El Paso Natural Gas Company

El Paso, Texas

April 11, 1957

DIRECT REPLY TO:
P. O. BOX 997
FARMINGTON, NEW MEXICO

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

Dear Sir:

This is to request administrative approval of a well dually completed in the Blanco-Mesa Verde and Aztec Pictured Cliffs Extension Pools. The El Paso Natural Gas Company Turner No. 1-A (PM) is located 1800 feet from the South line, 1650 feet from the West line, Section 34, Township 31 North, Range 11 West, N.M.P.M., San Juan County, New Mexico. This well is completed in the Point Lookout member of the Mesa Verde formation and in the Pictured Cliffs formation. Completion has been accomplished in the following manner:

1. 16" conductor pipe set at 30 feet. Not cemented.
2. 10-3/4" surface casing set at 172' with 150 sacks of cement circulated to surface.
3. 7-5/8" intermediate casing set at 4360' with 300 sacks of cement.
4. 5-1/2" liner set from 4293' to 4655' with 150 sacks of cement.
5. Protection of the Pictured Cliffs formation was accomplished by circulating cement behind 7-5/8" casing before perforating. The casing and liner were both tested for leaks. None were found.
6. The Point Lookout formation was perforated with 5 intervals and sand-water fraced through the 5-1/2" liner.
7. The Pictured Cliffs formation was perforated with 2 intervals and sand-water fraced through the 7-5/8" casing.
8. After cleaning out both formations a 2" EUE tubing was run with a Baker Model "EGJ" production packer to separate the Mesa Verde and Pictured Cliffs formations. The Mesa Verde formation will be produced through the 2" tubing.
9. The Pictured Cliffs formation will be produced through the 7-5/8" casing. A syphon string consisting of 1-1/4" line pipe was run to a point opposite the Pictured Cliffs formation.

COPY

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

Administrative approval is asked for this dual completion to allow production from both known producing formations without the high initial cost of drilling two wells.

I am enclosing one letter of approval from one offset operator. The other two offset operators of this well are also communitized interest owner and were not specially notified. Also enclosed are:

(a) Two copies of the schematic diagram of the mechanical installations.
(b) Two copies of an affidavit from the packer setting company stating that the packer used was set at the depth shown.
(c) Two copies of the packer leakage tests as observed by a member of the Oil Conservation Commission.
(d) Two copies of the initial potential test showing commercial production in these zones.
(e) Two copies of plats showing location of this well and offset operators.

It is intended to dedicate the W/2 of Section 34 to the Mesa Verde production and the SW/4 of Section 34 to the Pictured Cliffs production.

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

Yours very truly,

ORIGINAL SIGNED E. J. COEL

E. J. Coel
Senior Petroleum Engineer

EJC/gks

cc: Emery Arnold
R. L. Hamblin
Phil McGrath

ORIGINAL SIGNED E. J. DOEL

DUAL COMPLETION

OPEN FLOW TEST DATA

March 29, 1957

El Paso Natural Gas Company		Turner # 1-A	
1850'S, 1650'W, Sec. 34-31-11		San Juan	New Mexico
Pictured Cliffs		Undesignated	
7 5/8	4350	1¼	2220
2186	2230	4670 c/o - 4610 Packer at 4353	
Sand Water Frac		X	

.750	14.1605		5½" liner 4293 - 4655	
655	667	7	656	668
164	176		168	180
67	.85		1.018	.673

SIP (MV) 1025 psig. Ending SIP (MV) - 1031 psig

$$14.1605 \times 176 \times .9933 \times .9463 \times 1.018 \qquad 2385$$

$$\left(\frac{\quad}{\quad}\right)^n$$

$$\left(\frac{446,224}{413,824}\right)^n \qquad (1.0782)^{.85} \times 2385 = 1.0661 \times 2385$$

2543

K. C. McBride

A. R. Kendrick (O.C.C.)

cc: E. J. Coel (6)

L. D. Galloway

DUAL COMPLETION

OPEN FLOW TEST DATA

April 5, 1957

El Paso Natural Gas Company		Turner # 1-A	
1850'S, 1650'W, Sec. 34-31-11		San Juan	New Mexico
Mesa Verde		Blanco	
7 5/8	4350	2"	4563
4448	4593	4670 - c/o - 4610	
Sand Water Frac			X

.750	12.365	$5\frac{1}{2}$" liner - 4293 to 4655	
674 (PC)	14	1057	1069
337	349	Calculated	655
70	.75	1.033	.662

Ending SIPC (P.C.) - 677 psig

12.365 x 349 x .9905 x .9535 x 1.033 4210

$$\left(\quad \right)^n$$

$$\left(\begin{matrix} 1,142,761 \\ 713,736 \end{matrix} \right)^n \quad (1.601)^{.75} \times 4210 = 1.423 \times 4210$$

5991

K. C. McBride

cc: E. J. Coel (6)

L. D. Galloway

EL PASO NATURAL GAS COMPANY

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

April 5, 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, Turner # 1-A, SW 34-31-11, San Juan County, New Mexico.

Dear Mr. Arnold:

This well was dually completed in the Pictured Cliffs and Mesa Verde formations. A Production Packer was set at 4353 feet. The Pictured Cliffs zone was tested March 29, 1957 with the following results:

Pictured Cliffs	SIPT - 656 psig (shut-in 7 days)
Pictured Cliffs	SIPC - 655 psig
Mesa Verde	SIPT - 1025 psig

The casing was opened at 11:15 A.M. and flowed for three hours through a 3/4" choke.

Time	Casing Choke Pressure Psig	Temp. °F	Tubing Pressure Psig
11:15	Opened casing		1025
11:30	351		1029
11:45	259		1030
12:00	237		1030
12:15	220		1030
12:45	201		1031
1:15	183		1031
1:45	172		1031
2:15	164	67	1031

The calculated choke volume was 2385 MCF/Day. After the well was shut-in 7 days, the Mesa Verde zone was tested with the following results:

Pictured Cliffs	SIPC - 674
Mesa Verde	SIPT - 1057 psig (shut-in 14 days)

The tubing was opened at 10:20 A.M. through a 3/4" positive choke and flowed for three hours.

Time	Tubing Choke Pressure Psig	Temp. °F	Casing Pressure Psig
10:20	Opened tubing		674
10:35	454		676
10:50	431		677
11:05	404		677
11:20	394		677
11:50	370		677
12:20	358		677
12:50	345		677
1:20	337	70	677

The calculated choke volume was 4210 MCF/Day. The results of the tests obtained indicate there is no packer leakage.

These tests were witnessed by Mr. A. R. Kendrick of the New Mexico Oil Conservation Commission.

Very truly yours,

K. C. McBride
Gas Engineer

KCMcB/jla

cc: W. T. Hollis
W. M. Rodgers
E. J. Coel, Jr. (6)
File

Form 21-24 Rev. 5-5

EL PASO NATURAL GAS COMPANY
GAS WELL TEST

To: Mr. E. E. Alsup

From: Gas Engineering Department

Date: April 5, 1957

Place: Farmington, New Mexico

DUAL COMPLETION

Subject: Test data on the El Paso Natural Gas Company Well, TURNER # 1-A, San Juan County, New Mexico.

Tested By: K. C. McBride

Location ..... Sec. 34 T. 31 R. 11 1850'S, 1650'W

Shut-In Pressure ..... Pictured Cliffs SIPC 674 psig ; (Shut-in 14 days)
Mesa Verde SIPT 1057 psig

0.750" Choke Volume ..... 4210 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 ..... 5991 MCF/D

Working Pressure On ..... Calculated ..... = 643 Psig

Producing Formation ..... Mesa Verde

Stimulation Method ..... Sand Water Frac

Total Depth ..... 4670 - c/o - 4610

Field ..... Blanco

H_2S ..... Sweet to lead acetate.

Ending SIPC (P.C) - 677 psig

Lewis D. Galloway
L. D. Galloway

H. H. Lines
Bill Parrish
Dean Rittmann

cc: D. H. Tucker
****
W. T. Hollis
****
W. M. Rodgers
****
Drilling Department
B. D. Adams
Roland Hamblin
Jack Purvis
W. V. Holik
C. C. Kennedy
E. J. Coel, Jr. (6)
A. J. Dudenhoeffer
File

EL PASO NATURAL GAS COMPANY
GAS WELL TEST

To: Mr. E. E. Alsup

From: Gas Engineering Department

Date: March 29, 1957

Place: Farmington, New Mexico

DUAL COMPLETION

Subject: Test data on the El Paso Natural Gas Company Well, TURNER # 1-A, San Juan County, New Mexico.

Tested By: K. C. McBride. Witnessed By: A. R. Kendrick (New Mexico Oil Conservation Commission)

Location ..... Sec. 34 T. 31 R. 11 1850'S, 1650'W

Shut-In Pressure ..... Pictured Cliff SIPC 655 psig ; (Shut-in 7 days)
SIPT 656 psig
Mesa Verde SIPT 1025 psig

0.750" Choke Volume ..... 2385 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 ..... 2543 MCF/D

Working Pressure On tubing ..... = 168 Psig

Producing Formation ..... Pictured Cliffs

Stimulation Method ..... Sand Water Frac

Total Depth ..... 4670 - c/o - 4610

Field ..... Undesignated

H_2S ..... Sweet to lead acetate.

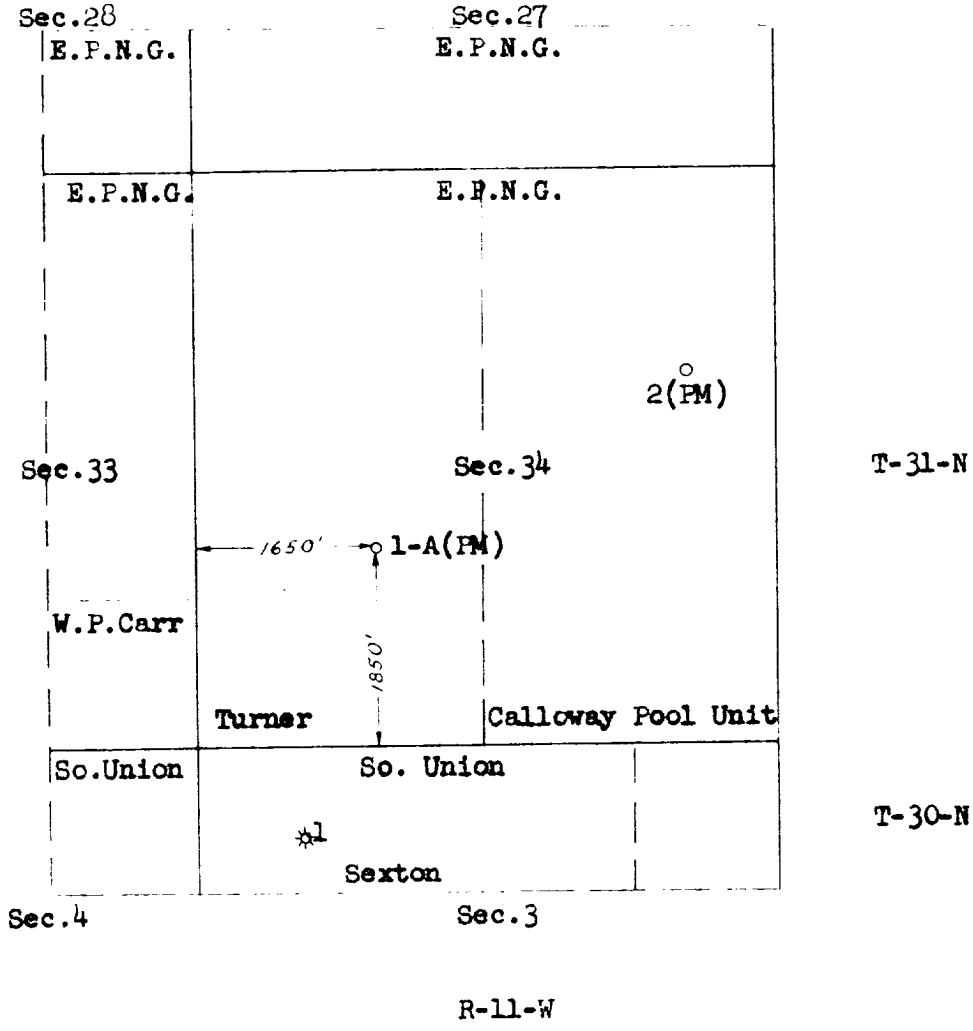
Ending SIPT (MV) - 1031

H. H. Lines
Bill Parrish
Dean Rittmann

Lewis D. Galloway
L. D. Galloway

cc: D. H. Tucker
****
R. W. Harris
W. T. Hollis
****
C. O. Parker
W. M. Rodgers
****
Wayne Cheer
Drilling Department
B. D. Adams
Roland Hamblin
Jack Purvis
W. V. Holik
C. C. Kennedy
E. J. Coel, Jr. (6)
A. J. Dudenhoeffer
File

PLAT SHOWING LOCATION OF DUAL COMPLETED
EL PASO NATURAL GAS TURNER NO. 1-A (PM)
AND OFFSET ACREAGE



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE	DATE	No.
DRAWN BY	CHECKED BY	

FORM 7-132 (10-56)