

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22234

5. LEASE DESIGNATION AND SERIAL NO.
NM 013678

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.
71A (PM)

10. TABLE AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
w/ 160 ac. P.C. Cliffs
Blanco Mesa Verde
Sec. 13, T-28-N, R-6-W
NMPM

12. COUNTY OR PARISH | 13. STATE
Rio Arriba | NM

22. APPROX. DATE WORK WILL START*

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
E/2 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 940'S, 1520'E
At proposed prod. zone same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE?
3.5 miles southwest of Gobernador Camp, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
940'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
1800'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6493' GL

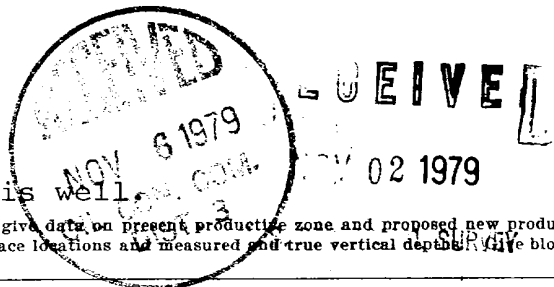
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	9 5/8"	36.0#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	3695'	258 cu.ft. to cover Ojo Alamo
6 1/4"	4 1/2" liner	10.5#	3545-6015'	431 cu.ft. to circ. liner

Selectively perforate and sandwater fracture the Pictured Cliffs and 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 E/2 of Section 13 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 [Signature] TITLE Drilling Clerk DATE 10-18-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

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

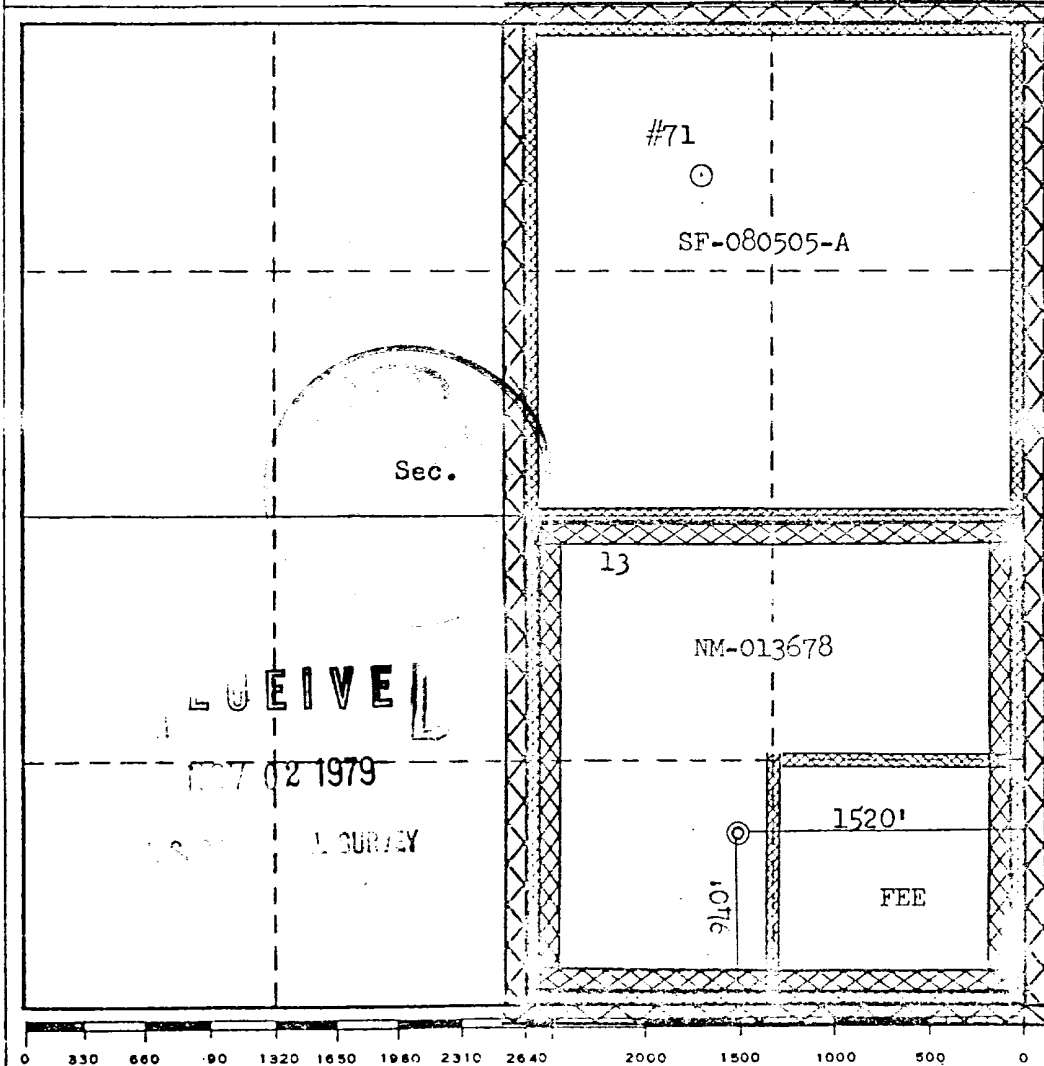
Operator EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 28-6 UNIT (NM-013678)		Well No. 71A
Unit Letter 0	Section 13	Township 28N	Range 6W	County Rio Arriba	
Actual Footage Location of Well: 940 feet from the South line and 1520 feet from the East line					
Ground Level Elev. 6493	Producing Formation Mesa Verde	Pictured Cliffs	Pool Undesignated	Pictured Cliffs	Dedicated Acreage: 160.0 & 320.0 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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?

X
 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.

[Signature]
Name

Drilling Clerk

El Paso Natural Gas Co.
Company

August 10, 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
August 2, 1979
Registered Professional Engineer and/or Land Surveyor
[Signature]
Fred B. Kerr Jr.
Certificate No. 3950

Multi-Point Surface Use Plan

San Juan 28-6 Unit #71A

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.
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,

RECEIVED

APR 02 1979

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 canyon bottom with sagebrush, grass, pinon and juniper growing. Cattle, deer and horses 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

RECEIVED

NOV 02 1979

SURVEY

October 18, 1979

Operations Plan
San Juan 28-6 Unit #71A

I. Location: 940'S, 1520'E, Section 13, T-28-N, R-6-W, Rio Arriba County, NM

Field: Undes. PC & Blanco MV Elevation: 6493'

II. Geology:

A. Formation Tops:	Surface	San Jose	Lewis	3495'
	Ojo Alamo	2550'	Mesa Verde	5040'
	Kirtland	2735'	Menefee	5225'
	Fruitland	3145'	Point Lookout	5545'
	Pic.Cliffs	3355'	Total Depth	6015'

B. Logging Program: GR-Ind. and GR-Density at Total Depth.
I-ES and GR-Density at 3695'

C. Coring Program: none

D. Natural Gauges: 5030', 5215', 5535' 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 3695'. 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"	3695'	7"	20.0# K-55
	6 1/4"	3545-6015'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - cement guide shoe.

7" intermediate casing - cement guide shoe and self-fill insert float valve, 5 stabilizers every other joint above shoe. Run float two joints above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff & PBR. Geyser shoe and flapper type float collar

C. Tubing: 6015' 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.
3545' of 1 1/4", 2.33#, J-55 IJ tubing with a common pump seating nipple above a perforated joint plugged on bottom. Isolate producing formations with a packer.

D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" x 7" casing hanger, 10" 2000 x 6" 2000 dual tubing head.

RECEIVED

NOV 02 1979

SURVEY

Operations Plan - San Juan 28-6 Unit #71A

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.

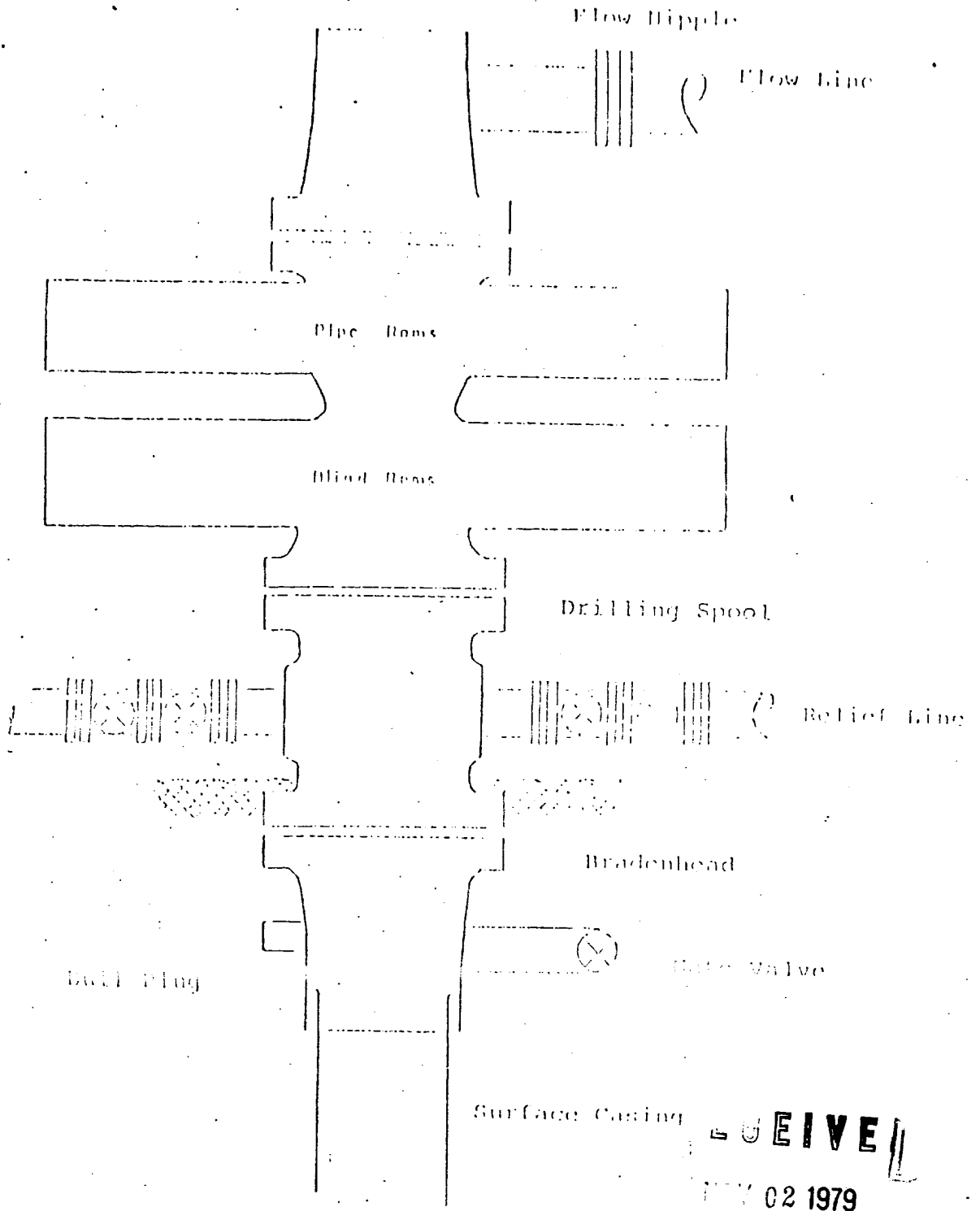
7" intermediate casing - use 86 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "E" with 2% calcium chloride (258 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 310 sks. of 50/50 Class "B" Poz with 2% gel, 0.6% Halad-9, 6.25# gilsonite plus 1/4# Flocele per sack (431 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

W E I V E

02 1979

Typical B.O.P. Installation
for Mega Verde Well



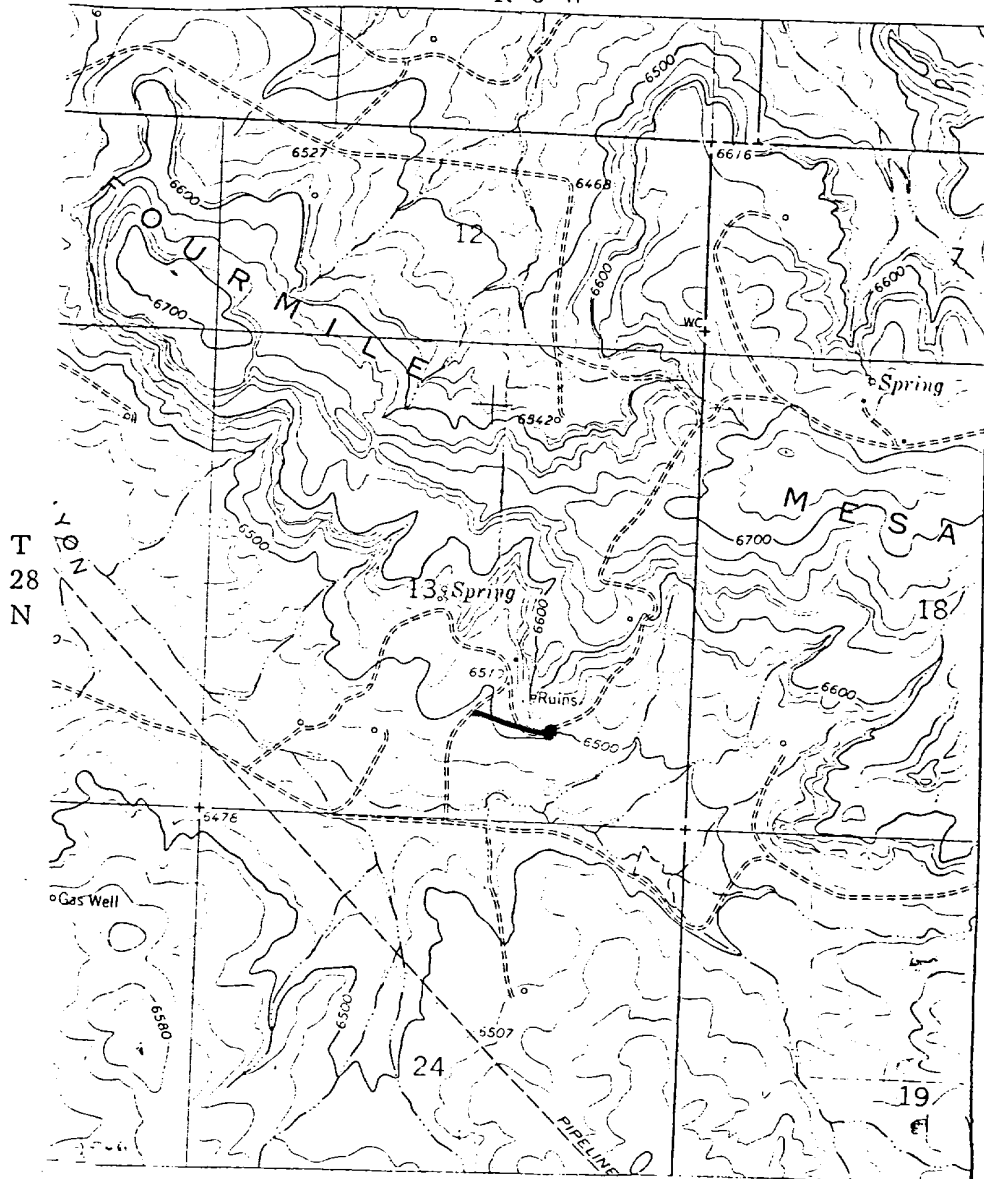
BEIVE
MAY 02 1979

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.

SURVEY







El Paso Natural Gas Company
 San Juan 28-6 Unit #71A
 SE 13-28-6

R-6-W



MAP 1

LEGEND OF RIGHT-OF-WAYS

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

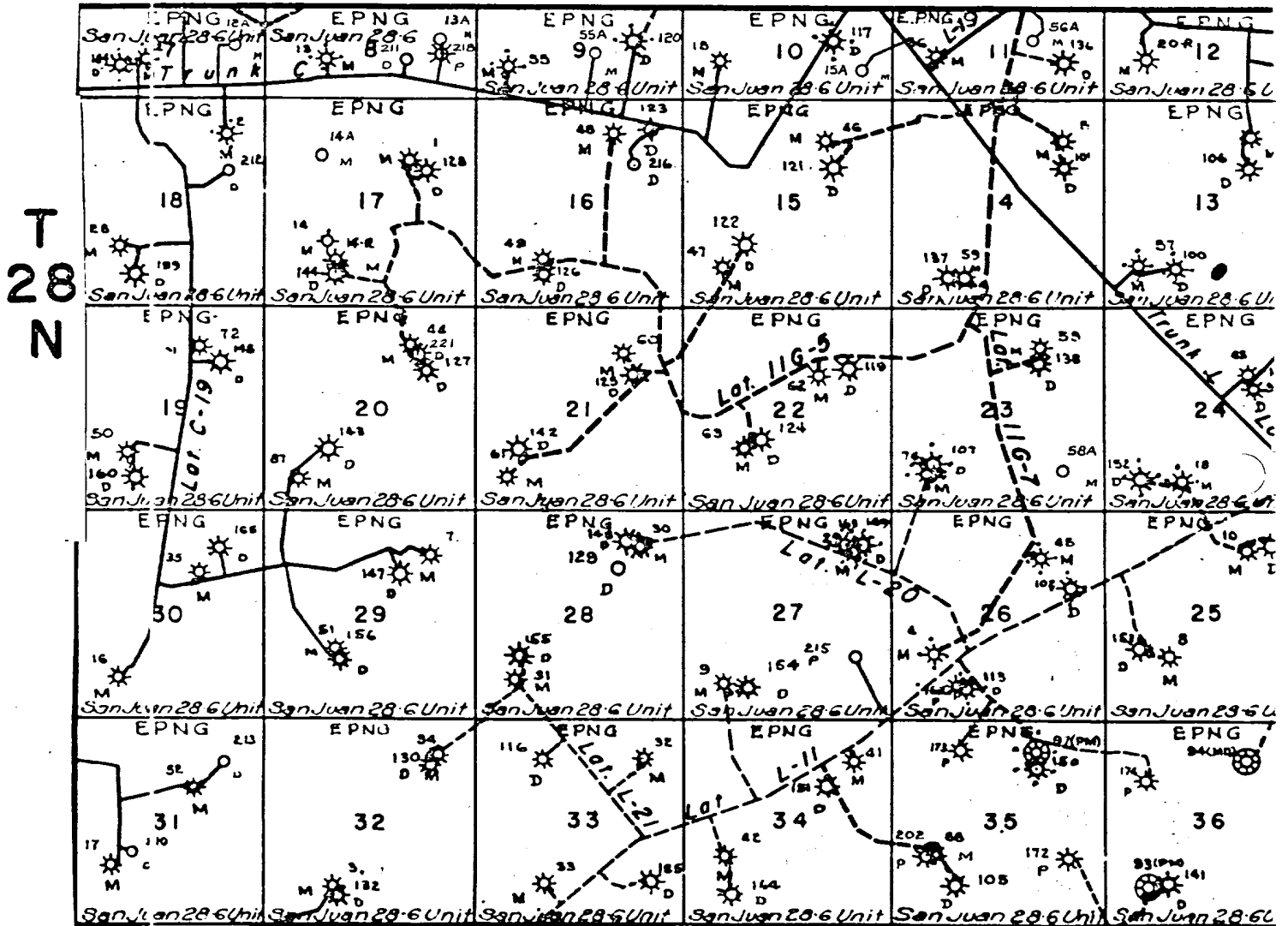
JEIVE

02 1979

CONVEY

El Paso Natural Gas Company
San Juan 28-6 Unit #71A
SE 13-28-6

R-6-W



MAP 2

Proposed Location ●

WELLS

02 1979