

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

El Paso Natural Gas Company

3. ADDRESS OF OPERATOR

Box 289, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1190' S, 1740' E

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

10 miles south of Gobonador

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drilg. unit line, if any)

1190'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2000

16. NO. OF ACRES IN LEASE

Unit 1600.36

19. PROPOSED DEPTH

8700

17. NO. OF ACRES ASSIGNED

TO THIS WELL

5/320.00

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

7430' GL

22. APPROX. DATE WORK WILL START*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 4/4"	9 5/8"	32.3#	200'	224 Cu. ft. circulated
8 3/4"	7"	20.0#	4630'	210 cu.ft. to cover Ojo Alam
6 1/4"	4 1/2"	10.5# & 11.6#	8700'	630 cu. ft. to fill to intermediate

Selectively perforate and sand water fracture the Dakota formation.

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

This gas is dedicated.

The S/2 of Section 11 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED 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.

24.

SIGNED

H. H. Lince

TITLE

Drilling Clerk

DATE

May 30, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

ah 3m

*See Instructions On Reverse Side

APPROVED

JUL 10 1980

DISTRICT ENGINEER

30-039-22435

30-039-22435

All distances must be from the outer boundaries of the Section.

Operator EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 27-5 UNIT (SF-079491)		Well No. 105-E
Unit Letter 0	Section 11	Township 27N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1190 feet from the South line and 1740 feet from the East line					
Ground Level Elev. 7430	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 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?

☒ Yes ☐ No If answer is "yes," type of consolidation Unitization

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. NOTE: THIS PLAT IS REISSUED TO SHOW MOVED LOCATION. 5-1-80

	Sec.	
	11	
	SF-079491-A	SF-079491
	#105	1740'
	1190'	1740'
<p style="text-align: center;">CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Name Drilling Clerk</p> <p>Position El Paso Natural Gas Co.</p> <p>Company May 30, 1980</p> <p>Date</p> <p>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 is true and correct to the best of my knowledge and belief.</p> <p>Date Surveyed April 1, 1980</p> <p>Registered Professional Engineer and/or Land Surveyor <i>[Signature]</i> Fred B. Kern Jr.</p> <p>Certificate No. 3950</p>		

Multi-Point Surface Use Plan
San Juan 27-5 Unit #105E

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 27-5 Water Well #1.
 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,
-

7. cont'd. 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 as designated by the responsible government agency 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 as designated by the responsible government agency.
11. Other Information - The terrain is rolling hills with pinon, sage and juniper growing. Deer, cattle and elk are occasionally seen on the proposed project site.
12. Operator's Representative - W.D. Dawson, PO Box 990, Farmington, NM
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.



D. R. Read
Project Drilling Engineer

May 30, 1980

Operations Plan
San Juan 27-5 Unit #105-E

I. Location: 1190' S, 1710' E, Section 11, T-27-N, R-5-W, Rio Arriba County, NM

Field: Basin Dakota

Elevation: 7430

II. Geology:

A. Formation Tops:	Surface	San Jose	Menefee	6080'
	Ojo Alamo	3700'	Point Lookout	6435'
	Kirtland	3815'	Gallup	7425'
	Fruitland	4100'	Greenhorn	8371'
	Pic.Cliffs	4284'	Graneros	8430'
	Lewis	4430'	Dakota	8577'
	Mesa Verde	5965'	Total Depth	8700'

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

C. Coring Program: none

D. Natural Gauges: 5955', 6070', 6425', 7415', 8360', 8420', 8565', 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 4630' 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"	36.0# K-55
	8 3/4"	4630'	7"	20.0# K-55
	6 1/4"	6500'	4 1/2"	10.5# K-55
	6 1/4"	1500'	4 1/2"	11.6# K-55
	6 1/4"	700'	4 1/2"	11.6# N-80
B. Float Equipment:	9 5/8" surface casing - Pathfinder Texas Pattern guide shoe (Part No.2006-1-012)			

7" intermediate casing - Pathfinder guide shoe (Part No. 2003-1-007) and Howco self-fill insert float valve (Price Ref. 36A & 37)
5 Pathfinder stabilizers (Part No. 107-10) one every other joint above shoe. Run float two joints above shoe.

4 1/2" production casing - Pathfinder guide shoe (Part.#2003-1-000) and Larkin flapper type float collar (fig. 404 M&F)

C. Tubing: 8700' of 1 1/2", 2.9#, J-55 10rd 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: 3000 psi test tree. Wellhead representative to set all slips and cut off casing.

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 57sks. 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 (210cu.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" production casing - precede cement with 40 bbls. of gel water (4 sks. gel) cement with 235 sks. of Class "B" with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7, followed by 100 sks. of Class "B" with 1/4# fine tuf-plug per sack and 0.4% HR-7 (630cu.ft. of slurry, 50% excess to fill to intermediate casing). Run temperature survey at 8 hours. WOC 18 hours.

SEN 1110 S 1710 E
1190 S 1740 E road 36 west

El Paso NATURAL GAS COMPANY

P.O. BOX 1000
EL PASO, TEXAS 79901
PHONE 545-0000

Unorthodox USGS

Well Name S. J. 27-5 Unit # 105 E
Location SE 11 27-5
Formation DK

We, the undersigned, have inspected this location and road.

U. S. Forest Service _____ Date _____
Dabney Ford _____ 4/10/80
Archaeologist _____ Date

Bureau of Indian Affairs Representative _____ Date _____
Bab Maul Mary J. Oliver _____ 4/10/80
Bureau of Land Management Representative _____ Date

Barbara J. Conklin _____ 4/10/80
U. S. Geological Survey Representative - AGREES _____ Date

TO THE FOOTAGE LOCATION OF THIS WELL.
REASON: too close to edge of ridge - less access road & surface disturbance
Seed Mixture: I

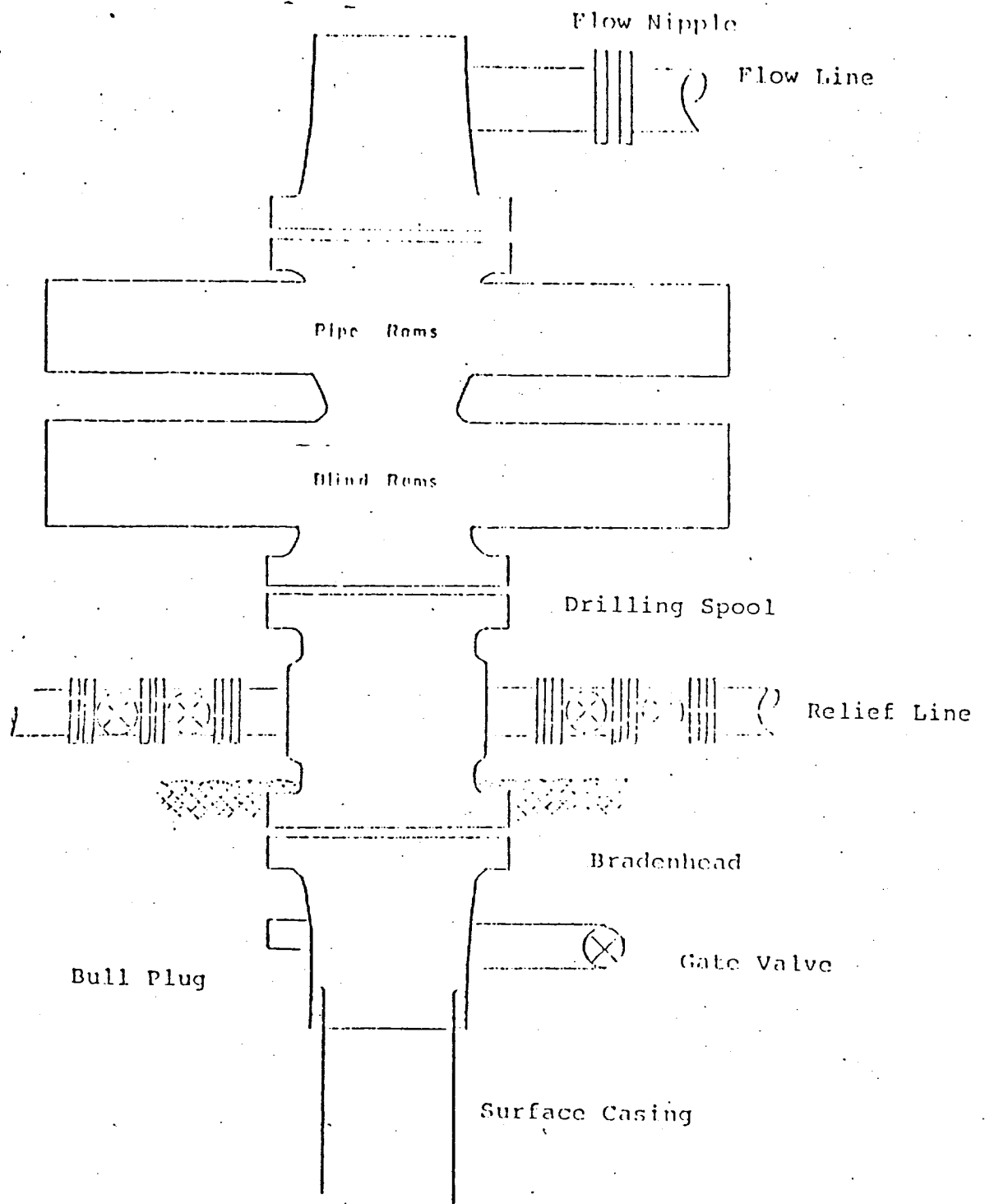
Equipment Color: Green

Road and Row: (Same) or (Separate)

Remarks: _____

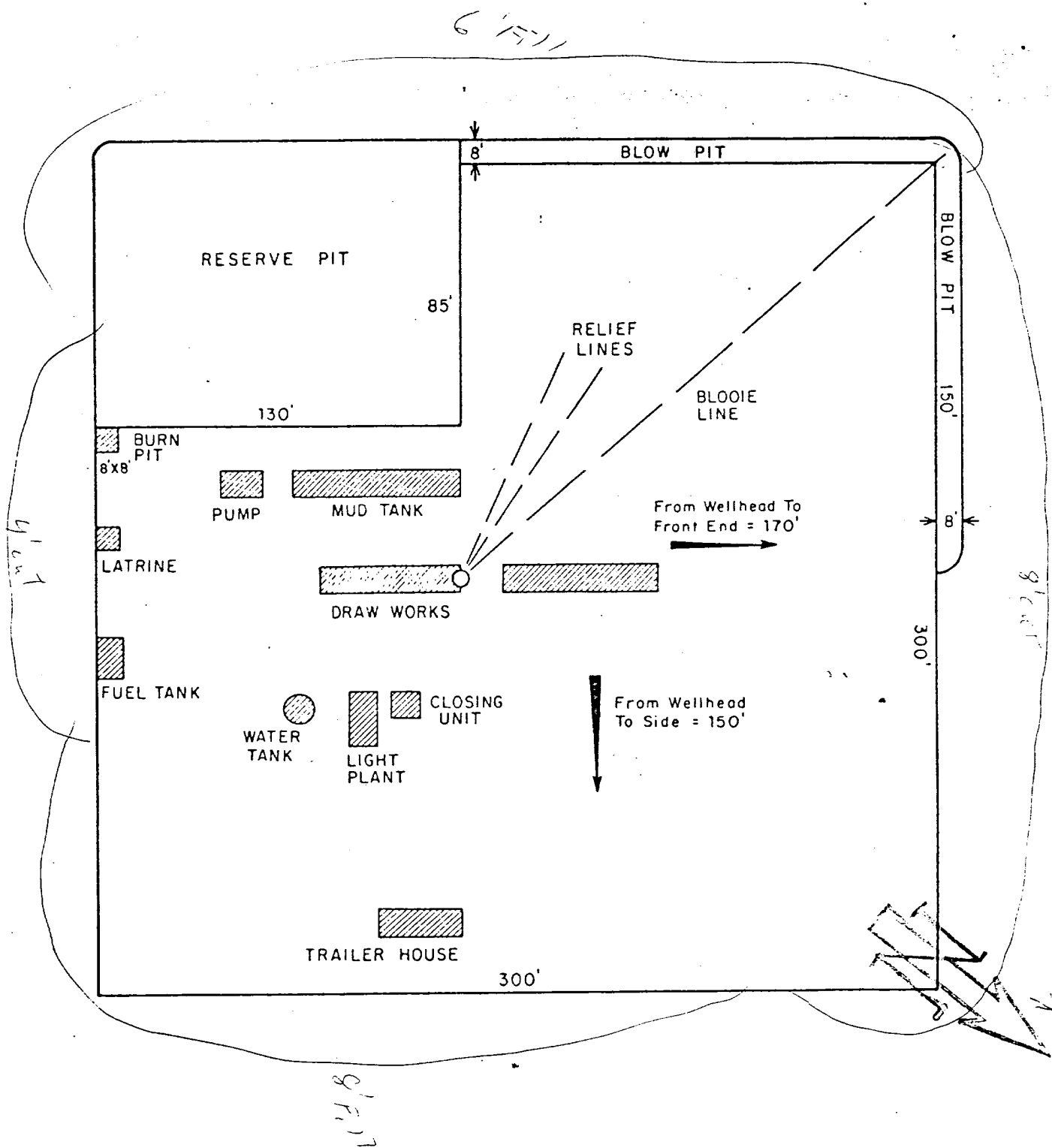
C.C. to Dave Vilvin
Earl Mealer
John Ahim

Typical B.O.P. Installation
for Dakota 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.



			ENG. REC.		DATE
			DRAWN	J.L.H.	8-16-78
			CHECKED		
			CHECKED		
			PROJ. APP		
			DESIGN		
PRT.	SEP.	DATE	TO	W.O.	
PRINT RECORD			W.O.		

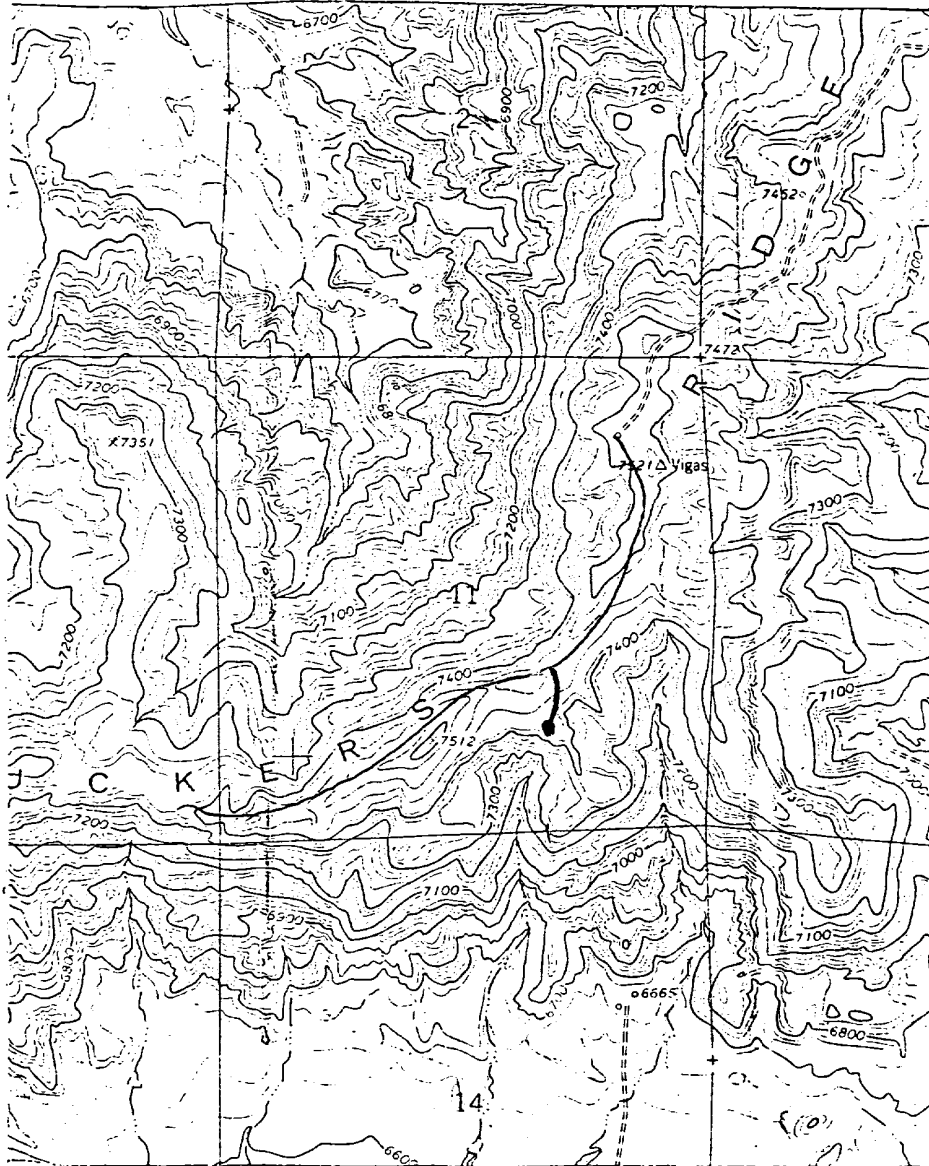

El Paso Natural Gas Company
 TYPICAL LOCATION PLAT FOR
 MESAVERDE OR DAKOTA DRILL SITE

SCALE: 1" = 50'	DWG. NO.	RE
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EL PASO NATURAL GAS COMPANY
 San Juan 27-5 Unit #105E
 SE 11-27-5

R-5-W

T
27
N



MAP #1

LEGEND OF RIGHT-OF-WAYS

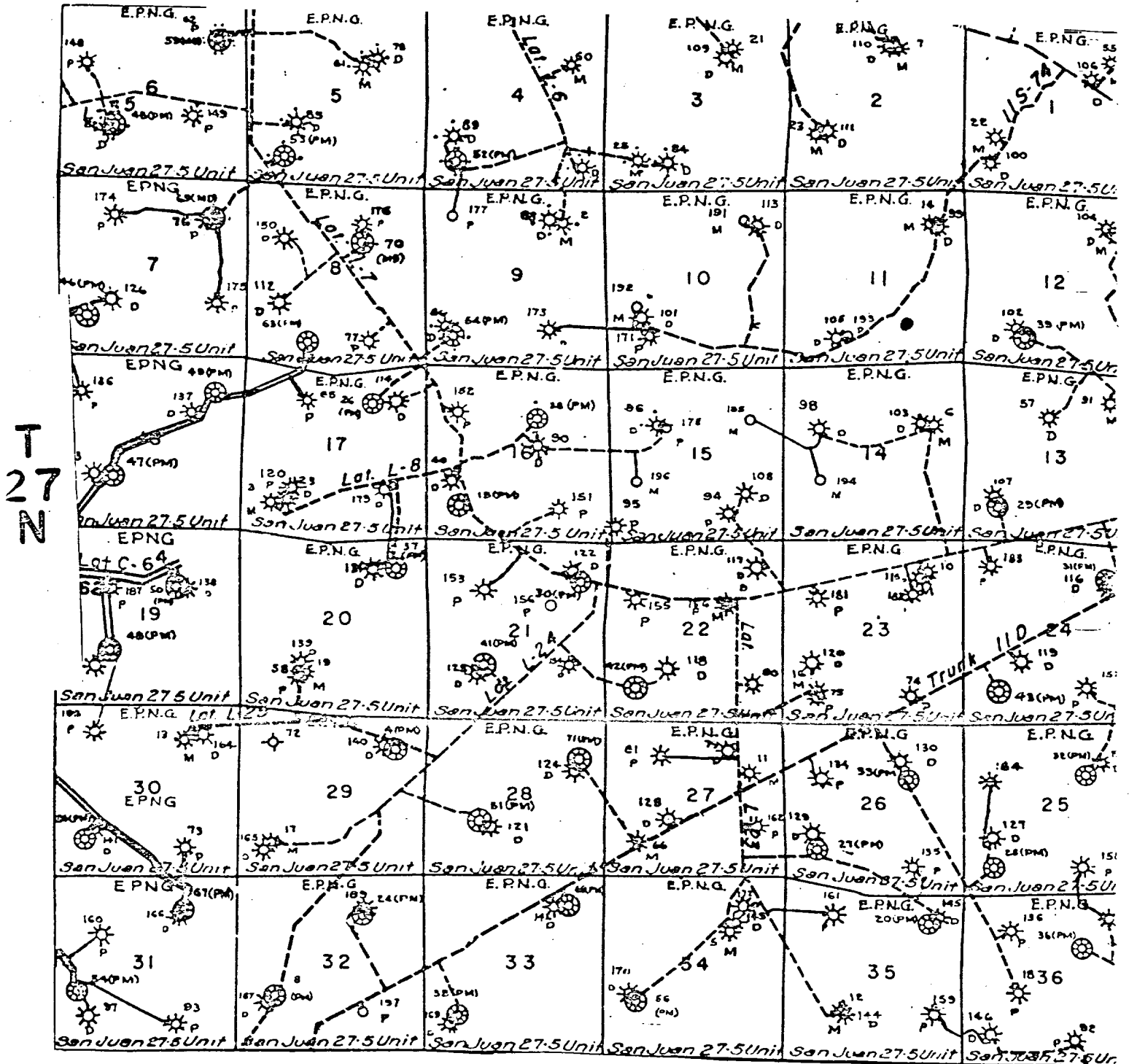
EXISTING ROADS	—
EXISTING PIPELINES	+ + +
EXISTING ROAD & PIPELINE	+ + +
PROPOSED ROADS	—
PROPOSED PIPELINES	+ + +
PROPOSED ROAD & PIPELINE	+ + +

EL PASO NATURAL GAS COMPANY

San Juan 27-5 Unit #105E

SE 11-27-5

R-5-W



MAP # 2

Proposed Location

