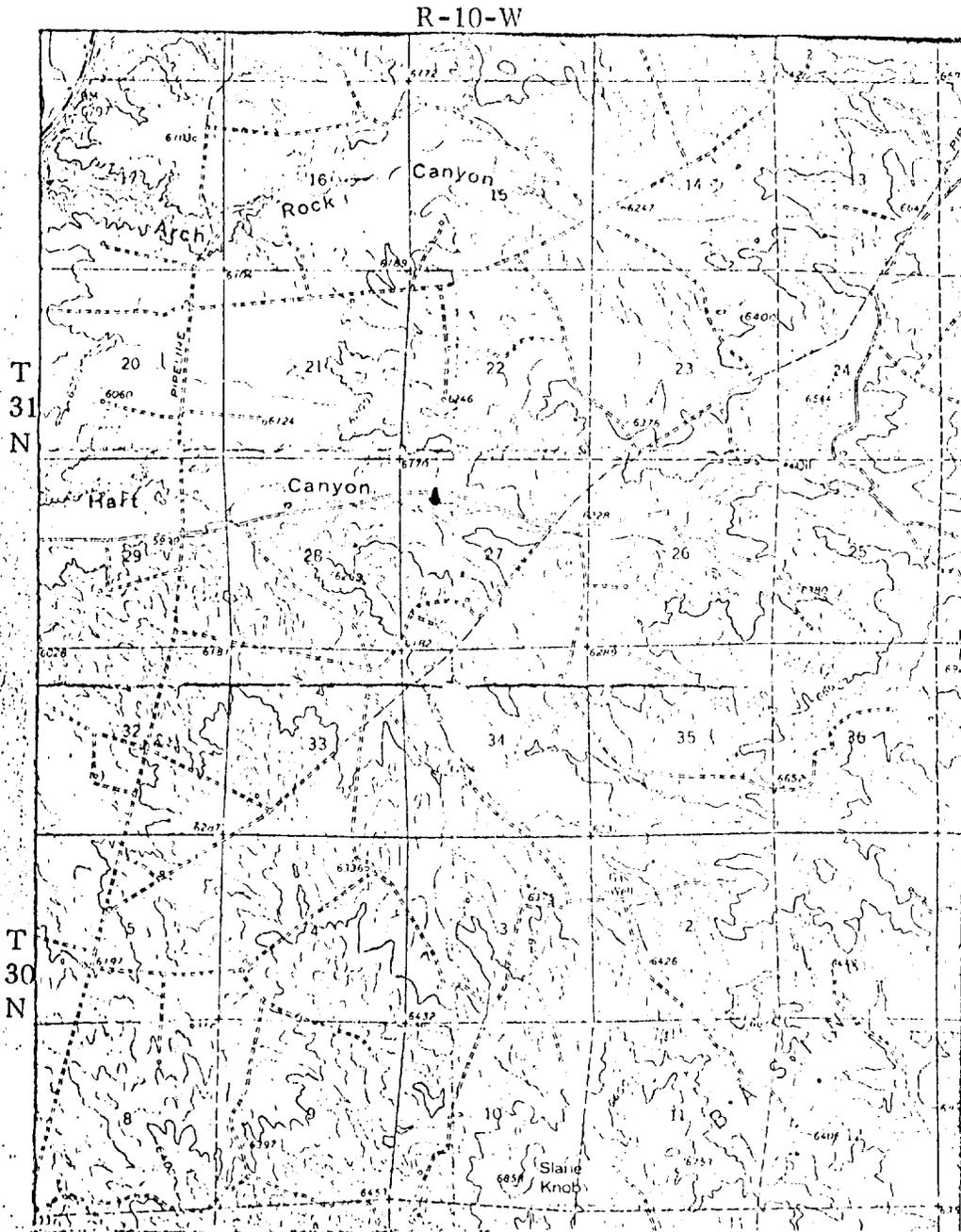


Multi-Point Surface Use Plan
Atlantic A #9A

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 a water hole located at
Hart Canyon
6. Source of Construction Materials - No additional materials will be required to build either the access road or the proposed location.

EL PASO NATURAL GAS COMPANY
 ATLANTIC A #9A
 NW 27-31-10



MAP #1

LEGEND OF RIGHT-OF-WAYS

EXISTING ROADS	—————
EXISTING PIPELINES	- + + -
EXISTING ROAD & PIPELINE	- + + -
PROPOSED ROADS	—————
PROPOSED PIPELINES	- + + -
PROPOSED ROAD & PIPELINE	- + + -

Operations Plan

Atlantic A #9A

I. Location: 1185'N, 1575'W, Sec. 27, T-31-N, R-10-W, San Juan County, New Mexico

Field: Blanco Mesa Verde

Elevation: 6154' DF

II. Geology:

A. Formation Tops:	Surface	Nacimiento	Lewis	3055
	Ojo Alamo	1550	Mesa Verde	4405
	Kirtland	1600	Menefee	4730
	Fruitland	2555	Point Lookout	5130
	Pic.Cliffs	2895	Total Depth	5530

B. Logging Program: GR-Ind. and GR-Density at Total Depth.

C. Coring Program: none

D. Natural Gauges: 4395, 4720, 5120' 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 3255' . Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt.&Grade</u>
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	3255'	7"	20.0# K-55
	6 1/4"	3105-5530'	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: 5530' of 2 3/8", 4.7#, J-55 8rd BUE 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.

Operations Plan -

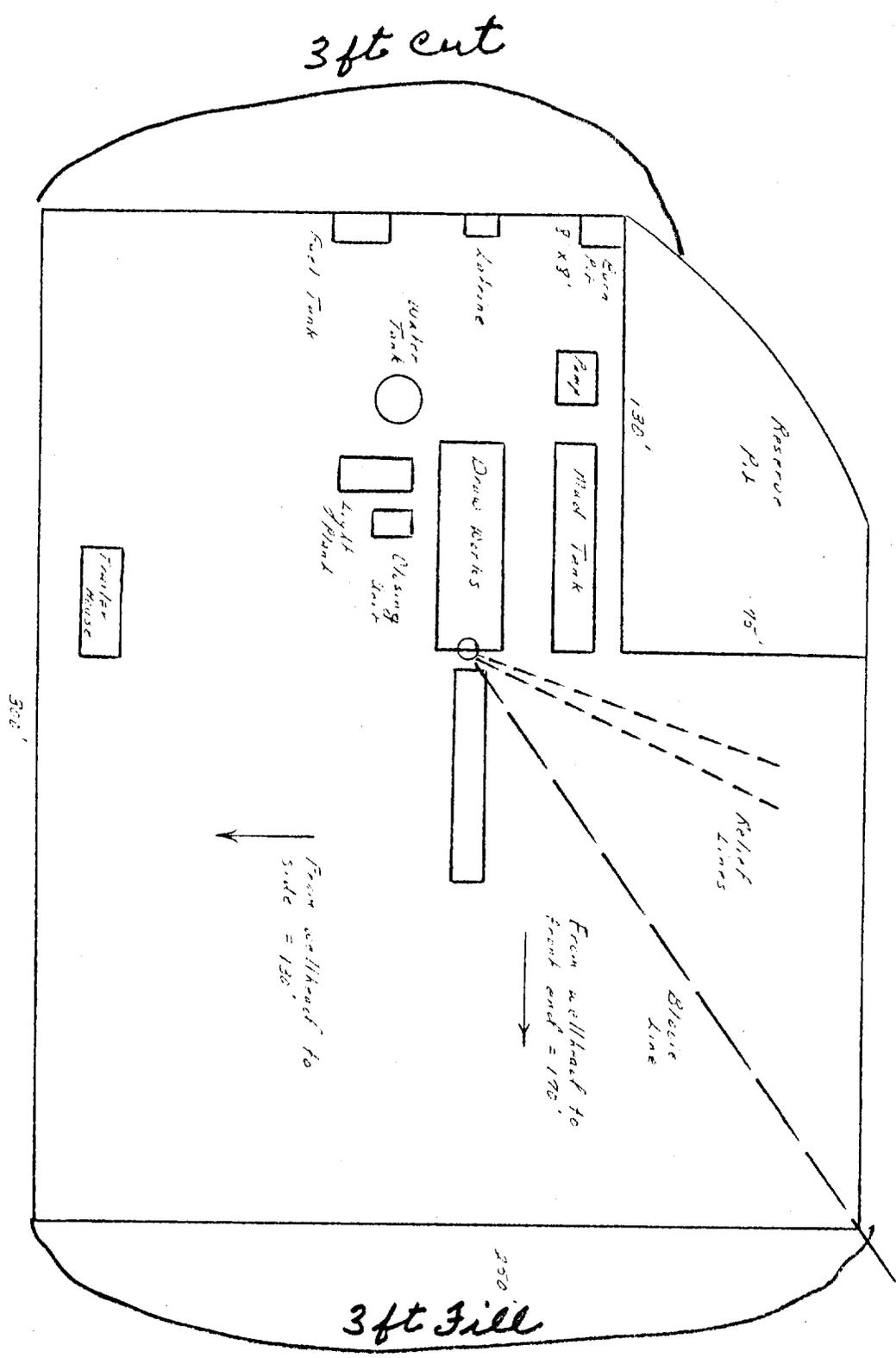
V. Cementing:

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 101 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 (383 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.

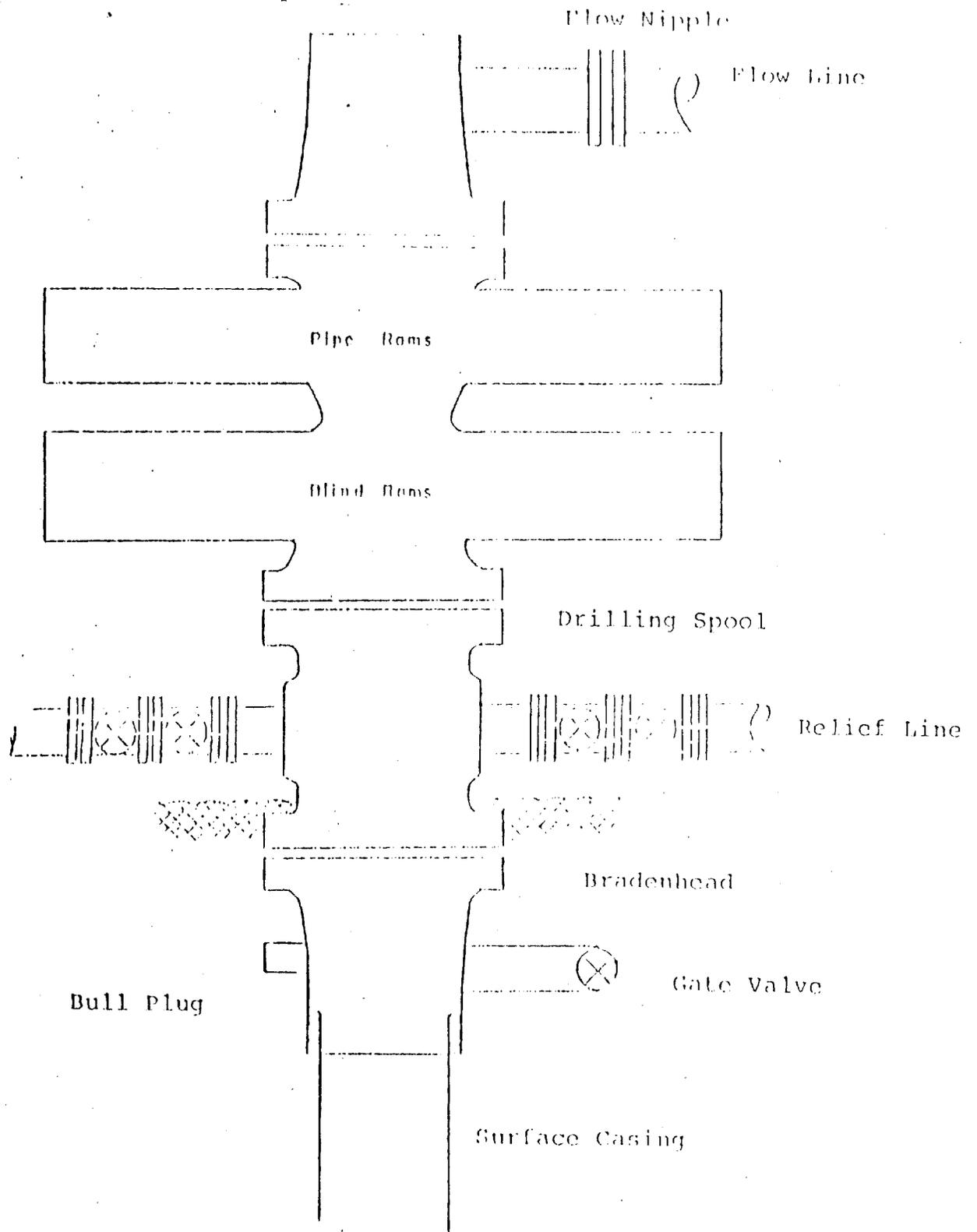
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 234 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (422 cu.ft. of slurry, 70% excess to circulate liner).

E1 Paso Natural Gas Company
Typical location plat for lease lands and estate wells



arrow
↓

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