

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

## Multi-Point Surface Use Plan - Barrett #4A

- 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 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 necessary.
- 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 the Hart Canyon Water Well.
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

- Methods of Handling Waste Materials All garbage and trash 7. 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 Federal Standard #595 34127.
- 11. Other Information The terrain is rolling hills and sage brush flats covered with sage brush and cedar trees. Cattle graze the proposed project site.

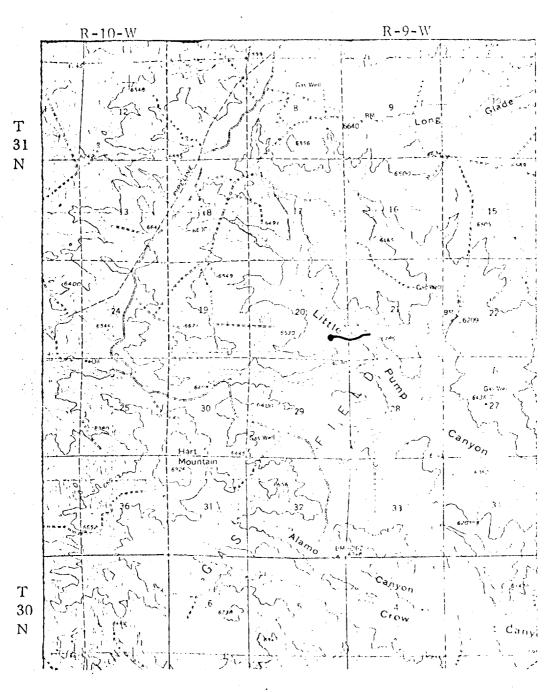
### Operations Plan - Barrett #4A

#### 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 104 sks. of 65/35 Class "B" Poz with 12% gel (15.52 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (391 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 231 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (415 cu.ft. of slurry, 70% excess to circulate liner).

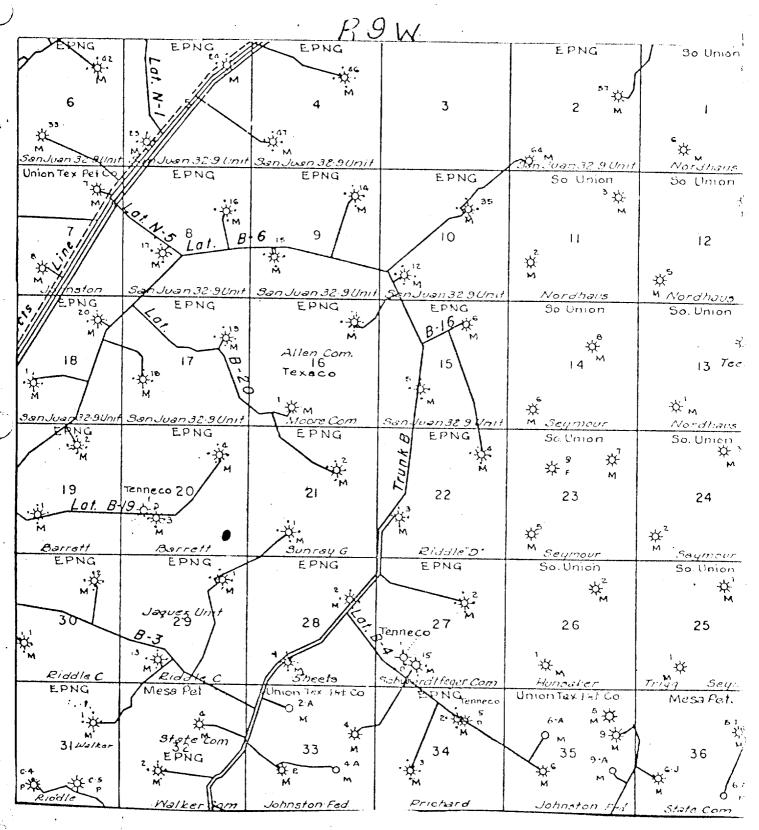


MAP #1

LEGEND OF RIGHT-OF-MAYS

EXISTING	ROADS	
	FIFELINES	-++ <del>+</del> -
EXISTIUS	ROAD ~ PIFELI	FG-+-+
PROFOSED	ROADS	
FROPOGED	FIFELINES	+++
FROPOSED	ROAD A PURELI	III <del>         </del>

# EL PASO NATURAL GAS COMPANY BARRE ET #4A SE 20-31-9



MAP #2 Proposed Location

# Operations Plan - Barrett #4A

I. Location: 1105'S, 1175'E, Sec. 20, T-31-N, R-9-W, San Juan County, New Mexico

Field: Blanco Mesa Verde

Elevation: 6261' D. F.

# II. Geology:

Α.	Formation Tops:	Surface	San Jose	Lewis	3295'
		Ojo Alamo	1760'	Mesa Verde	4830'
		Kirtland	1800'	Menefee	4910'
		Fruitland	<b>2</b> 660'	Point Lookout	5330'
		Pic.Cliffs	3070'	Total Depth	5730'

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4820', 4900', 5320' 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 3495'. 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"	3495'	7"	20.0# K-55
		•	6 1/4"	3345-5730'	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: 5730' 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.

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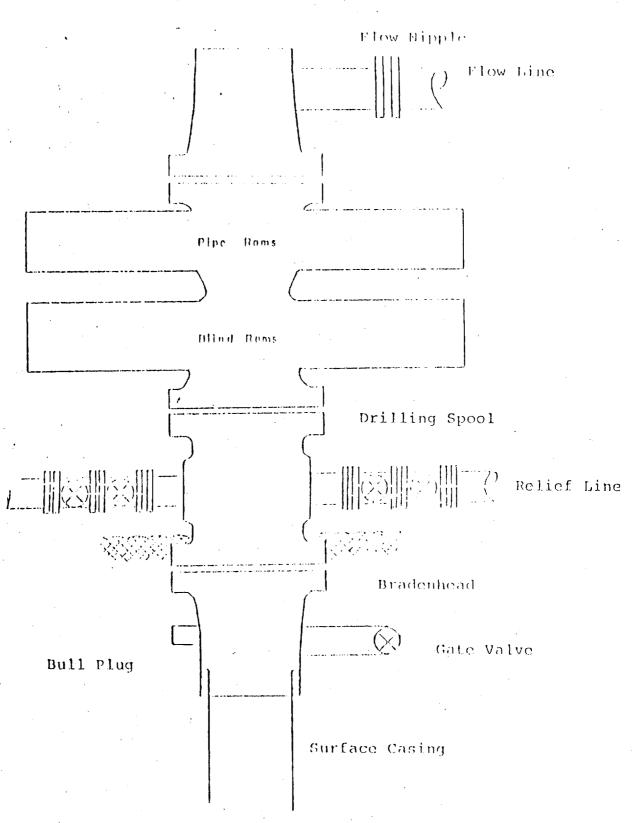
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from wellhard to NORTH

NORTH

For Natural Gas Company
on Plat for Moss Vende and Dated 8 tr 3 il 10 ft Cut 12, 1. W. 2. 3 Draw Morks Mud Tank Rospino day



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