

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 078282

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

San Juan 29-5 Unit

8. FARM OR LEASE NAME

San Juan 29-5 Unit

9. WELL NO.

51

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 19, T-29-N, R-5-W

XXXXX H.M.P.M.

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

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

1150'S, 1150'W

14. PERMIT NO.

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

6682' GL

16.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

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 pertinent to this work.)*

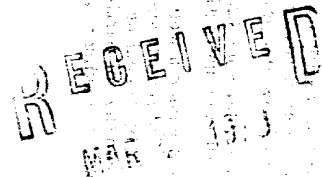
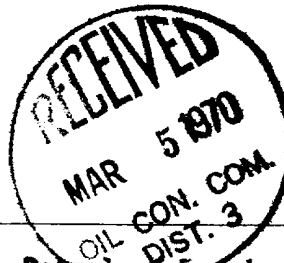
On 2-6-70 spudded well, drilled surface hole.

On 2-7-70 ran 6 joints 5 5/8", 32.30#, H-40 surface casing (202') set at 219' w/165 sacks of cement circulated to surface. W.O.C. 12 hours, held 600#/30 Min.

On 2-12-70 T. D. 3825', ran 116 joints 7", 20#, J-55 intermediate casing (3810') set at 3825' w/185 sacks of cement. W.O.C. 14 hours, held 800#/30 Min.

On 2-18-70 T. D. 8097'. Ran 257 joints 4 1/2", 10.5 & 11.6#, J-55 casing (8080') set at 8097' w/360 sacks of cement. W.O.C. 18 hours.

On 2-19-70 P.B.T.D. XXXX 8076', perf. 7928-38', 7989-95', 8005-12', 8022-30' 8040-48', 8060-68' w/20 SPZ. Frac w/70,000# 40/60 sand, 69,970 gal. water. Dropped 5 sets of 20 balls, flushed w/4460 gal. water.



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

SIGNED

Original Signed F. H. WOOD

TITLE

Petroleum Engineer

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

DATE

2-26-70

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

EL PASO NATURAL GAS COMPANY

DEVIATION REPORT

Name Of Company El Paso Natural Gas Company				Address Box 990, Farmington, New Mexico 87401			
Lease San Juan 29-5 Unit	Well No. 51	Unit Letter M	Section 19	Township 29N	Range 5W		
Pool Basin Dakota				County Rio Arriba			

<u>DEPTH</u>	<u>Deviation</u>	<u>Depth</u>	<u>DEVIATION</u>
718'	1°	6291'	1/2°
1188'	1°	6700'	1/2°
1478'	1°	7136'	1/4°
1972'	1°	7563'	3/4°
2530'	1 1/2°	7792'	1 1/2°
2982'	1 1/4°	7888'	1 3/4°
3580'	3/4°	8097'	1 3/4°
3797'	1°		
4625'	1/2°		
5034'	3/4°		
5400'	1/2°		
5911'	1/4°		



I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer of El Paso Natural Gas Company, am authorized by said Company to make this report; and that this report was prepared by me or under my supervision and directions and that the facts stated therein are true to the best of my knowledge and belief.

[Signature]

Subscribed and sworn to before me this 19th day of March, 1970.

[Signature]
Notary Public in and for San Juan County, New Mexico

My commission expires October 5, 1972.

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE March 2, 1970

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit No. 51	
Location 1150'S; 1150'W; Sec. 19-T29N-R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8097	Tubing: Diameter 1.900	Set At: Feet 8049
Pay Zone: From 7928	To 8068	Total Depth: 8097	Shut In 2-21-70
Stimulation Method Sand Water Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 2770	PSIG	+ 12 = PSIA 2782	Days Shut-In 9	Shut-In Pressure, Tubing 2770	PSIG
Flowing Pressure: P 423	PSIG	+ 12 = PSIA 435		Working Pressure: P _w 653	PSIG
Temperature: T = 88 °F		n = .75		Fpv (From Tables) 1.028	Gravity .590
	F _t = .9741				F _g = 1.008

$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365)(435)(.9741)(1.008)(1.028) = \underline{5429} \text{ MCF/D}$$

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

$$Aof = \left(\frac{7739524}{7297299} \right)^n = (5429)(1.0606)^{.75} = (5429)(1.0451)$$

Note: Blew medium spray of water distillate throughout test.

$$Aof = \underline{5674} \text{ MCF/D}$$

TESTED BY D. R. Roberts

WITNESSED BY _____

H. L. Kendrick
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-R555.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____		5. LEASE DESIGNATION AND SERIAL NO. SF 078282	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR El Paso Natural Gas Company		7. UNIT AGREEMENT NAME San Juan 26-5 Unit	
3. ADDRESS OF OPERATOR Box 660, Farmington, New Mexico 87401		8. FARM OR LEASE NAME San Juan 26-5 Unit	
4. LOCATION OF WELL (Report location clearly and in accordance with any State laws) At surface 1150'S, 1150'W At top prod. interval reported below At total depth		9. WELL NO. 51	
14. PERMIT NO.		DATE ISSUED MAR-25-1970	
15. DATE SPUDDED 2-6-70		16. DATE T.D. REACHED 2-17-70	
17. DATE COMPL. (Ready to prod.) 3-2-70		18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 8882' GL	
19. ELEV. CASINGHEAD		20. TOTAL DEPTH, MD & TVD 8067'	
21. PLUG, BACK T.D., MD & TVD 8076'		22. IF MULTIPLE COMPL., HOW MANY*	
23. INTERVALS DRILLED BY		ROTARY TOOLS 0-8067	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 7928 - 8069' (Dakota)		25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN IES/IGR, XGR, FDC/GR, Temp. Survey		27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
X 9 5/8"	32.30#	219'	13 3/4"
7"	20#	3825'	8 3/4"
4 1/2"	10.5 & 11.6#	8067'	6 1/4"
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
30. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
1 1/2"	8066'		
31. PERFORATION RECORD (Interval, size and number)			
7928-38', 7988-95', 8005-12', 8022-30', 8040-43', 8060-68' w/20 SPZ			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
7928-8068'		60,970 gal. water, 70,000# sand	
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
3-2-70	3	3/4"	
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.
SI 2782	SI 2782		
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)		TEST WITNESSED BY	
		D. R. Roberts	
35. LIST OF ATTACHMENTS			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED Original Signed F. H. WOOD		TITLE Petroleum Engineer	
DATE 3-15-70			

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

INSTRUCTIONS

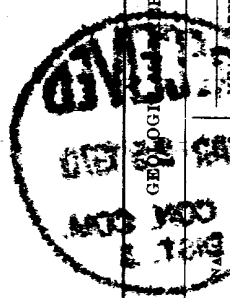
General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the 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 33, 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 33. 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 INTERVALS																	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.																
			<table border="1"> <thead> <tr> <th>LOG DEPTH</th> <th>TRUE VERT. DEPTH</th> </tr> </thead> <tbody> <tr> <td>Pictured Rocks</td> <td>3604</td> </tr> <tr> <td>Mesa Verde</td> <td>5395</td> </tr> <tr> <td>Point Lookout</td> <td>5497</td> </tr> <tr> <td>Gallup</td> <td>5900</td> </tr> <tr> <td>Greenhorn</td> <td>7740</td> </tr> <tr> <td>Graneros</td> <td>7793</td> </tr> <tr> <td>Dakota</td> <td>7921</td> </tr> </tbody> </table>	LOG DEPTH	TRUE VERT. DEPTH	Pictured Rocks	3604	Mesa Verde	5395	Point Lookout	5497	Gallup	5900	Greenhorn	7740	Graneros	7793	Dakota	7921
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TRANSPORTER	OIL 1 GAS 1
OPERATOR	2
PRORATION OFFICE	

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

I. Operator
El Paso Natural Gas Company

Address
Box 990, Farmington, New Mexico 87401

Reason(s) for filing (Check proper box) Other (Please explain)

New Well	☒	Change in Transporter of:	
Recompletion	☐	Oil	☐
Change in Ownership	☐	Casinghead Gas	☐
		Dry Gas	☐
		Condensate	☐

If change of ownership give name and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

Lease Name San Juan 29-5 Unit	Well No. 51	Pool Name, Including Formation Basin Dakota	Kind of Lease State, Federal or Fee SF	Lease No. 078282
Location Unit Letter M 1150X Feet From The South Line and 1150 Feet From The West Line of Section 19 Township 29N Range 5W , NMPM, Rio Arriba County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☒ El Paso Natural Gas Company	Address (Give address to which approved copy of this form is to be sent) Box 990, Farmington, New Mexico 87401	
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☒ El Paso Natural Gas Company	Address (Give address to which approved copy of this form is to be sent) Box 990, Farmington, New Mexico 87401	
If well produces oil or liquids, give location of tanks.	Unit M	Sec. 19
	Twp. 29N	Rge. 5W
	Is gas actually connected? When	

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

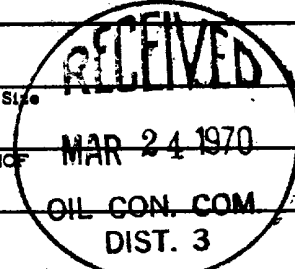
IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		☒	☒					
Date Spudded 2-6-70	Date Compl. Ready to Prod. 3-2-70		Total Depth 8097		P.B.T.D. 8076			
Elevations (DF, RKB, RT, GR, etc.) 6682' GL	Name of Producing Formation Dakota		Top of Gas Pay 7928'		Tubing Depth 8059'			
Perforations 7928-38, 7989-95, 8005-12, 8022-30, 8040-43, 8060-68					Depth Casing Shoe 8097			
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
13 3/4"	9 5/8"		219'		165 Sks.			
8 3/4"	7"		3825'		185 Sks.			
6 1/4"	4 1/2"		8097'		360 Sks.			
	1 1/2"		8059'		Tubing			

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF



GAS WELL

Actual Prod. Test-MCF/D 5674	Length of Test 3 Hours	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pitot, back pr.) Calculated A.O.F.	Tubing Pressure (shut-in) 2782	Casing Pressure (shut-in) 2782	Choke Size 3/4"

VI. CERTIFICATE OF COMPLIANCE

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

Original Signed F. H. WOOD

(Signature)

Petroleum Engineer

(Title)

March 19, 1970

(Date)

OIL CONSERVATION COMMISSION

MAR 24 1970

APPROVED

Original Signed by Emery C. Arnold

BY SUPERVISOR DIST. 3

TITLE

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 deviation 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.

