$ Osna 3 D. Day Mesalet Ø 0 Oana 13 Lively 18 fs Vandewart Tenneco EPNG JPMcHugt 20 J.F. Hughes EPNG Dana 25 28 ineco 27 29 Hughes Hardic & Hughes lones Bolin E.PNG EPNG Tenneco Mesa Pet 33 35 36 StalaCom State Com Prichar Bolin A Hughes A

MAP #1

Proposed Road \_\_\_\_\_

7 29 N

# EL PASO NATURAL GAS COMPANY ROELOES #2A SE 15-29-8



LEGEND OF RIGHT-OF-WAYS

EXISTING ROADS

EXISTING PEPELINES + + +

EXISTING ROAD \* PIFELINE + +

PROPOSED ROADS

PROPOSED PIFELINES + + +