

# El Paso Natural Gas Company

El Paso, Texas

December 30, 1957

DIRECT REPLY TO:  
P. O. BOX 987  
FARMINGTON, NEW MEXICO

Mr. A. L. Porter  
Secretary and Director  
Oil Conservation Commission  
Box 871  
Santa Fe, New Mexico



Dear Sir:

This is a request for administrative approval for a well dually completed in the Wildcat Pictured Cliffs Pool and in the Blanco Mesa Verde Pool. The El Paso Natural Gas Company San Juan 28-6 Unit No. 77 (PM) is located 1660 feet from the South line and 1750 feet from the West line of Section 2, Township 27 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico.

This well has been completed in the Point Lookout and Cliff House sections of the Mesa Verde formation and in the Pictured Cliffs formation. Completion has been accomplished in the following manner:

1. 10 3/4" surface casing set at 174 feet with 150 sacks of cement circulated to the surface.
2. 7 5/8" intermediate casing set at 3445 feet with 250 sacks of cement. Top of the cement is at 2840 feet, which is above the top of the Pictured Cliffs at 3247 feet.
3. 5 1/2" liner set from 3353 feet to 5635 feet with 300 sacks of cement.
4. The casing and liner were tested for leaks before perforating.
5. The Point Lookout section was perforated in three intervals and fractured with water and sand.
6. The Cliff House section was perforated in four intervals and fractured with water and sand.
7. The Pictured Cliffs formation was perforated in one interval and fractured with water and sand.
8. All perforations were cleaned after treatment and completion was accomplished by setting a Baker Model "EGJ" production packer on 2" EUE tubing at 3377 feet with the tubing perforations set opposite the Point Lookout perforations. 1 1/4" EUE tubing was run, with the tubing perforations set opposite the Pictured Cliffs perforations, as a siphon string. The Point Lookout gas will be produced through the 2" tubing and the Pictured Cliffs gas through the casing.

COPY

9. A Garrett circulating sleeve was installed in the 2" EUE tubing string just below the Pictured Cliffs perforations. This will enable the bottom hole pressure tests to be taken at a future date if so required.
10. Initial potential tests have been run and commercial production has been found in both zones. A packer leakage test has been run and witnessed by a member of the Aztec office of the Oil Conservation Commission. This test shows no communication in the well bore between the two producing formations.

Administrative approval is requested for the dual completion to allow production from both known producing formations, eliminating the high initial cost of drilling two separate wells.

El Paso Natural Gas Company, being the only operator of the San Juan 28-6 Unit, has not sought the approval of any other operator to dually complete this well. Enclosed are:

- (a) Two copies of the schematic diagram of the mechanical installations.
- (b) Two copies of the affidavit from the packer setting company stating that the packer used was set at the depth shown.
- (c) Two copies of the packer leakage test as observed by a member of the Oil Conservation Commission.
- (d) Two copies of the initial potential test showing commercial production from the two formations.

It is intended to dedicate the W/2 of Section 2, Township 27 North, Range 6 West to the Mesa Verde formation and the SW/4 of Section 2, Township 27 North, Range 6 West to the Pictured Cliffs formation.

Any further information required will be furnished upon your request. Thank you for your consideration in this matter.

Yours very truly,

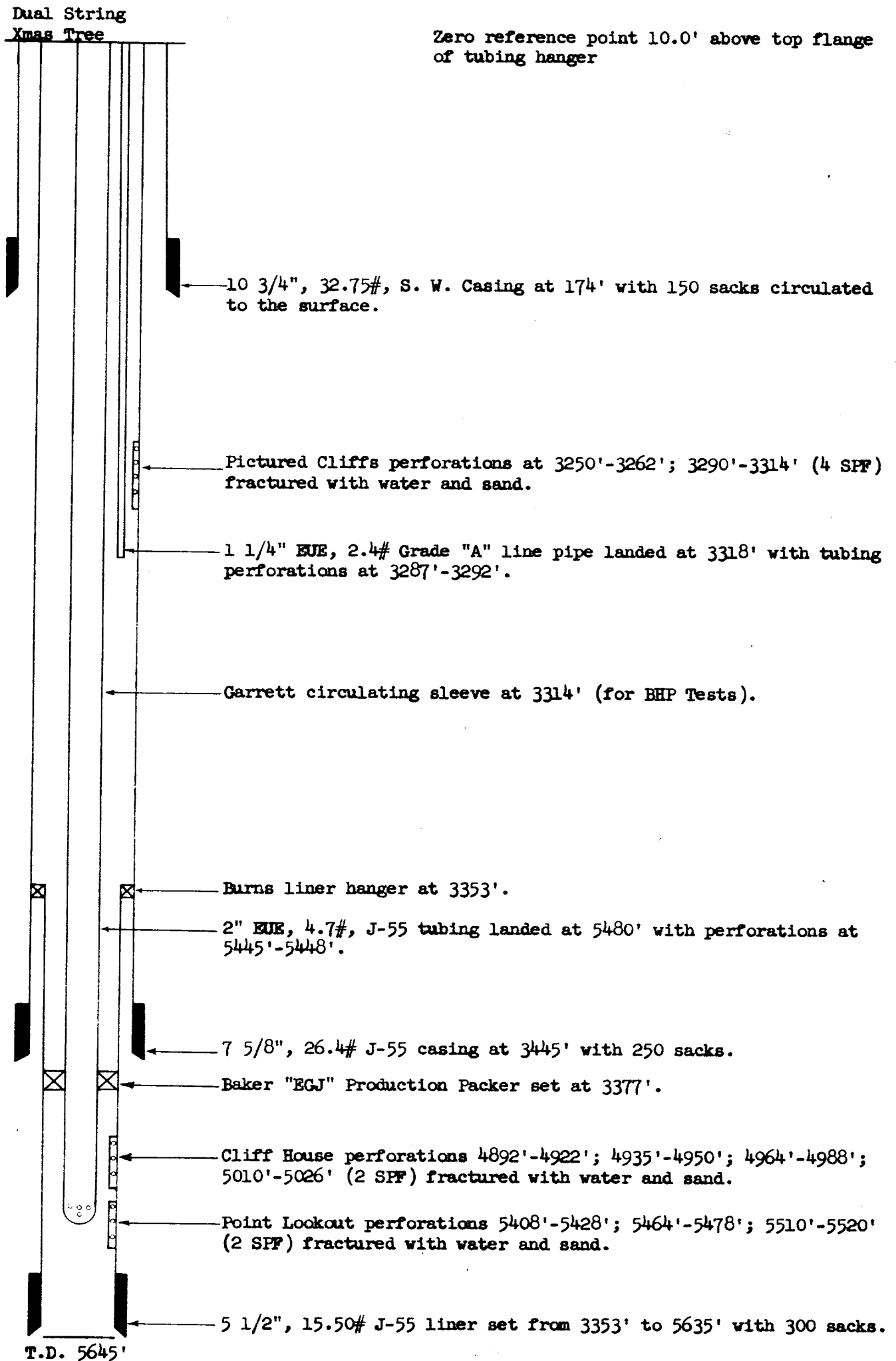
ORIGINAL SIGNED E. S. OBERLY  
E. S. Oberly  
Division Petroleum Engineer

ESO:dgb

Encl.

cc: NMOCC (Emery Arnold) ✓  
Sam Smith  
USGS (Phil McGrath)

SCHEMATIC DIAGRAM OF DUAL COMPLETION  
EL PASO NATURAL GAS SAN JUAN 28-6 UNIT NO. 77 (PM)  
SW/4 Section 2, T-27-N, R-6-W



STATE OF NEW MEXICO

COUNTY OF SAN JUAN

I, Mack M. Mahaffey, being first duly sworn upon my oath depose and say as follows:

I am an employee of Baker Oil Tools, Inc., and that on November 1, 1957, I was called to the location of the El Paso Natural Gas Company San Juan 28-6 Unit No. 77 (FM) Well located in the NESE/4 of Section 2, Township 27 North, Range 6 West, N.M.P.M., for advisory service in connection with installation of a production packer. In my presence, a Baker Model "HBJ" Production Packer was set in this well at 3377 feet in accordance with the usual practices and customs of the industry.

Mack M. Mahaffey

Subscribed and sworn to before me, a Notary Public in and for San Juan County, New Mexico, the 31 day of DEC, 1957.

Don L. MacLachlan  
Notary Public in and for San Juan County,  
New Mexico

My commission expires February 24, 1960.

I, Mark M. Mandley, being first duly sworn upon my oath depose and say as follows:

I am an employee of Baker Oil Tools, Inc., and that on November 1, 1957, I was called to the location of the El Paso Natural Gas Company San Juan 28-6 Unit No. 17 (PM) Well located in the NE1/4 of Section 5, Township 27 North, Range 6 West, N.M.P.M., for advisory service in connection with installation of a production packer. In my presence, a Baker Model "ECL" Production Packer was set in this well at 3377 feet in accordance with the usual practices and customs of the industry.

*Mark M. Mandley*

Subscribed and sworn to before me, a Notary Public in and for San Juan County, New Mexico, this 27 day of December, 1957.

*Notary Public in and for San Juan County, New Mexico*

My commission expires February 24, 1960.

EL PASO NATURAL GAS COMPANY

P. O. Box 997  
Farmington, N.M.

December 17, 1957

Mr. E. C. Arnold  
Oil Conservation Commission  
120 East Chaco  
Aztec, New Mexico

Re: Packer Leakage Test on the El Paso Natural Gas  
Company Well, San Juan 28-6 No. 77 (PM), 1660'S,  
1750'W, Sec. 2-27N-6W, Rio Arriba County, N.M.

Dear Mr. Arnold:

The subject well was dually completed in the Pictured Cliffs and Mesa Verde zones and a packer was set at 3377 feet. The Mesa Verde zone was tested through a 3/4" choke for three hours December 5, 1957 with the following data obtained:

Pictured Cliff SIPC - 1035 psig; shut-in 9 days  
Pictured Cliff SIPT - 1035 psig

Mesa Verde SIPT - 942 psig; shut-in 9 days

<u>Time</u> <u>Minutes</u>	<u>MV Flowing Pressure</u> <u>Tubing Psig</u>	<u>PC SIPC Psig</u>	<u>MV Working</u> <u>Pressure, Psig</u>	<u>Temp ° F</u>
15	359	1039		58
30	341	1040		59
45	320	1040		60
60	305	1040		60
120	268	1042		62
180	247	1042	Calculated 283	62

The choke volume for the Mesa Verde was 3087 MCF/D with an A.O.F. of 3328 MCF/D.

The Pictured Cliffs zone was tested December 12, 1957 with a 3/4" choke for three hours with the following data obtained:

Pictured Cliff SIPC - 1063 psig; shut-in 16 days  
Pictured Cliff SIPT - 1063 psig

Mesa Verde SIPT - 971 psig; shut-in 7 days

<u>Time Minutes</u>	<u>PC Flowing Pressure Casing Psig</u>	<u>MV SIPT Psig</u>	<u>PC Working Pressure, Psig</u>	<u>Temp ° F</u>
15	390	971		48
30	287	971	301	52
45	214	970		53
60	184	970	201	54
120	147	970	162	55
180	132	970	145	55

The choke volume for the Pictured Cliffs test was 1717 MCF/D with an A.O.F. of 1749 MCF/D.

The results of the above tests indicate there is no packer leakage.

Very truly yours,

R. R. Davis  
R. R. Davis  
Gas Engineer

RRD/jla

cc: W. M. Rodgers  
E. S. Oberly (6)  
File

EL PASO NATURAL GAS COMPANY  
GAS WELL TEST

To: Mr. Ed E. Alsup

Date: December 5, 1957

From: Gas Engineering Department

Place: Farmington, New Mexico

DUAL COMPLETIONSubject: Test data on the El Paso Natural Gas Company Well,  
SAN JUAN 28-6 UNIT NO. 77 (M), Rio Arriba County, N.M.

Tested By: R. R. Davis

Location ..... Sec. 2 T. 27N R. 6W 1660'S, 1750'W

Shut-In Pressure ..... P.C. SIPC 1035 psig ; (Shut-in 9 days)  
P.C. SIPT 1035 psig  
M.V. SIPT 942 psig. Shut-in 9 days0.750" Choke Volume ..... 3087 MCF/D @ 14.7 psia and 60° F. for 0.6  
gravity gas. Flow through tubing for 3 hours.

Calculated 3 Hour Absolute Open Flow ..... 4001 MCF/D

Working Pressure On ..... Calculated = 504 Psig

Producing Formation ..... Mesa Verde

Stimulation Method ..... Sand Water Frac.

Total Depth ..... 5645

Field ..... Blanco

H<sub>2</sub>S ..... Sweet to lead acetate.

Final SIPC (PC) - 1042 psig

cc: D. H. Tucker

~~W. M. Rodgers~~~~Wayne Cheek~~~~Drilling Department~~

W. M. Rodgers

Wayne Cheek

Drilling Department

B. D. Adams

~~Richard H. H. H.~~

Jack Purvis

~~W. M. Rodgers~~

C. C. Kennedy

E. J. Coel, Jr.

A. J. Dudenhoeffer

File

Bill Parrish

Dean Rittmann

Samuel Smith

E. S. Oberly(6)

D. N. Canfield

Heavy fog for 15 minutes. Light fog remainder of test.

Lewis D. Galloway  
L. D. Galloway



EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADUAL COMPLETIONDATE December 5, 1957

Operator <b>El Paso Natural Gas Company</b>		Lease <b>San Juan 28-6 Unit No. 77 (M)</b>	
Location <b>1660'S, 1750'W, Sec. 2-27-6</b>		County <b>Rio Arriba</b>	State <b>New Mexico</b>
Formation <b>Mesa Verde</b>		Pool <b>Blanco</b>	
Casing: Diameter <b>7-5/8</b>	Set At: Feet <b>3434</b>	Tubing: Diameter <b>2"</b>	Set At: Feet <b>5495</b>
Pay Zone: From <b>4892</b>	To <b>5520</b>	Total Depth: <b>5645</b>	
Stimulation Method <b>Sand Water Frac.</b>		Flow Through Casing	Flow Through Tubing <b>X</b>

Choke Size, Inches <b>.750</b>		Choke Constant: C <b>12.365</b>		<b>5-1/2" liner - 3352 - 5635</b>	
Shut-In Pressure, Casing, PSIG <b>1035 PC</b>	+ 12 = PSIA <b>1047</b>	Days Shut-In <b>9</b>	Shut-In Pressure, Tubing PSIG <b>942 MV</b>	+ 12 = PSIA <b>954</b>	
Flowing Pressure: P PSIG <b>247</b>	+ 12 = PSIA <b>259</b>		Working Pressure: P <sub>w</sub> PSIG <b>Calculated</b>	+ 12 = PSIA <b>516</b>	
Temperature: T °F <b>62</b>	n = <b>.750</b>		F <sub>pv</sub> (From Tables) <b>1.028</b>	Gravity <b>.680</b>	

Final SIPC (PC) - 1042 psig. Packer at 3377. Sleeve at 3314

CHOKE VOLUME = Q = C x P<sub>i</sub> x F<sub>i</sub> x F<sub>g</sub> x F<sub>pv</sub>

$$Q = 12.365 \times 259 \times .9981 \times .9393 \times 1.028 = \underline{3087} \text{ MCF/D}$$

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

$$Aof = \left( \frac{910,116}{643,860} \right)^n = 1.4135^{.75} \times 3087 = 1.2960 \times 3087$$

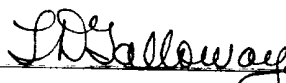
$$Aof = \underline{4001} \text{ MCF/D}$$

TESTED BY R. R. Davis

WITNESSED BY \_\_\_\_\_

cc: E. S. Oberly (6)

Heavy fog for 15 minutes. Light fog remainder of the test.

  
 L. D. Galloway

EL PASO NATURAL GAS COMPANY  
GAS WELL TEST

To: Mr. Ed E. Alsup

Date: December 13, 1957

From: Gas Engineering Department

Place: Farmington, New Mexico

DUAL COMPLETIONSubject: Test data on the El Paso Natural Gas Company Well,  
SAN JUAN 28-6 UNIT NO. 77 (P), Rio Arriba County, N.M.

Tested By: R. R. Davis

Location ..... Sec. 2 T. 27N R. 6W ,1660'S, 1750'W

Shut-In Pressure .....	P.C. SIPC 1063 psig	16
	P.C. SIPT 1063 psig	; (Shut-in. .... days)
	M.V. SIPT 971 psig.	Shut-in 7 days

0.750" Choke Volume .....	1717	MCF/D @ 14.7 psia and 60° F. for 0.6
	gravity gas. Flow through	casing for 3 hours.

Calculated 3 Hour Absolute Open Flow .....	1749	MCF/D
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Working Pressure On tubing .....	= 145	Psig
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Producing Formation .....	Pictured Cliffs
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Stimulation Method .....	Sand Water Frac.
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Total Depth .....	5645
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Field .....	Undesignated
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H2S .....	Sweet to lead acetate.
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Final SIPT (MV) - 970 psig

cc: D. H. Tucker

Bill Parrish

~~R. H. Hays~~

Dean Rittmann

~~W. T. Hays~~

Samuel Smith

~~C. D. Walker~~

E. S. Oberly (6)

W. M. Rodgers

D. N. Canfield

Wayne Cheek

Drilling Department

B. D. Adams

~~R. H. Hays~~

Jack Purvis

~~W. T. Hays~~

C. C. Kennedy

E. J. Coel, Jr.

A. J. Dudenhoeffer

File

*Lewis D. Galloway*  
L. D. Galloway

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

(Form C-104)  
Revised 7/1/57

REQUEST FOR (OIL) - (GAS) ALLOWABLE

New Well  
~~Recompletion~~

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Farmington, New Mexico January 13, 1958  
(Place) (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

El Paso Natural Gas Company San Juan 28-6 Unit, Well No. 77(FM), in NE  $\frac{1}{4}$  SW  $\frac{1}{4}$ ,  
(Company or Operator) (Lease)

K 2 27N 6W NMPM, Blanco Pool  
Unit Letter

Rio Arriba County. Date Spudded 9-17-57 Date Drilling Completed 10-13-57  
Elevation 6485'G Total Depth 5645 ~~max~~ C.O. 5590

Please indicate location:

D	C	B	A
E	F	G	H
L	K	J	I
M	N	O	P

Top Oil/Gas Pay 4892 Name of Prod. Form. Mesa Verde

PRODUCING INTERVAL 4892-4922, 4935-50; 4964-88; 5010-26; 5408-28;  
5464-78; 5510-20

Perforations  
Open Hole None Depth 5644 Depth 5505  
Casing Shoe Tubing

OIL WELL TEST -

Natural Prod. Test: \_\_\_\_\_ bbls. oil, \_\_\_\_\_ bbls water in \_\_\_\_\_ hrs, \_\_\_\_\_ min. Size \_\_\_\_\_ Choke

Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of Choke load oil used): \_\_\_\_\_ bbls. oil, \_\_\_\_\_ bbls water in \_\_\_\_\_ hrs, \_\_\_\_\_ min. Size \_\_\_\_\_

GAS WELL TEST -

Natural Prod. Test: \_\_\_\_\_ MCF/Day; Hours flowed \_\_\_\_\_ Choke Size \_\_\_\_\_

Method of Testing (pitot, back pressure, etc.): \_\_\_\_\_

Test After Acid or Fracture Treatment: 400L MCF/Day; Hours flowed 3

Choke Size 3/4" Method of Testing: Calculated AOF

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): 64,000 gal. water & 60,000# sand; 65,100 gal. water & 60,000# sand;  
Casing Tubing Date first new  
Press. Press. 942 oil run to tanks

Oil Transporter El Paso Natural Gas Products Co.

Gas Transporter El Paso Natural Gas Company

Remarks: Baker "RGJ" Packer @ 3377'; Garrett Sleeve @ 3314'

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved JAN 15 1958, 19\_\_\_\_

El Paso Natural Gas Company  
(Company or Operator)

OIL CONSERVATION COMMISSION

By: Original Signed Emery C. Arnold

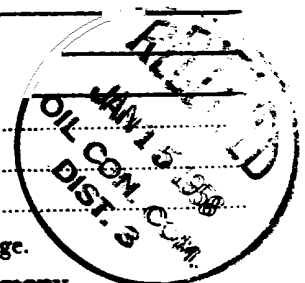
Title Supervisor Dist. # 3

By: Original Signed D. C. Johnston  
(Signature)

Title Petroleum Engineer  
Send Communications regarding well to:

Name E. S. Oberly

Address Box 997, Farmington, New Mexico



NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

(Form C-104)  
Revised 7/1/57

REQUEST FOR (OIL) - (GAS) ALLOWABLE

New Well  
Recompletion

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Farmington, New Mexico January 13, 1958  
(Place) (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

El Paso Natural Gas Company San Juan 28-6 Unit, Well No. 77 (FM), in NE 1/4 SW 1/4,  
(Company or Operator) (Lease)

K, Sec. 2, T. 27N, R. 6W, NMPM, Wildcat Pool  
Unit Letter

Rio Arriba

Please indicate location:

D	G	B	A
E	F	G	H
L	K	J	I
M	N	O	P

1660'S, 1750'W

Tubing, Casing and Cementing Record

Size	Feet	Sax
10 3/4"	162'	150
7 5/8"	3434	250
5 1/2"	2282	300
2"	5505'	---
1 1/4"	3308'	---

County. Date Spudded 9-17-57 Date Drilling Completed 10-13-57  
Elevation 6485' G Total Depth 5645 C.O.T.D. 5590

Top Oil/Gas Pay 3250' (Perf.) Name of Prod. Form. Pictured Cliffs

PRODUCING INTERVAL -

Perforations 3250-62; 3290-3314

Open Hole None Depth Casing Shoe 3445 Depth Tubing 3308

OIL WELL TEST -

Natural Prod. Test: bbls, oil, bbls water in hrs, min. Size Choke

Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of load oil used): bbls, oil, bbls water in hrs, min. Size Choke

GAS WELL TEST -

Natural Prod. Test: MCF/Day; Hours flowed Choke Size

Method of Testing (pitot, back pressure, etc.):

Test After Acid or Fracture Treatment: 1749 MCF/Day; Hours flowed 3

Choke Size 3/4" Method of Testing: Calculated A.O.F.

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): 46,620 gal. water and 40,000# sand.

Casing Tubing Date first new Press. 1063 Press. oil run to tanks

Oil Transporter El Paso Natural Gas Products Co.

Gas Transporter El Paso Natural Gas Company

Remarks: Baker "BJ" Packer @ 3377'; Garrett Sleeve @ 3314'.

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved: JAN 15 1958, 19

El Paso Natural Gas Company

Original Signed D. C. Johnston

By: (Signature)

Title Petroleum Engineer

Send Communications regarding well to:

Name E. S. Oberly

Address Box 997, Farmington, New Mexico

OIL CONSERVATION COMMISSION

Original Signed Emery C. Arnold

By:

Title Supervisor Dist. # 3



## OIL CONSERVATION COMMISSION

## AZTEC INSTRUCTION OFFICE

No. Copies Received 5

## DISTRIBUTION

	NO.	
Operator	2	
	1	
Director	1	
State Land Office		
U. S. G. S.		
	1	✓

### Santa Fe, New Mexico

## WELL RECORD

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in **QUINTUPLICATE**. If State Land submit 6 Copies

**AREA 640 ACRES  
LOCATE WELL CORRECTLY**

**El Paso Natural Gas Company**

**San Juan 28-6 Unit**

(Company or Operator)

(Lease)

Well No. 77 (PM), in NE  $\frac{1}{4}$  of SW  $\frac{1}{4}$ , of Sec. 2, T. 27N, R. 6W, NMPM.  
Blanco Mesa Verde, Wildcat P. C. Rio Arriba

ALANCO MISS VERON, ALBERT F. C. Pool, AIR AFFAIRS County.

Well is 1650 feet from South line and 1750 feet from West line

of Section 2 If State Land the Oil and Gas Lease No. is 7-299-29

Drilling Commenced 9-17, 1957 Drilling was Completed 10-13, 1957

Name of Drilling Contractor.....**Carroll Brilling Co. (Rotary), Chilton Brilling Co. (Sable), Cox Brilling**  
(Sable)

Address.....

Elevation above sea level at Top of Tubing Head.....**6485**..... The information given is to be kept confidential until

..... 19.....

### OIL SANDS OR ZONES

No. 1, from 3247 to 3314 (g) No. 4, from 5510 to 5580 (g)

No. 2, from 4892 to 5028 (G) No. 5, from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from 5028 to 5510 (8) No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

**Include data on rate of water inflow and elevation to which water rose in hole.**

No. 1, from ..... to ..... feet. 1 CON 1958

No. 2, from ..... to ..... feet.

No. 3. from ..... to ..... feet.

No. 4, from ..... to ..... feet.

### CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
10 3/4"	32.75	New	168'	Newco			Surface
7 5/8"	26.40	New	34 1/2	Baker			Intermediate
5 1/2"	15.50	New	2252	Baker			Production

## MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
15"	10 3/4"	174'	150	Circulsted		
8 3/4"	7 5/8	3445	250	Single Stage		
6 3/4"	5 1/2"	3660-5644	300	Single Stage		

### RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

10-16-57 T.D. 5648'. G.O.T.D. 5590'. Water fraced. P.L. thru perf. int. 5408-28; 5464-78; 5510-80 w/221/ft. with 64,050 gal. water, 60,000# sand. MD pr. 1400 psi, max. pr. 2100 psi, avg. tr. pr. 1500, 1500, 1600, 1700, 2000. IR 62 MM. Flushed w/9030 gal. water. Drugged 4 sets of 17 balls each - 5 stages. 10-16-57 NP @ 5150. Perf. C.N. 4892-4922; 4935-50; 4964-88; 5010-26. Treated w/65,100 gal. water & 60,000# sand. Flushed w/9030 gal. water. IR 52.3 MM. Max. pr. 3000 psi, MD pr. 1700, 1800, 1900, 2000, 2100, 2200, 2700. 9 stages w/8 drops of 17 balls each. Set NP @ 4650. Perf. P.C. 3250-62; 3260-134 w/4 perf. Treated w/34,600 gal. water, 40,000# sand. Flushed w/8200 gal. water. IR 47 MM. Max. pr. 1900, MD pr. 1090. Tr. pr. 1000. Result of Production Stimulation. 1000, 1100, 1200. 8 stages w/5 drops of 18 balls each.

A.O.F. - P.C. 1749, M.V. 4001 NEW/D Choke Volume - P.C. 1717, M.V. 3007 NEW/D

...Depth Cleaned Out.....5590'

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 174 feet to 5645 feet, and from feet to feet.  
Cable tools were used from 0 feet to 174 feet, and from feet to feet.

PRODUCTION

Put to Producing, 19

OIL WELL: The production during the first 24 hours was barrels of liquid of which % was  
was oil; % was emulsion; % water; and % was sediment. A.P.I.  
Gravity

GAS WELL: The production during the first 24 hours was P.G. 1742 M.C.F. plus 9.0. 1717 barrels of  
liquid Hydrocarbon. Shut in Pressure N.Y. 542 lbs. Casing Ch. Volume - N.Y. 3087 MCF/D  
Length of Time Shut in 9 Days (GV); 16 Days (PG)

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico			Northwestern New Mexico		
T. Anhy.			T. Devonian.		
T. Salt.			T. Silurian.		
B. Salt.			T. Montoya.		
T. Yates.			T. Simpson.		
T. 7 Rivers.			T. McKee.		
T. Queen.			T. Ellenburger.		
T. Grayburg.			T. Gr. Wash.		
T. San Andres.			T. Granite.		
T. Glorieta.			T.		
T. Drinkard.			T.		
T. Tubbs.			T.		
T. Abo.			T.		
T. Penn.			T.		
T. Miss.			T.		
			T. Ojo Alamo.	2592	
			T. Kirtland.	2668	
			T. Fruitland.	3050	
			T. Pictured Cliffs.	3247	
			T. Menefee.	5028	
			T. Point Lookout.	5510	
			T. Mancos.	5580	
			T. Dakota.		
			T. Morrison.		
			T. Penn.		
			T. Lewis.	3314	
			T. Cliff House.	4892	
			T.		
			T.		

FORMATION RECORD

From	To	Thickness in Feet	Formation
0	2592	2592	San to gry or-grn ss interbedded w/gry sh.
2592	2668	76	Ojo Alamo ss. White or-grn s.
2668	3050	382	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
3050	3247	197	Fruitland form. Gry sub sh, scattered coals, coals and gry, tight, fine-grn ss.
3247	3314	67	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
3314	4892	1578	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.
4892	5028	136	Cliff House ss. Gry, fine-grn, dense all ss.
5028	5510	482	Mancos form. Gry, fine-grn s, carb sh & coal.
5510	5580	70	Point Lookout form. Gry, very fine all ss w/frequent sh breaks.
5580	5645	65	Mancos formation. Gry carb sh.

OIL CONSERVATION COMMISSION	
AZTEC DISTRICT OFFICE	
No. Copies Received	6
DISTRIBUTION	
Operator	1
Santa Fe	1
Production Office	
State Land Office	1
U.S.G.S.	2
Transporter	

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

January 13, 1998

Company or Operator: El Paso Natural Gas Company Address: Box 397, Farmington, New Mexico  
Name: Original Signed D. C. Johnston Position or Title: Petroleum Engineer