

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-039-21871  
5. LEASE DESIGNATION AND SERIAL NO.  
SF 079192

## 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 990, Farmington, NM 87401

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

At surface

810'N, 880'W

At proposed prod. zone

same

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

26 miles East of Blanco, NM

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

810'

## 16. NO. OF ACRES IN LEASE

Unit

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

W/ 320.00

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

3000

## 19. PROPOSED DEPTH

6105'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6627'GR

## 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 3/4"	9 5/8"	32.3#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	3795'	264 cu.ft. to cover Ojo Alai
6 1/4"	4 1/2" liner	10.5#	3645-6105'	429 cu.ft. to fill to 3645'

Selectively perforate and sandwater fracture the Mesa Verde 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.

The W/2 of Section 16 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

TITLE

Drilling Clerk

DATE

August 17, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

DATE

AUG 22 1978

\*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-120  
Effective 1-1-65

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

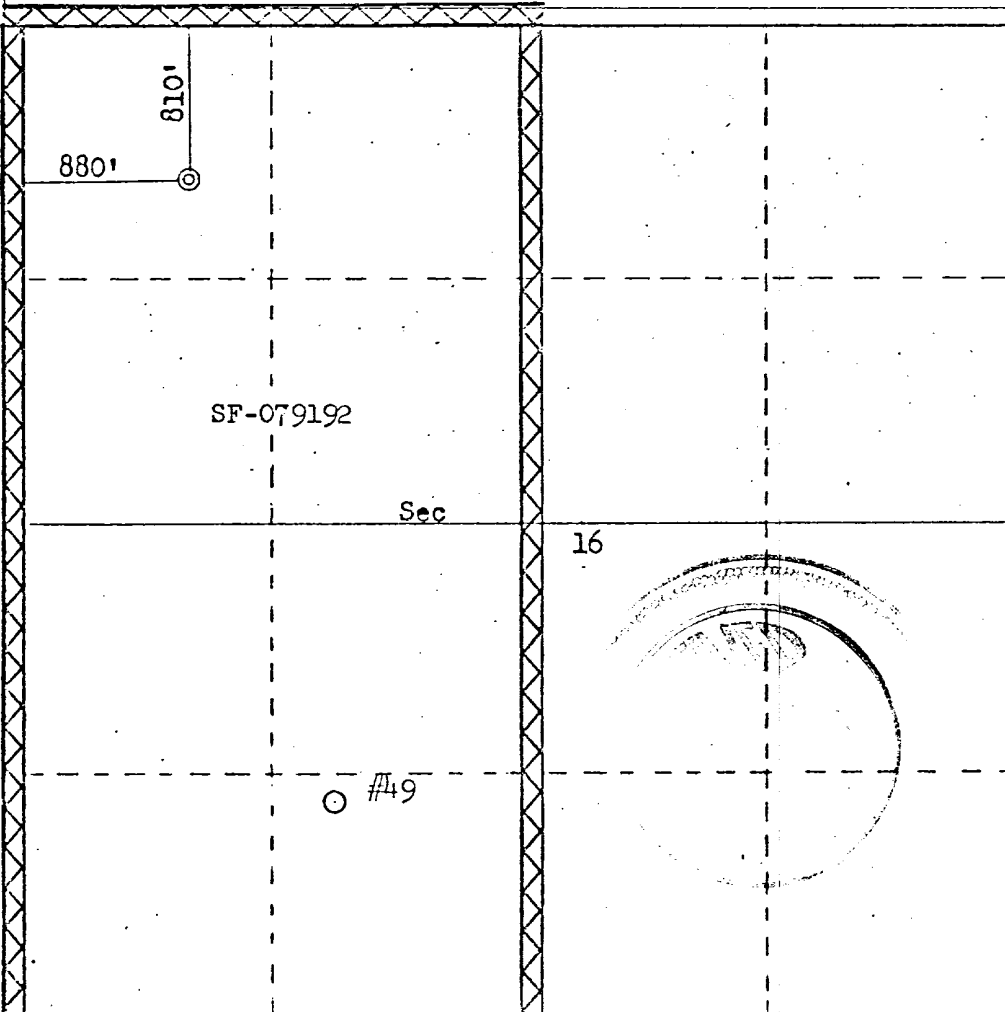
Operator <b>EL PASO NATURAL GAS COMPANY</b>			Lease <b>SAN JUAN 28-6 UNIT (SF-079192)</b>		Well No. <b>49A</b>
Unit Letter <b>D</b>	Section <b>16</b>	Township <b>28N</b>	Range <b>6W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>810</b> feet from the <b>North</b> line and <b>880</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6627</b>	Producing Formation <b>Mesa Verde</b>		Pool <b>Blanco Mesa Verde</b>		Dedicated Acreage: <b>320.00</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*D. B. Guico*  
Name

**Drilling Clerk**  
Position

**El Paso Natural Gas Co.**  
Company

**August 18, 1978**  
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  
**July 20, 1978**

Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**

3950  
MEXICO  
R. KERR, JR.

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

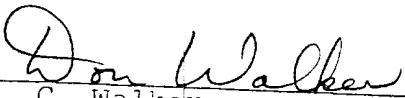
Multi-Point Surface Use Plan  
San Juan 28-6 Unit #49A

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 28-6 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,

Multi-Point Surface Use Plan

Page Two

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 operation 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 sandstone ledges and rolling hills with railed pinon and cedar growing. Cattle graze 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. C. Walker  
Project Drilling Engineer

August 21, 1978

Operations Plan  
San Juan 28-6 Unit #49A

I. Location: 810'N, 880'W, Section 16, T-28-N, R-6-W, Rio Arriba County, NM

Field: Blanco Mesa Verde

Elevation: 6627'GR

II. Geology:

A. Formation Tops:	Surface	San Jose	Lewis	3595'
	Ojo Alamo	2625'	Mesa Verde	5155'
	Kirtland	2755'	Menefee	5315'
	Fruitland	3180'	Point Lookout	5657'
	Pic.Cliffs	3465'	Total Depth	6105'

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

C. Coring Program: none

D. Natural Gauges: 5145', 5305', 5645' 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 3795'. Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	Hole Size	Depth	Casing Size	Wt.&Grade
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	3795'	7"	20.0# K-55
	6 1/4"	3645-6105'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - Pathfinder guide shoe (Part #2006-1-012).

7" intermediate casing - Pathfinder guide shoe (Part #1003-1-007) and Pathfinder self-fill insert float valve (Part #2010-6-007), 5 Pathfinder stabilizers (Part #107-10) every other joint above shoe. Run float two joints above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff. Pathfinder geyser shoe (Part #2017-1-050) and Larkin flapper type float collar (fig. 404 M&F).

C. Tubing: 6105' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple one joint above bottom. Tubing will be open ended.

D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.

## Operations Plan - San Juan 28-6 Unit #49A

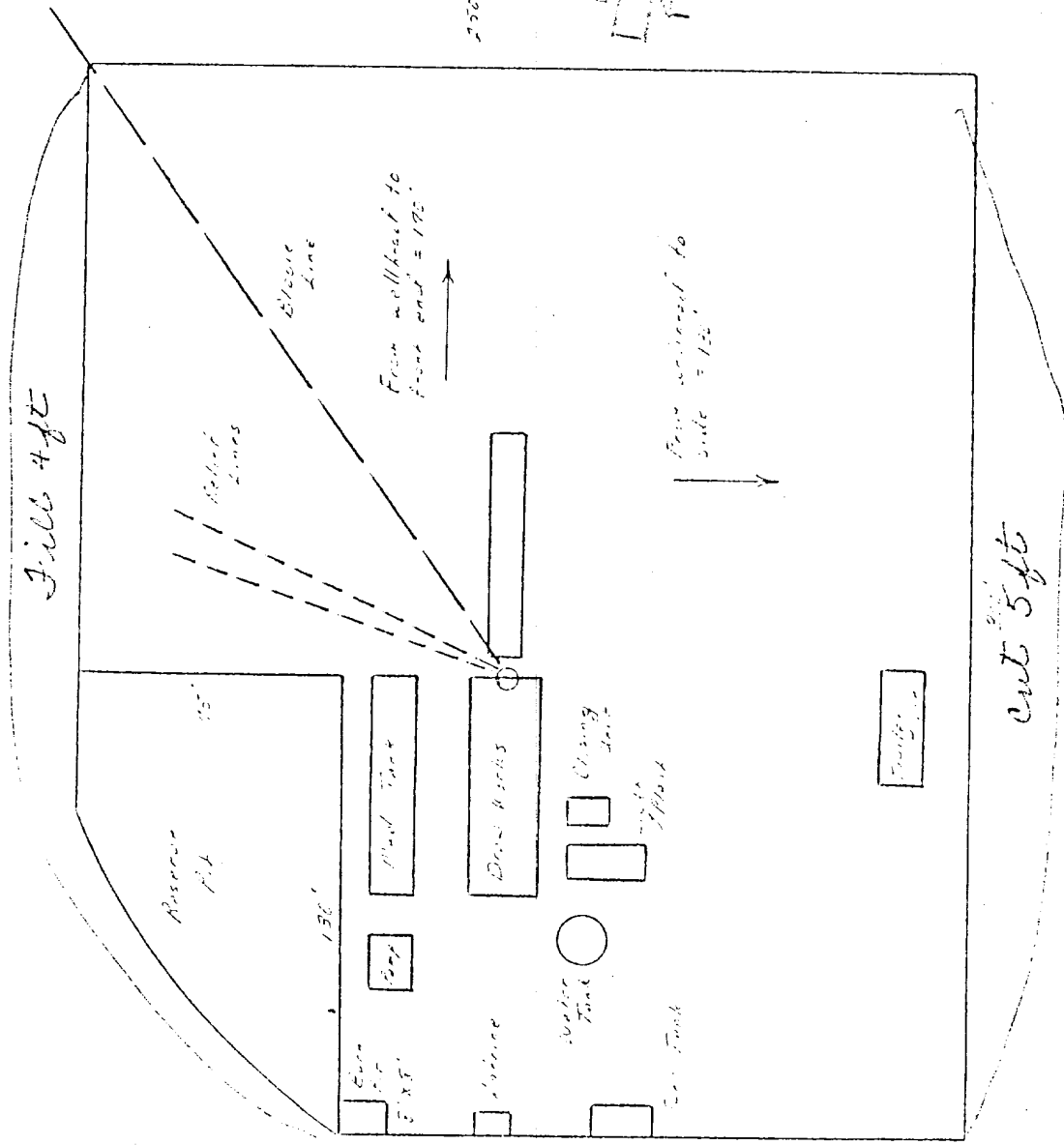
### V. Cementing:

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.

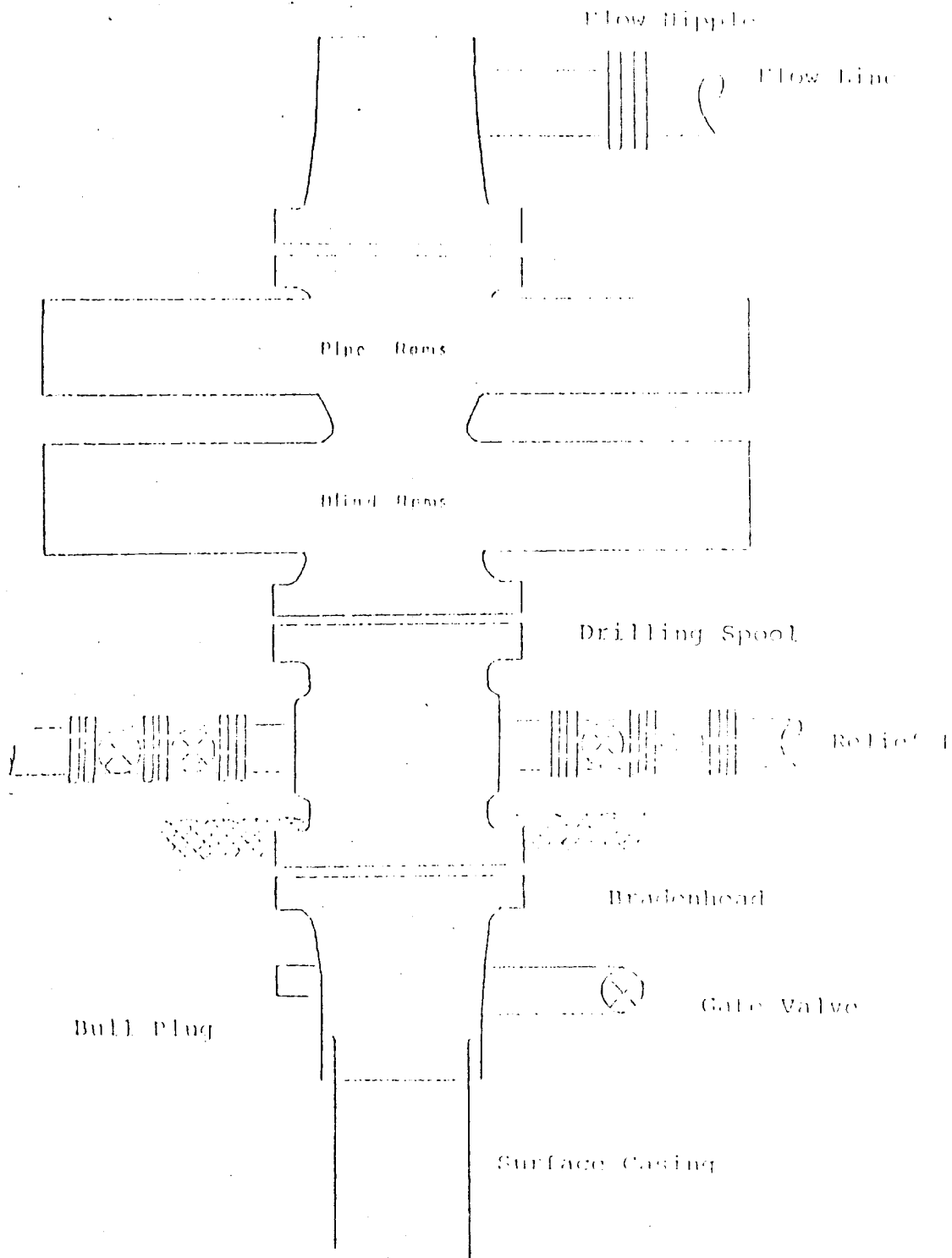
7" intermediate casing - use 90 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (264 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 309 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (429 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

To the National Gas Company



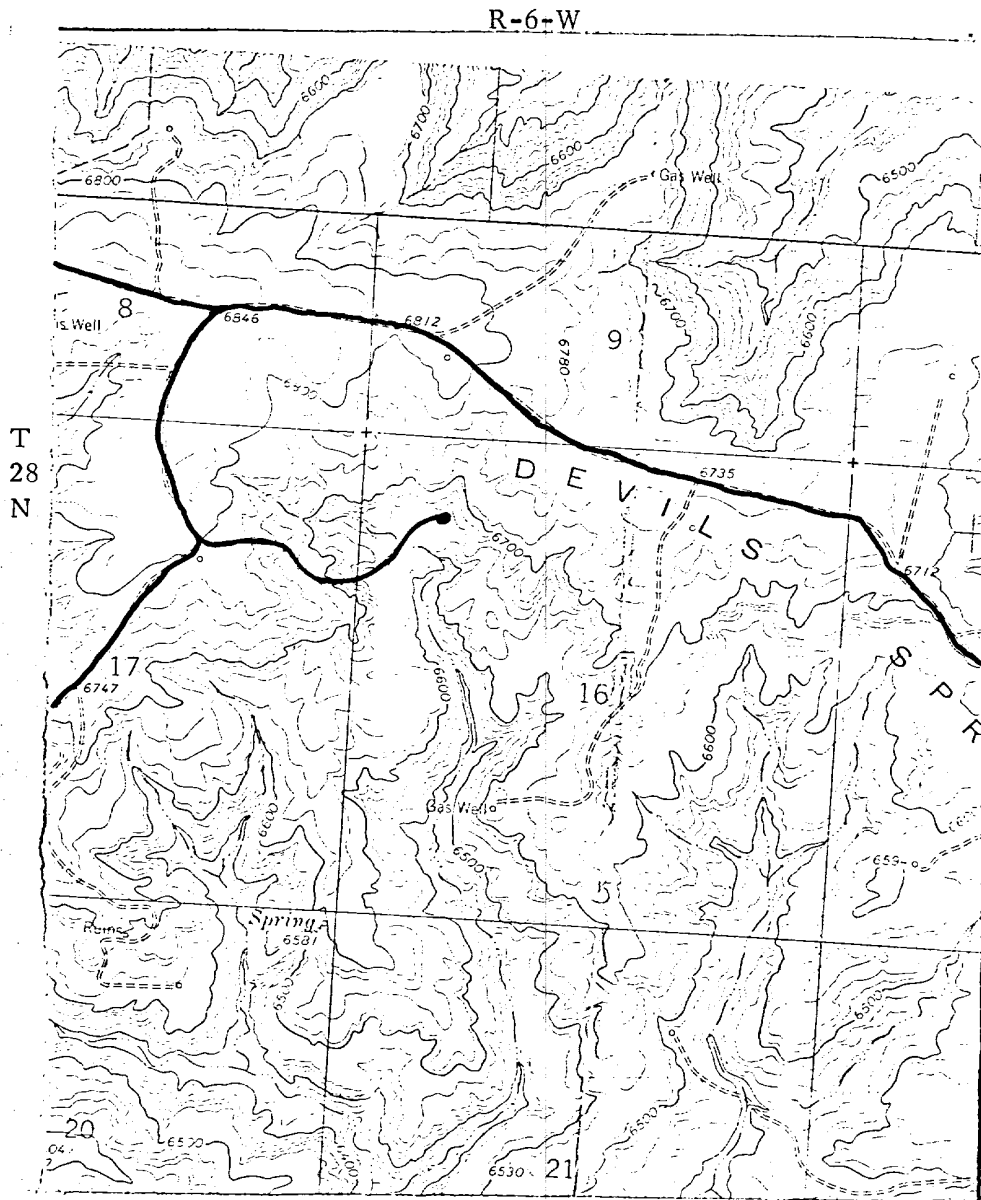
# Typical B.O.P. Installation for Mega-Perfor Well



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  
 San Juan 28-6 Unit #49A  
 NW 16-28-6



MAP #1

LEGEND OF RIGHT-OF-WAYS

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

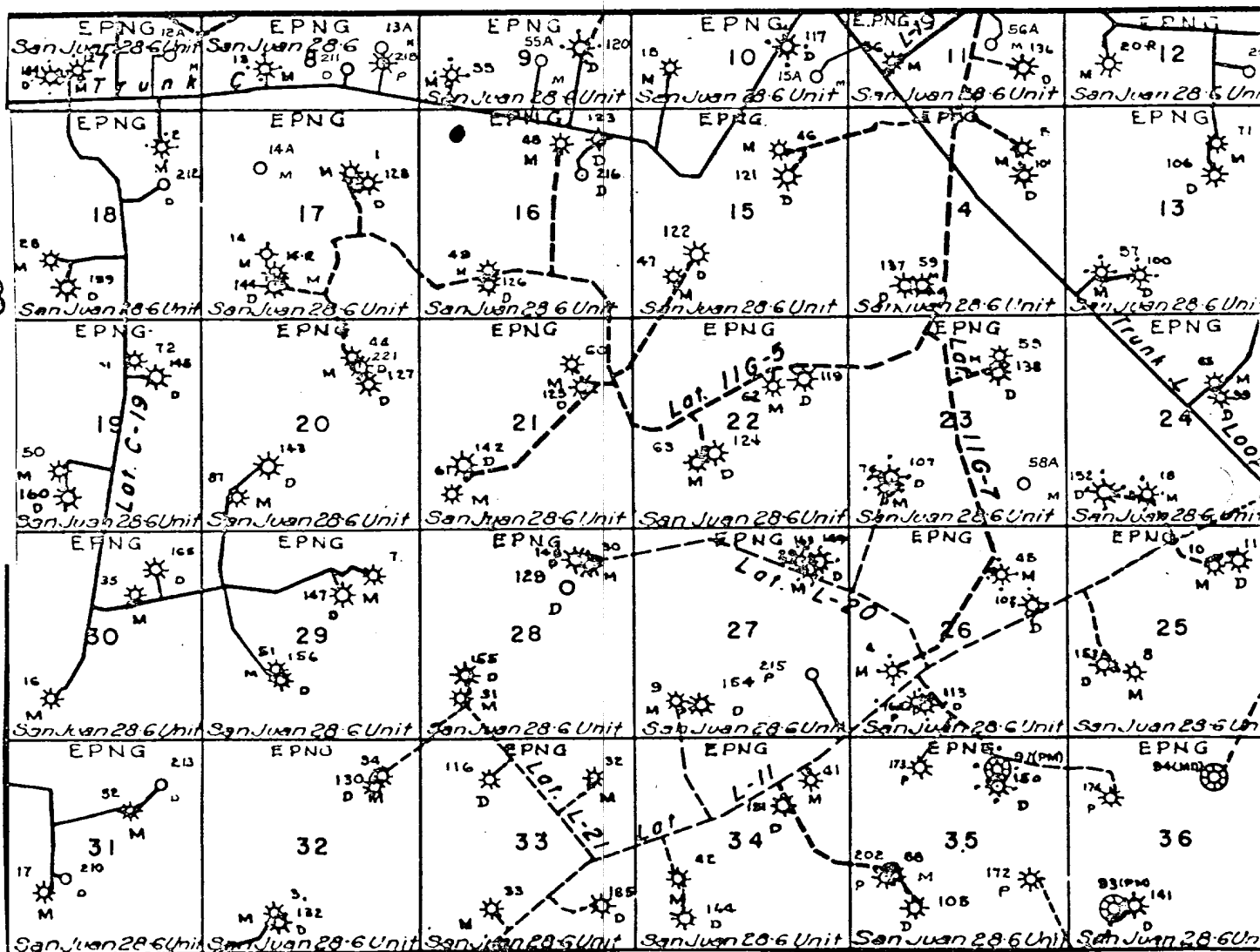
# EL PASO NATURAL GAS COMPANY

San Juan 28-6 Unit #49A

NW 16-28-6

## R-6-W

T  
28  
N



Map #2

Proposed location ●

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other ☐  
2. NAME OF OPERATOR  
El Paso Natural Gas Company  
3. ADDRESS OF OPERATOR  
P.O. Box 289, Farmington, New Mexico 87401  
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 810'N, 880'W  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:  
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input checked="" type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) <input type="checkbox"/>	<input type="checkbox"/>

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

5-24-79: Spudded well. Drilled surface hole.

5-25-79: Ran 5 jts. 9 5/8", 36#, K-55 surface casing, 201' set at 215'. Cemented w/224 cu. ft. cement. Circulated to surface. WOC 12 hours; held 600#/30 minutes.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

18. I hereby certify that the foregoing is true and correct

SIGNED D. P. Quisenberry TITLE Drilling Clerk DATE May 25, 1979

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

Form Approved.  
Budget Bureau No. 42-R1424

5. LEASE  
SF 079192  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT AGREEMENT NAME  
San Juan 28-6 Unit  
8. FARM OR LEASE NAME  
San Juan 28-6 Unit  
9. WELL NO.  
49A  
10. FIELD OR WILDCAT NAME  
Blanco M.V.  
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 16, T-28-N, R-6-W  
N.M.P.M.  
12. COUNTY OR PARISH  
Rio Arriba  
13. STATE  
New Mexico  
14. API NO.  
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
6627' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

MAY 30 1979

U.S. GEOLOGICAL SURVEY  
FARMINGTON, N.M.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other ☐  
2. NAME OF OPERATOR  
El Paso Natural Gas Company  
3. ADDRESS OF OPERATOR  
P.O. Box 289, Farmington, New Mexico 87401  
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 810'N, 880'W  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) ☐

SUBSEQUENT REPORT OF:

☒  
☐  
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17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

5-30-79: TD 3781'. Ran 99 jts. 7", 20#, K-55 intermediate casing, 3769' set at 3781'. Cemented w/269 cu. ft. cement. WOC 12 hours; held 1200#/30 minutes. Top of cement at 2300'.

6-03-79: 6106'. Ran 76 jts. 4 1/2", 10.5#, K-55 casing liner, 2465' set 3641-6106'. Float collar set at 6089'. Cemented w/431 cu. ft. cement. WOC 18 hours.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

18. I hereby certify that the foregoing is true and correct

SIGNED D. B. Bisco TITLE Drilling Clerk DATE June 4, 1979

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

5. LEASE SF 079192	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME San Juan 28-6 Unit	
8. FARM OR LEASE NAME San Juan 28-6 Unit	
9. WELL NO. 49A	
10. FIELD OR WILDCAT NAME Blanco M.V.	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 16, T-28-N, R-6-W N.M.P.M.	
12. COUNTY OR PARISH Rio Arriba	13. STATE New Mexico
14. API NO.	
15. ELEVATIONS (SHOW DF, KDB, AND WD) 6627' GL	

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

