

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 990, Farmington, New Mexico - 87401

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

At surface

N 1060'N, 1175'E

At proposed prod. zone

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

15. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

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

19. PROPOSED DEPTH

7880'17. NO. OF ACRES ASSIGNED
TO THIS WELL320.00 ✓

20. ROTARY OR CABLE TOOLS

Rotary

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

6553' 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
<u>13 3/4"</u>	<u>9 5/8"</u>	<u>32.30#</u>	<u>200'</u>	<u>146 Sks. to circulate</u>
<u>8 3/4"</u>	<u>7"</u>	<u>20#</u>	<u>3650'</u>	<u>167 Sks. to cover the Cjo Alamo</u>
<u>6 1/4"</u>	<u>4 1/2"</u>	<u>10.5 & 11.6#</u>	<u>7880'</u>	<u>356 Sks. to fill to 3650'</u>

Selectively perforate and sand water fracture the Dakota formation.

The N/2 of Section 23 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 conditions and measured and true vertical depths. Give blowout preventer program, if any.

24.

Original Signed By:

SIGNED

L. O. Van Ryn

TITLE

Petroleum Engineer

DATE

5-27-69

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

TITLE

DATE

APPROVED

CONDITIONS OF APPROVAL, IF ANY:

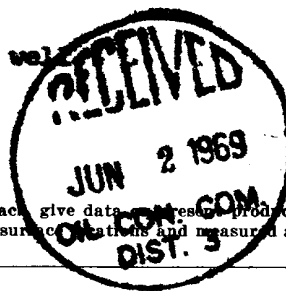
MAY 29 1969

JERRY W. LONG
DISTRICT ENGINEER

*See Instructions On Reverse Side

RECEIVED

MAY 29 1969

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-11
Supersedes O-12B
Effective 1-1-61

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

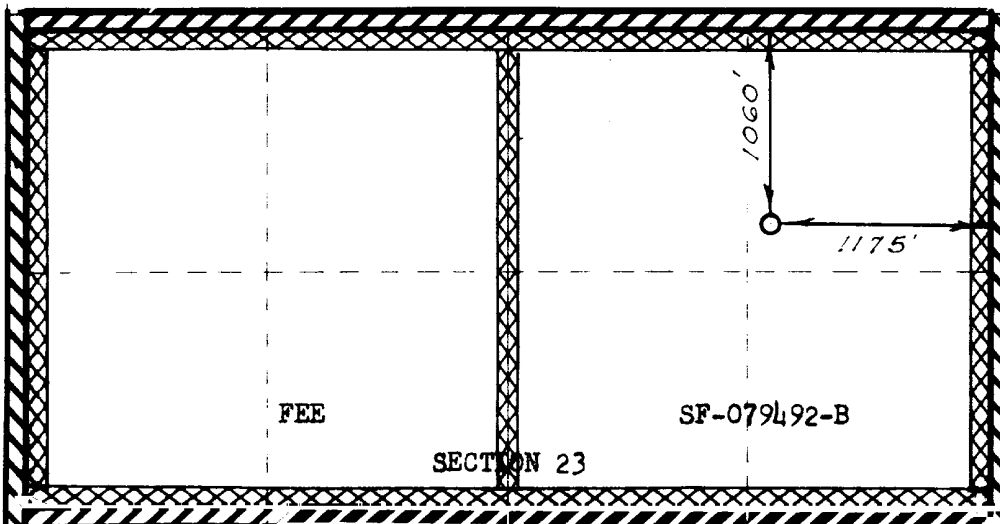
EL PASO NATURAL GAS COMPANY		SAN JUAN 27-5 UNIT (SF-079492-B)		115
A	23	27-N	5-W	RIO ARRIBA
1060	NORTH	1175	EAST	
6553	DAKOTA	BASIN DAKOTA	320.00	

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 such leases 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.

Original Signed By:

Name L. O. Van Ryan
Petroleum Engineer
 Position
El Paso Natural Gas Co.
 Company
May 27, 1969
 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.

MARCH 28, 1969

Paul Wilson
1760

0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 079492-B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

San Juan 27-5 Unit

8. FARM OR LEASE NAME

San Juan 27-5 Unit

9. WELL NO.

115

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREASec. 23, T-27-N, R-5-W
N.M.P.M.

12. COUNTY OR PARISH 13. STATE

Rio Arriba New Mexico

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 "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

El Paso Natural Gas Company

3. ADDRESS OF OPERATOR

Box 990, Farmington, New Mexico - 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

1060'N, 1175'E

14. PERMIT NO.

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

6553' GL

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETION

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)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 perti-
nent to this work.)*

On 6-3-69 spudded well, drilled surface hole and ran 7 joints 9 5/8", 32.30#, H-40 casing (224') set at 239' w/200 sacks of cement circulated to surface. W.O.C. 12 hours, held 600#/30 Min.

On 6-7-69 T.D. 3545', ran 109 joints 7", 20#, K-55 intermediate casing (3533') set at 3545' w/150 sacks of cement. W.O.C. 12 hours, 6 held 800#/30 Min.

On 6-13-69 T.D. 7801', ran 243 joints 4 1/2", 10.5 & 11.6# K-55 casing (7789') set at 7801' w/358 sacks of cement. W.O.C. 18 hours.

On 6-15-69 P.B.T.D. 7780', tested casing to 4000# O. K. Spotted 300 gal. 7 1/2% HCL. Perf. 7556-60', 7570-78', 7678-86', 7740-48', 7760-68' w/16 SPZ. Frac w/68,000# 40/60 sand, 69,000 gal. water. Max. pr. 4000#, BDP 2400#, avg. tr. pr. 3300#. I.R. 43 BPM. Dropped 4 sets of 16 balls, flushed w/4000 gal. water. ISIP 2600#, 5 Min. 2200#, 30 Min. 700#.



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

SIGNED

LARRY A. AIMES

TITLE

Engineer

DATE

6-16-69

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

DATE

JUN 17 1969

*See Instructions on Reverse Side U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE 7-01-69

Operator El Paso Natural Gas		Lease San Juan 27-5 Unit No. 115	
Location 1060N, 1175E S23-T27N-R5W		County Rio Arriba	State New Mexico
Formation Basin		Pool Dakota	
Casing: Diameter 4.500	Set At: Feet 7801	Tubing: Diameter 1.900	Set At: Feet 7704
Pay Zone: From 7556	To 7768	Total Depth: 7801	Shut In 6-17-69
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches 0.750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2572	+ 12 = PSIA 2584	Days Shut-In 18	Shut-In Pressure, Tubing PSIG 2627	+ 12 = PSIA 2639	
Flowing Pressure: P PSIG 251	+ 12 = PSIA 263		Working Pressure: P _w PSIG 608	+ 12 = PSIA 620	
Temperature: T = 67 °F	n = .75		F _{pv} (From Tables) 1.025	Gravity .650	F _g = .9608

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = (12.365)(263)(.9933)(.9608)(1.025) = \underline{3181} \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{6964321}{6579921} \right)^n = (1.0584)^{.75} 3181 = 1.0434 (3181)$$

Note: Heavy fog of water and light hydrocarbons

$$Aof = \underline{3319} \text{ MCF/D}$$

TESTED BY JBG

Calculated

WITNESSED BY RF & RES

H. L. Kendrick


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved,
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐		1b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐	
2. NAME OF OPERATOR El Paso Natural Gas Company			
3. ADDRESS OF OPERATOR Box 990, Farmington, New Mexico - 87401			
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1060'N, 1175'E At top prod. interval reported below At total depth			
14. PERMIT NO. JUL 25 1969		DATE ASSIGNED JUL 24 1969	
15. DATE SPUDDED 6-3-69		16. DATE T.D. REACHED 6-12-69	
17. DATE COMPL. (Ready to produce) 7-1-69		18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 6553' GL	
20. TOTAL DEPTH, MD & TVD 7801'		21. PLUG, BACK T.D., MD & TVD 7780'	
22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY 0-7801	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 7556 - 7768' (Dakota)		25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN Induction, Density, Temp. Survey		27. WAS WELL CORRED No	
28. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
9 5/8"	32.30#	239'	13 3/4"
7"	20#	3545'	8 3/4"
4 1/2"	10.5 & 11.6#	7801'	6 1/4"
CEMENTING RECORD			
200 Sks.			
150 Sks.			
358 Sks.			
AMOUNT PULLED			
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
30. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
1 1/2"	7714'		
31. PERFORATION RECORD (Interval, size and number)			
7556-60, 7570-78, 7678-86, 7740-48, 7760-68' w/16 SPZ			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
7556-7768		69,000 gal. water, 68,000# sand	
		300 gal. acid	
33. PRODUCTION			
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	
		Flowing	
WELL STATUS (Producing or shut-in)		Shut In	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD
7-1-69	3	3/4"	→
OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.
SI 2639	SI 2584	→	
GAS—MCF.		WATER—BBL.	OIL GRAVITY-API (CORR.)
3319 MCF/D - A.C.F.			
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)			
TEST WITNESSED BY J. B. Goodwin			
35. LIST OF ATTACHMENTS			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
Original Signed By: SIGNED L. O. Van Ryan TITLE Petroleum Engineer DATE 7-17-69			

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 38, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments, items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 38. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS, AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP	MEAS. DEPTH
				Pictured Cliffs	Not logged		
				Mesa Verde	5040		
				Point Lookout	5522		
				Gallego	6605		
				Greenhorn	7470		
				Graneros	7530		
				Dakota	7661		