

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-045-23877  
5. LEASE DESIGNATION AND SERIAL NO.

NM 02861

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Lodewick

9. WELL NO.

3E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREASec. 19, T-27-N, R-9-W  
NMPM

12. COUNTY OR PARISH

13. STATE

San Juan

NM

## 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

PO Box 289, Farmington, NM 87401

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

At surface

1000'N, 1795'E

At proposed prod. zone

same

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

10 miles south of Bloomfield, NM

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

845'

16. NO. OF ACRES IN LEASE

1283.46

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

E 320.00

18. DISTANCE FROM PROPOSED LOCATION\*

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

500'

19. PROPOSED DEPTH

7075'

20. ROTARY OR CABLE TOOLS

Rotary

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

6475'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
12 1/4"	8 5/8"	24.0#	200'	165 cu.ft. circ. to surface
7 7/8"	4 1/2"	10.5# & 11.6#	7075'	1349 cu.ft. - 3 stages

1st stage - 407 cu.ft. to cover Gallup  
2nd stage - 479 cu.ft. to cover Mesa Verde  
3rd stage - 463 cu.ft. to cover Ojo Alamo

Selectively perforate and sandwater fracture the Dakota formation.

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 well.

This gas is dedicated.

ORDER R-1670-V.

The E/2 of Section 19 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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured preventer program, if any.

24.

SIGNED

*A. G. Lucco*

TITLE

Drilling Clerk

DATE

10-1-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

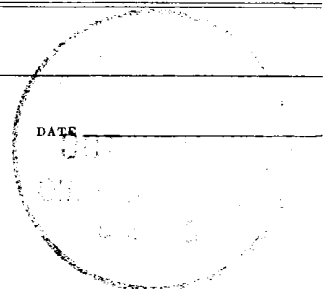
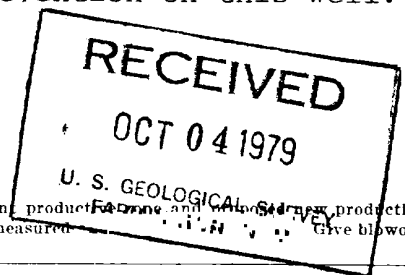
DATE

CONDITIONS OF APPROVAL, IF ANY:

*ok Frank*

\*See Instructions On Reverse Side

NM1000



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

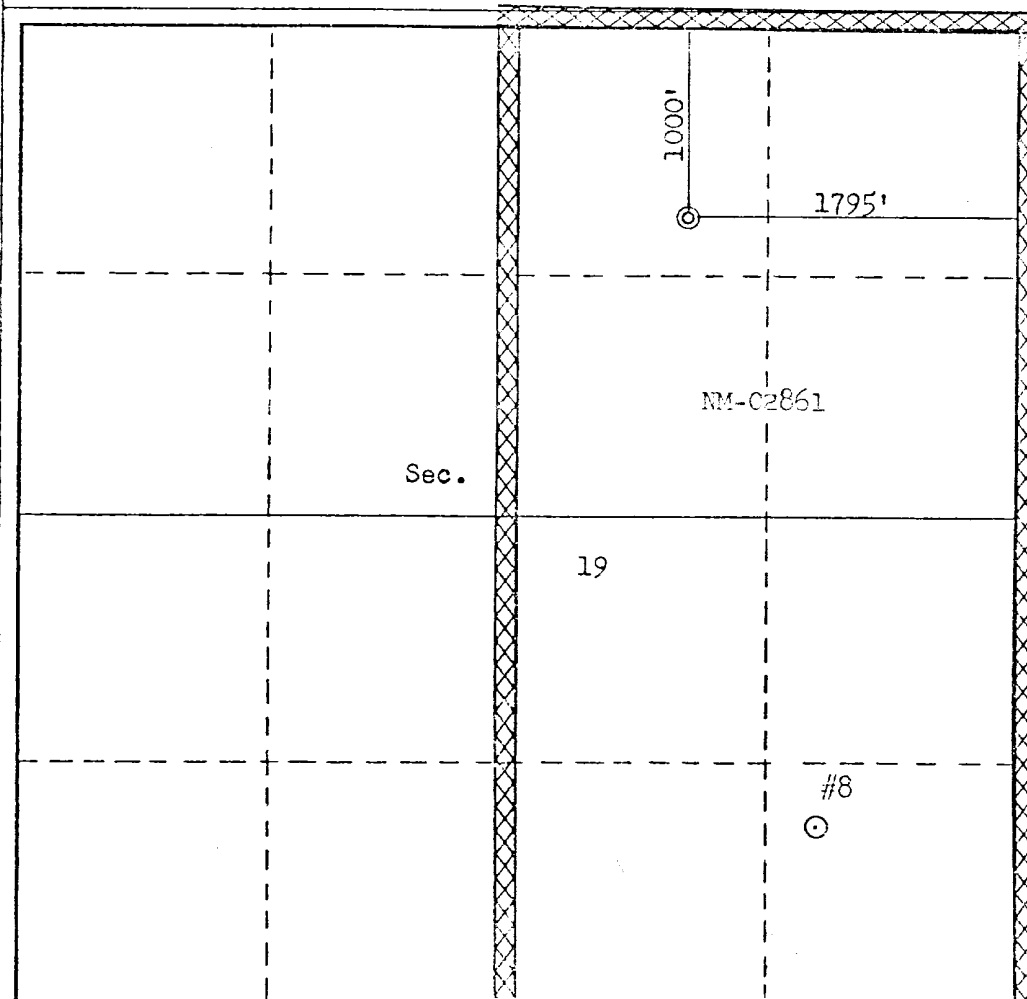
Operator <b>EL PASO NATURAL GAS COMPANY</b>			Lease <b>LODEWICK (NM-02861)</b>		Well No. <b>8-E</b>
Unit Letter <b>B</b>	Section <b>19</b>	Township <b>27N</b>	Range <b>9W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1000</b> feet from the <b>North</b> line and <b>1795</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6475</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>320.00</b> 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 \_\_\_\_\_

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 best of my knowledge and belief.

*A. G. Lince*

Name  
Drilling Clerk

Position  
El Paso Natural Gas Co.

Company  
October 1, 1979

Date

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.

Date Surveyed

September 1, 1979

Registered Professional Engineer  
and/or Land Surveyor

*Fred B. ...*  
Certificate No. 3950

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

Multi-Point Surface Use Plan

Lodewick #8E

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 Huerfano 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 sagebrush and cedar growing. Cattle and sheep 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.

L. A. Aimes

L. A. Aimes  
Project Drilling Engineer

## Operations Plan - Lodewick #8E

I. Location: 1000'N, 1795'E, Section 19, T-27-N, R-9-W, San Juan County, NM

Field: Basin Dakota

Elevation: 6475'GL

II. Geology:

A. Formation Tops:	Surface	Nacimient	Menefee	4033'
	Ojo Alamo	1390'	Point Lookout	4693'
	Kirtland	1568'	Gallup	5888'
	Fruitland	2073'	Greenhorn	6697'
	Pic.Cliffs	2353'	Graneros	6755'
	Lewis	2460'	Dakota	6875'
	Mesa Verde	3908'	Total Depth	7075'

B. Logging Program: Induction Electric and Gamma Ray Density at TD.

C. Coring: none

III. Drilling:

A. Mud Program: mud from surface to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Csg.Size</u>	<u>Wt.&amp;Grade</u>
	12 1/4"	200'	8 5/8"	24.0# K-55
	7 7/8"	7075'	4 1/2"	10.5# K-55

B. Float Equipment: 8 5/8" surface casing - cement guide shoe

4 1/2" production casing - guide shoe and self-fill insert valve  
Two multiple stage cementers equipped for three stage cementing.  
Set tool for second stage at 5293' and tool for third stage at 2660'. Run 20 centralizers spaced as follows: one on each of the bottom 8 joints, one below each stage tool, and five above each stage tool spaced every other joint.

C. Tubing: 7075' of 2 3/8", 4.7#, J-55 tubing, common pump seating nipple and Baker expendable check valve with drill type guide.

D. Wellhead Equipment: 8" 2000 x 8 5/8" casing head with 8" x 4 1/2" casing hanger, 8" 2000 x 6" 2000 xmas tree.

V. Cementing:

Surface casing (12 1/4" x 8 5/8") - use 140 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (165 cu.ft. of slurry, 100% excess to circulate). WOC 12 hours. Test to 600#/30 min.

V. Cementing, cont'd.

Production casing - (7 7/8" x 4 1/2")

First stage - use 189 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack followed by 80 sks. 50/50 Class "B" Pozmix with 2% gel, 2% calcium chloride and 1/4# fine tuf-plug per cu.ft. (407 cu.ft. of slurry, 50% excess to cover the Gallup).

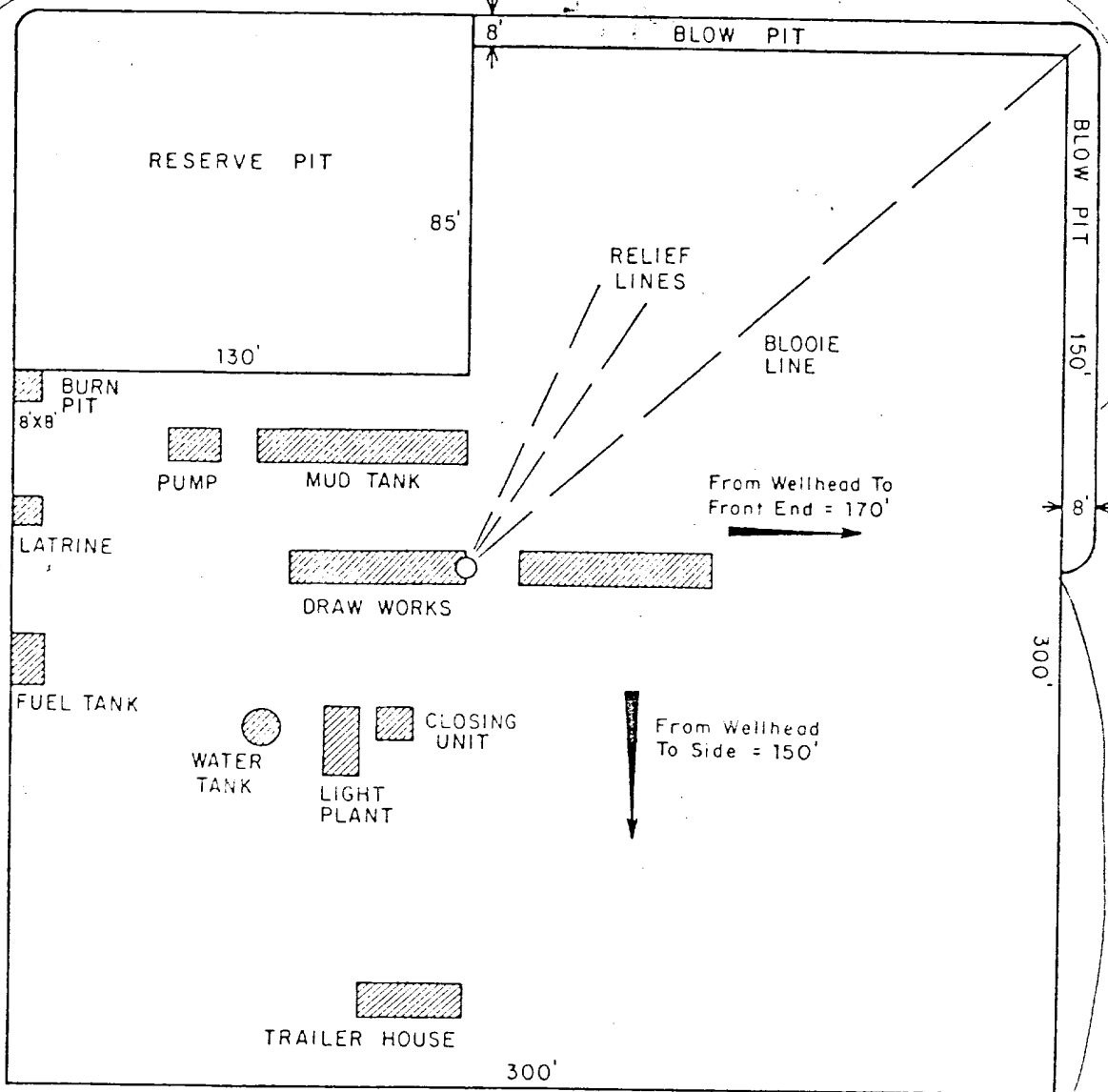
Second stage - circulate mud for 2 hours, then cement with 295 sks. of 65/35 Class "B" Pozmix with 6% gel and 2% calcium chloride and 8.3 gallons of water per sack (479 cu.ft. of slurry, 60% excess to cover the Mesa Verde).

Third stage - circulate mud for 2 hours, then cement using 286 sks. Class "B" Pozmix with 6% gel and 2% calcium chloride mixed with 8.3 gallons water per sack (463 cu.ft. of slurry, 60% excess to fill to base of Ojo Alamo). Run temperature survey on top stage only at 8 hours. WOC 18 hours.

81 F11



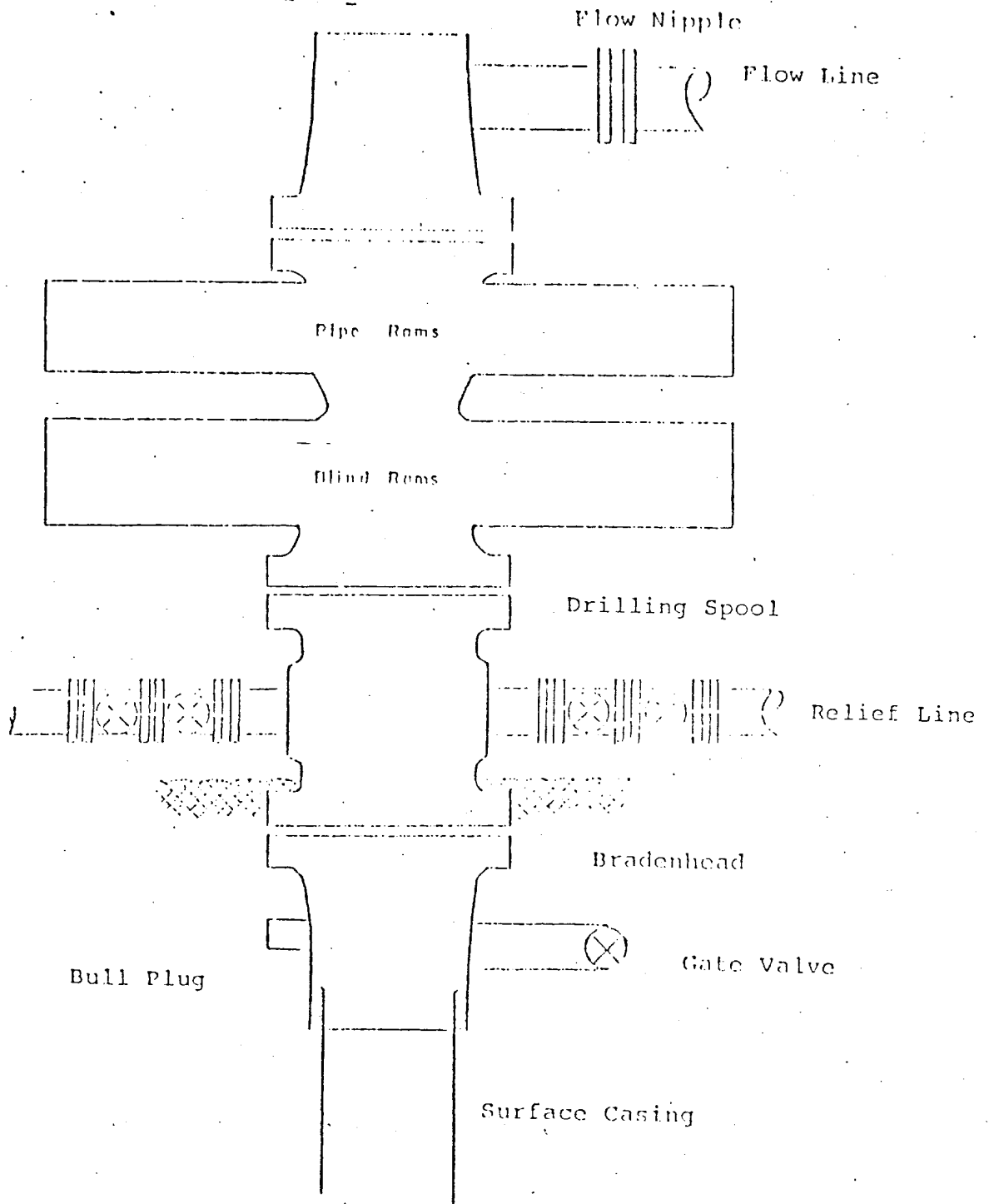
10' cut



10' cut

PRT.				SEP.				DATE				TO				W.O.			
PRINT RECORD																			
ENG. REC.								DATE											
DRAWN								J.L.H. 8-16-78											
CHECKED																			
CHECKED																			
PROJ. APP.																			
DESIGN																			
W.O.																			
El Paso Natural Gas Company TYPICAL LOCATION PLAT FOR MESAVERDE OR DAKOTA DRILL SITE																			
SCALE: 1" = 50'												DWG. NO.				REV			

Typical B.O.P. Installation  
for : Dakota : Well

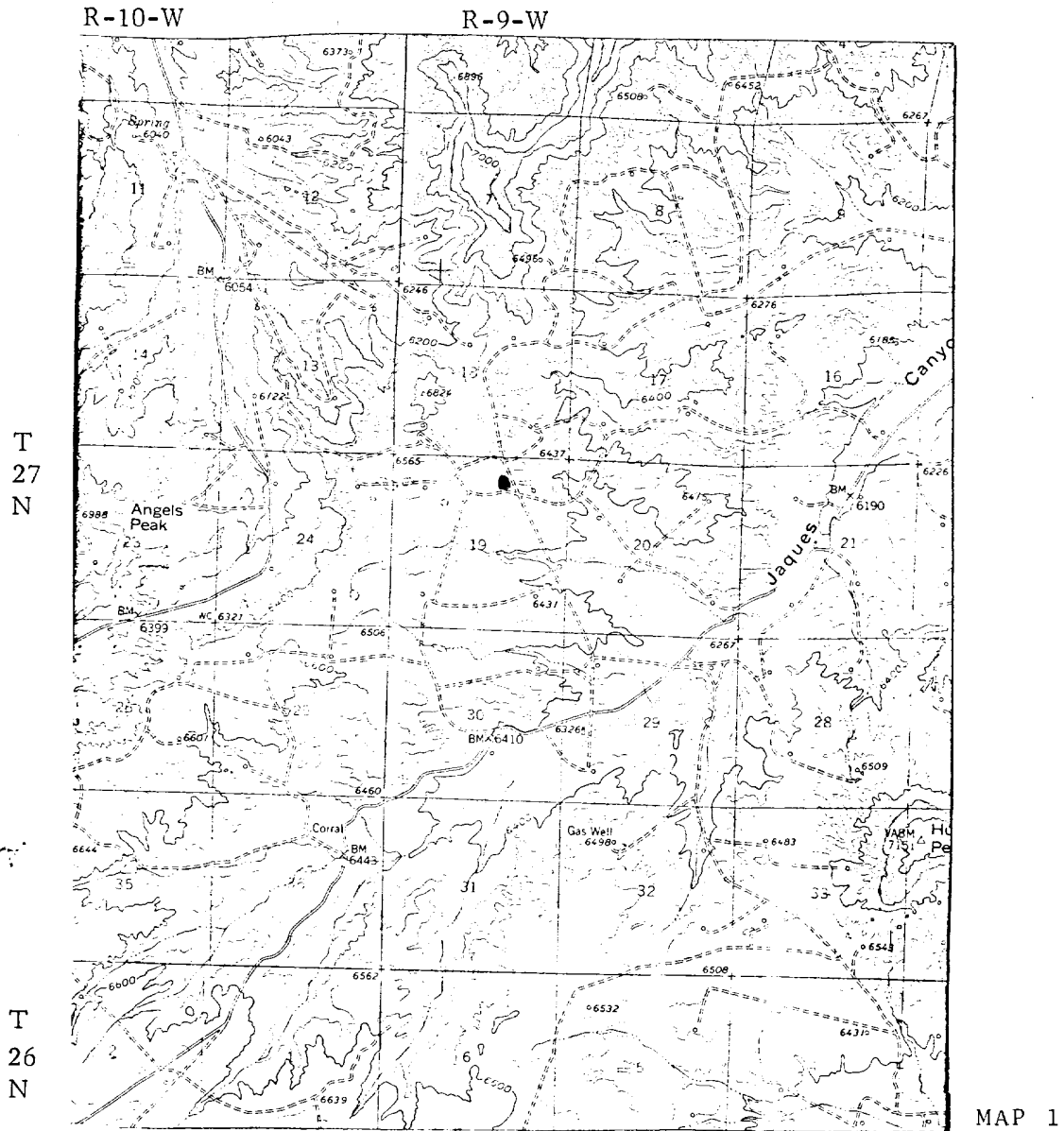


Series 900 Double Gate BOP, rated  
at 3000 psi Working Pressure

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.



El Paso Natural Gas Company  
Lodewick #8E  
NE 19-27-9



LEGEND OF RIGHT-OF-WAYS

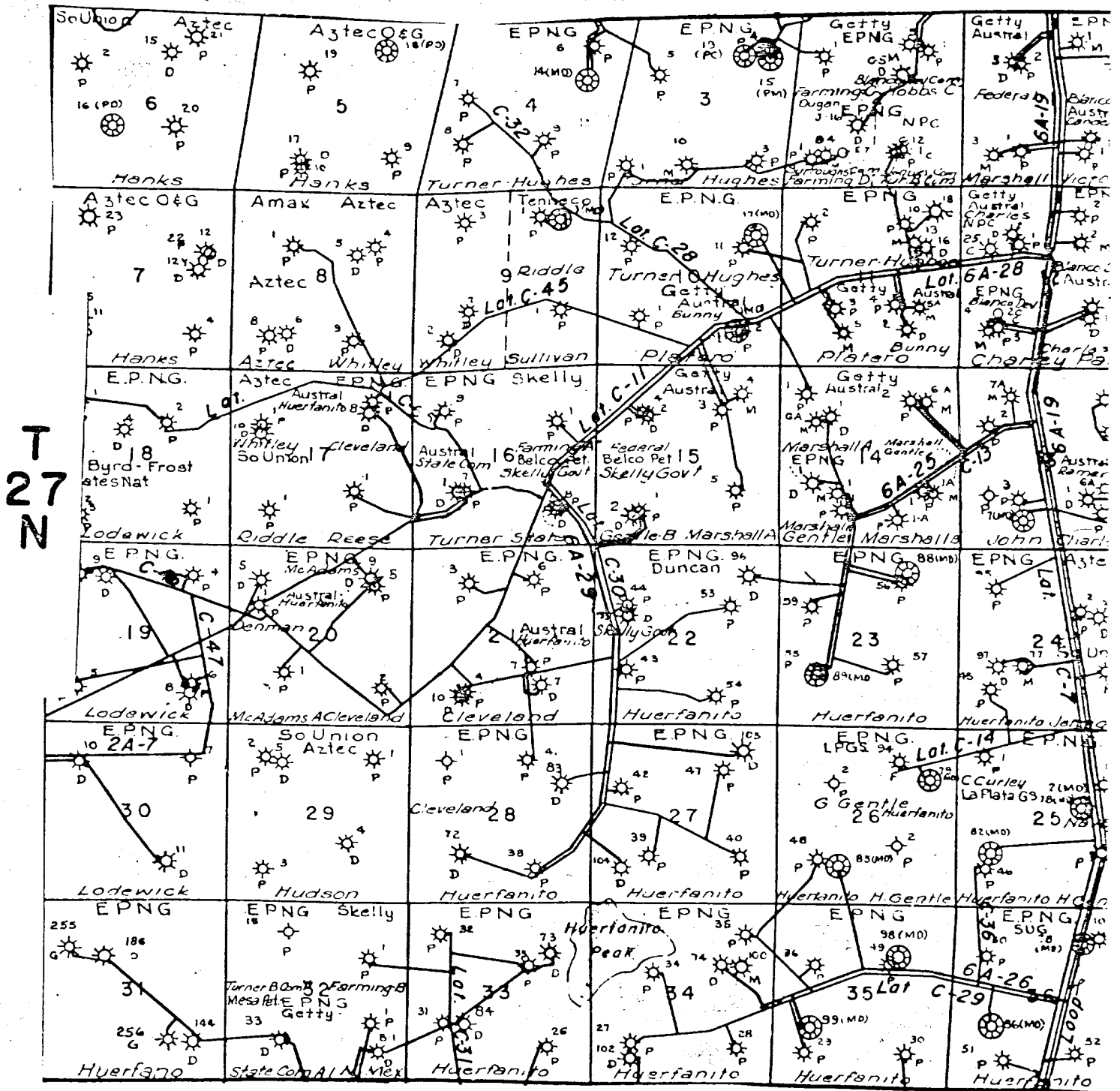
EXISTING ROADS	—————
EXISTING PIPELINES	+ + +
EXISTING ROAD & PIPELINE	+ + +
PROPOSED ROADS	—————
PROPOSED PIPELINES	+ + +
PROPOSED ROAD & PIPELINE	+ + +

# El Paso Natural Gas Company

Lodewick #8-E

NE 19-27-9

R-9-W



MAP 2

Proposed Location

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES RECEIVED	
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SANTA FE	
FILE	
U.S.S.	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
OPERATOR	
PRODUCTION OFFICE	

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form C-104  
Revised 10-01-78  
Format 06-01-83  
Page 1

**RECEIVED**

MAR 12 1986

REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

OIL CON. DIV.)  
DIST. 3

**I.**

Operator  
UNION OIL COMPANY OF CALIFORNIA

Address  
P. O. BOX 2620 - CASPER, WYOMING 82602-2620

Reason(s) for filing (Check proper box)

<input type="checkbox"/> New Well	Change in Transporter of:	
<input type="checkbox"/> Recompletion	<input type="checkbox"/> Oil	<input type="checkbox"/> Dry Gas
<input checked="" type="checkbox"/> Change in Ownership	<input type="checkbox"/> Casinghead Gas	<input type="checkbox"/> Condensate

Other (Please explain)

If change of ownership give name and address of previous owner EL PASO NATURAL GAS CO. - BOX 990 - FARMINGTON, NM 87401

**II. DESCRIPTION OF WELL AND LEASE**

Lease Name Lodewick	Well No. 9	Pool Name, including Formation Basin Dakota	Kind of Lease State, Federal or Fee Fed NM	Lease No. 02861
Location				
Unit Letter C : 990 Feet From The North Line and 1650 Feet From The West				
Line of Section 19 Township 27N Range 9W, NMPM, San Juan County				

**III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**

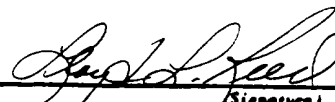
Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
EL PASO NATURAL GAS CO.	BOX 990 - FARMINGTON, NM 87401
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
EL PASO NATURAL GAS CO.	BOX 990 - FARMINGTON, NM 87401
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. Is gas actually connected? When
C 19 27N 9W	Yes

If this production is commingled with that from any other lease or pool, give commingling order number:

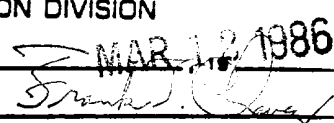
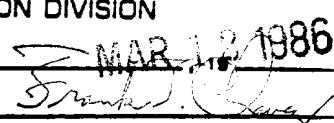
NOTE: Complete Parts IV and V on reverse side if necessary.

**VI. CERTIFICATE OF COMPLIANCE**

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

  
(Signature)  
DISTRICT PRODUCTION SUPERINTENDENT  
(Title)  
MAR 1 1986  
(Date)

OIL CONSERVATION DIVISION

APPROVED   
BY   
TITLE SUPERVISOR DISTRICT 3

This form is to be filed in compliance with RULE 1104.  
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviated tests taken on the well in accordance with RULE 111.  
All sections of this form must be filled out completely for allowable on new and recompleted wells.  
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.  
Separate Forms C-104 must be filed for each pool in multiply completed wells.