SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

| ص | ~ | 043- | 22495 |
|----|-------|-------------|----------------|
| 5. | LEASE | DESIGNATION | AND SERIAL NO. |
| | SF | 080917 | |
| ~ | | | |

| A DDI ICATION | L COD DEDLAIT T | O DDILL DEL | DENI OD DI | HC D | A CV | 6. IF INDIAN, ALLOTTER OR TRIBE NAME | |
|--|----------------------------|---------------------|------------------------|------------|---|--------------------------------------|--|
| APPLICATION | N FOR PERMIT T | O DRILL, DEL | PEN, OK FI | LUG B | ACK_ | | |
| 1a. TYPE OF WORK DRI | LL 🐔 | DEEPEN [| PLU | IG BAC | :к 🗆 | 7. UNIT AGREEMENT NAME | |
| b. TYPE OF WELL | | | SINGLE [| MULTIPI | .B. [| S. FARM OR LEASE NAME | |
| OIL WELL W | ELL OTHER | | ZONE X | ZONE | | 1 | |
| 2. NAME OF OPERATOR | | | | | | Atlantic & | |
| El Paso Nat | tural Gas Comp | pany | | | : | 9. WELL NO. | |
| 3. ADDRESS OF OPERATOR | | | | | | la 🗸 | |
| PO Box 990 | , Farmington, | NM 87401 | | | | 10. FIELD AND POOL, OR WILDCAT | |
| 4. LOCATION OF WELL (R | eport location clearly and | n accordance with a | ny State requiremen | 1ts.*) | | Blanco Mesa Verde | |
| 800'S, 1550'E | | | | | 11. SEC., T., R., M., OB BLK. SEC. 33, T-31-N, R-10- | | |
| At proposed prod. zon | | | | | | NMPM | |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* | | | | | | 12. COUNTY OR PARISH 13. STATE | |
| | of Aztec, NM | | | | | San Juan NM | |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) | | | NO. OF ACRES IN 2566 | LEASE | 17. NO. OF ACRES ASSIGNED TO THIS WELL 308.58 | | |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2640 | | | PROPOSED DEPTH 5600 | , • | 20. ROTARY OR CABLE TOOLS ROTARY | | |
| 21. ELEVATIONS (Show wh 6218 GL | ether DF, RT, GR, etc.) | | | | | 22. APPROX. DATE WORK WILL START* | |
| 23. | P | ROPOSED CASING | AND CEMENTING | PROGRA | M | | |
| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING D | EPTH | | QUANTITY OF CEMENT | |
| 13 3/4" | 9 5/8" | 32.3# | 200 |) ' | | cu.ft. to circulate | |
| 8 3/4" | 7" | 20.0# | 3270 |) ' | | cu.ft.to cover Ojo Ala | |
| 6 1/4" | 4 1/2"line | r 10.5# | 3120-56 | 500' | 438 | cu.ft.to fill to 3120' | |

Selectively perforate and sandwater fracture the Mesa Verde formation.

10.5#

3120-5600'

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this

This gas is dedicated

The E/2 of Section 33 is dedicated to this well.

4 1/2"liner

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and 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.

Drilling Clerk BIGNE (This space for Federal or State office use) PERMIT NO. APPROVED BY CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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. NEW MEXICO O'L CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator Lease (SF-080917) EL PASO NATURAL GAS COMPANY ATLANTIC B lA County Section Range Township Unit Letter 10-W SAN JUAN 31-N 33 Actual Footage Location of Well: EAST 1550 E 800 SOUTH line feet from the feet from the line and Dedicated Acreage: Ground Level Elev. Producing Formation BLANCO MESA VERDE 308.58 6218 MESA VERDE 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? □ No If answer is "yes," type of consolidation __ Yes 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 Commis-CERTIFICATION I hereby certify that the information contained herein is true and complete to the B#1 Drilling Clerk Position El Paso Natural Gas Co. Company April 7, 1978 ON 33 SECK I hereby certify that the well location shown on this plat was platted from field notes of actual surveys made by me or SF-080917 under my supervision, and that the same is true and correct to the best of my knowledge and belief. 1550 Date Surveyed FEBRUARY 1, 1978 Registered Professional Engineer 1760

2000

1J20 1650

330

EIPaso NATURAL GAS COMPANY

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

Multi-Point Surface Use Plan Atlantic B #1A

- 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 twenty feet (20') 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. 2
- 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 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 at Hart Carnyon Water Well (NW 28-31-10)
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

Multi-Point Surface Use Plan

Page Two

- 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 gray (Federal Standard #595-36357)
- 11. Other Information The terrain is rolling hills and sagebrush flats. Sagebrush grows on the site.

 Cattle graze 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.

April 6, 1978

D. C. Walker

Project Drilling Engineer

DCW:pb

Operations Plan Atlantic B #1A

I. Location: 800'S, 1550'E, Section 33, T-31-N, R-10-W, San Juan County, NM

Field: Blanco Mesa Verde Elevation: 6218'GR

II. Geology:

| Α. | Formation | Tops: | Surface | Nacimiento | Lewis | 3070 ' |
|----|-----------|-------|------------|---------------|---------------|---------------|
| | | | Ojo Alamo | 1470' | Mesa Verde | 45 15' |
| | | | Kirtland | 1595 ' | Menefee | 4705' |
| | | | Fruitland | 2530 ' | Point Lookout | 515 0' |
| | | | Pic.Cliffs | 2890 ' | Total Depth | 5600 ' |

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4505', 4695', 5140' 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 3270. Gas from intermediate casing to Total Depth.

IV. Materials:

| Α. | Casing H | Program: Ho | le Size | Depth | Casing Size | Wt.&Grade |
|----|----------|-------------|---------|------------|-------------|-------------|
| | | 13 | 3/4" | 200' | 9 5/8" | 32.3 # H-40 |
| | | 8 | 3/4" | 3270' | 7" | 20.0# K-55 |
| | | 6 | 1/4" | 3120-5600' | 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 4 1/2" liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F).
- C. Tubing: 5600' 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" casing head. 10" 900 x 6" 900 xmas tree.

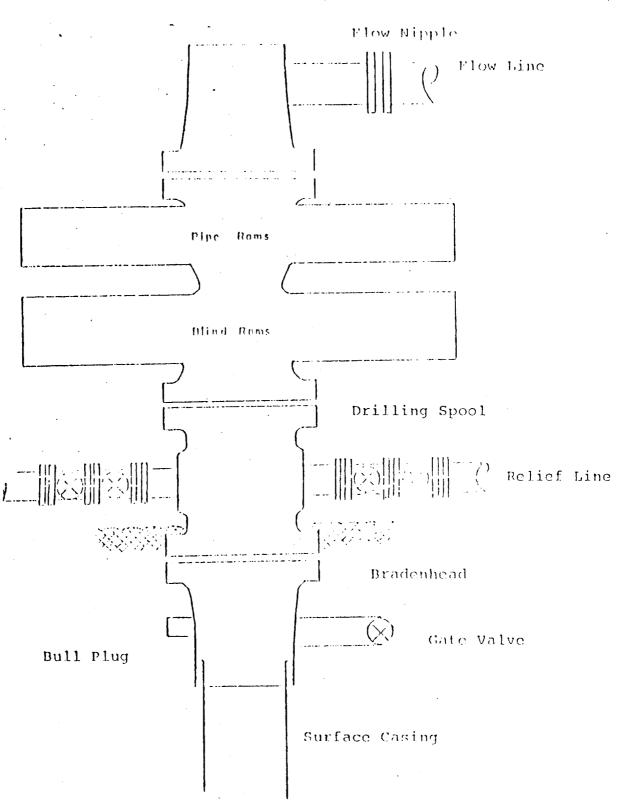
V. Cementing:

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 180 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (410 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.

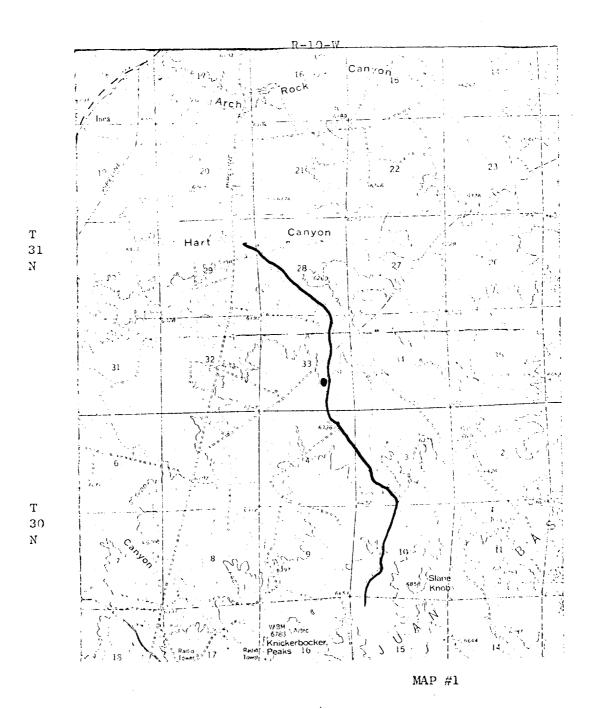
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 315 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (438 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

Typical B.O.P. Installation 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

EL PASO NATURAL ĜAS COMPANY ATLANTIC B #1A SE 33-31-10



LEGEND OF RIGHT-OF-MAYS

| EXISTING | ROADS | | |
|----------|----------------|---------------|-------------|
| | PIPELINES | -++ | |
| EXISTING | ROAD A PIPELIN | II-1-1 | ٠ |
| PROPOSED | ROADS | | |
| FROPOGED | PITELITES | + + | - + |
| PROPOSED | BOAD - TIPETIE | E | |