

# El Paso Natural Gas Company

El Paso, Texas

July 30, 1958

ADDRESS REPLY TO  
POST OFFICE 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 a request for administrative approval for a well dually completed in the Blanco Mesa Verde Pool and South Blanco Pictured Cliffs Pool. The El Paso Natural Gas Company Bolack No. 13-C (FM) is located 960 feet from the South line and 800 feet from the West line of Section 29, Township 27 North, Range 8 West, N.M.P.M., San Juan County, New Mexico.

This well has been completed in the Point Lookout section 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 175 feet with 150 sacks of cement circulated to the surface.
2. 7 5/8" intermediate casing set at 4428 feet with 470 sacks of cement. Top of the cement is at 1950 feet, which is above the top of the Pictured Cliffs at 2364 feet.
3. 5 1/2" liner set from 4374 feet to 4825 feet with 200 sacks of cement.
4. The casing and liner were tested for leaks before perforating.
5. The Point Lookout section was perforated in six intervals and fractured with water and sand.
6. The Pictured Cliffs formation was perforated in two intervals and fractured with water and sand.
7. All perforations were cleaned out after treatment and completion was accomplished by setting a Baker Model "EGJ" production packer on 2" EUE tubing at 4441 feet with tubing perforations set opposite the Point Lookout perforations. 1 1/4" EUE tubing siphon string was run with tubing perforations set opposite the Pictured Cliffs perforations. The Point Lookout gas will be produced through the 2" tubing and the Pictured Cliffs gas through the casing.
8. 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.

COPY

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.

The offset operators to the acreage dedicated to the well have been notified of El Paso Natural Gas Company's dual completion plans, and in turn have waived objections to said plans. Enclosed are copies of these waivers. Also 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.
- (e) Two plats showing the location of the well and offset operators.

It is intended to dedicate the W/2 of Section 29, Township 27 North, Range 8 West to the Mesa Verde formation and the SW/4 of Section 29, Township 27 North, Range 8 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

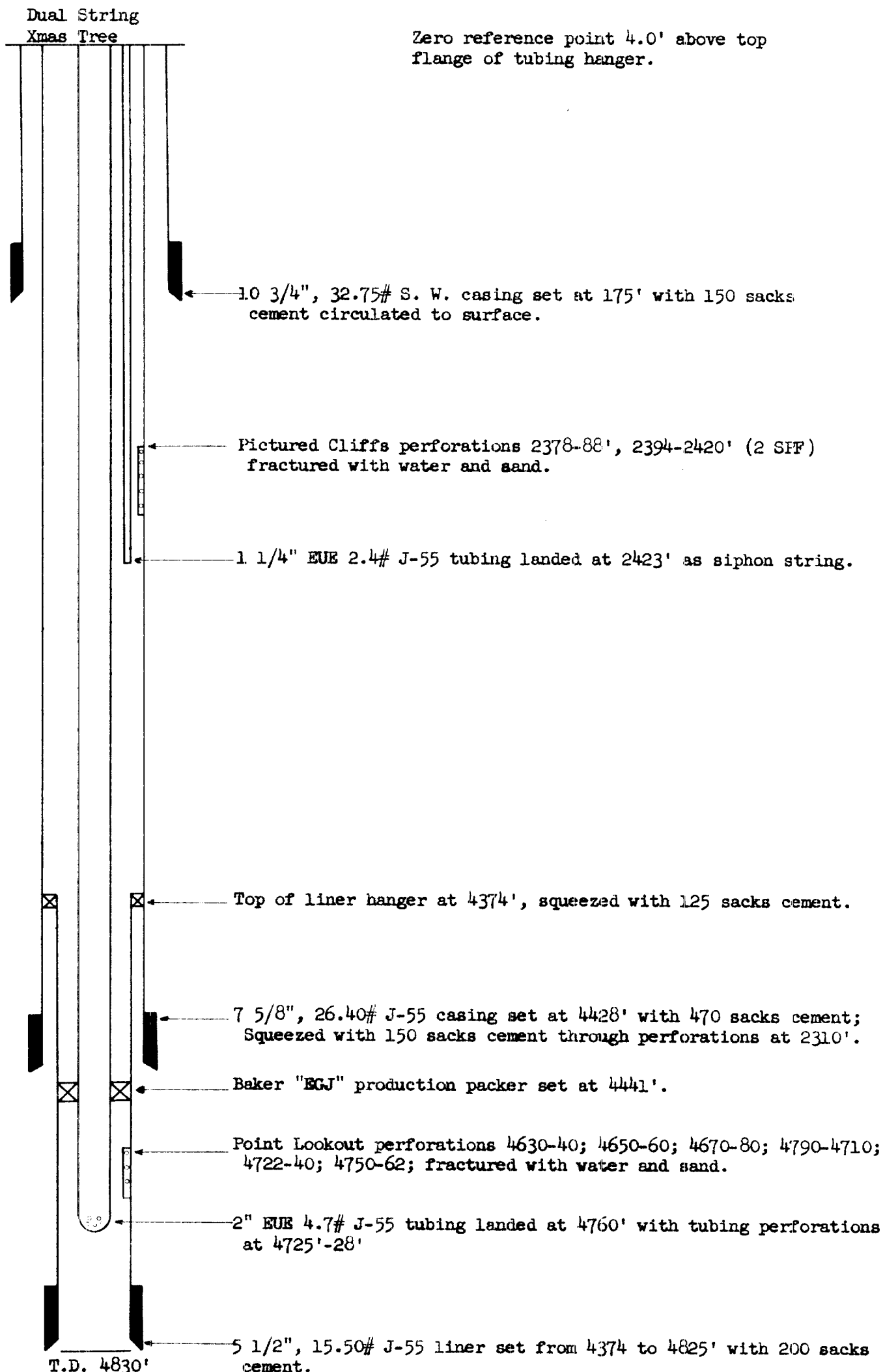
ESC:dgb

cc: NMOC (2) (Emery Arnold)

Sam Smith

USGS (Phil McGrath)

SCHEMATIC DIAGRAM OF DUAL COMPLETION  
El Paso Natural Gas Co. Bolack No. 13-C (PM)  
SW/4 Section 29, T-27-N, R-8-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 April 30, 1958, I was called to the location of the El Paso Natural Gas Company Bolack No. 13-C (PM) Well located in the SWSW/4 of Section 29, Township 27 North, Range 8 West, N.M.P.M., for advisory service in connection with installation of a production packer. In my presence, a Baker Model "EGJ" Production Packer was set in this well at 4441 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 31st day of July, 1958.

Paul H. Macleod  
Notary Public in and for San Juan County,  
New Mexico

My commission expires February 24, 1960.

# ST. LOUIS NATURAL GAS COMPANY

Box 477  
 Farmington, New Mexico

July 17, 1958

Mr. D. C. Smith  
 St. Louis Natural Gas Company  
 315 Pine Street  
 St. Louis, Missouri

Subject: Test on the St. Louis Natural Gas  
 Company Well, Bolack 13-C (PM), 960S, 800W;  
29-27-8, San Juan County, New Mexico  
 (Name - Location - Company)

Dear Mr. Smith:

The subject well was finally completed in the Pictured Cliffs and Mesa Verde zones and a pressure was set at 4441 feet. The Mesa Verde zone was tested through a 5/8" choke for three hours July 8, 1958 with the following data obtained:

Q 1000 673 gal. Shut-in 10 days  
 Q 500 673 gal.  
 Q 100 1113 gal. Shut-in 10 days

Time Elapsed	MV Working Pressure Tubing (psig)	PC 13-C (psig)	( ) Working Pressure, (psig)	Depth, (ft)
0				73
15	340	676		74
30	288	676		75
45	271	676		75
60	250	676		76
120	202	676		76
180	170	676	Calc. 341	76

The choke value for the Mesa Verde was 2064 WCFD with an AOF of 2219 WCFD.

The Pictured Cliffs zone was tested July 17, 1958 with a 5/8" choke for 4 hours with the following data obtained:

Q 1000 677 gal. Shut-in 19 days  
 Q 500 677 gal.  
 Q 100 1105 gal. Shut-in 9 days

July 17, 1958

Depth	(PC) Working pressure Casing	(MV) (ED) (T) (sig)	(PC) Working tbg. pressure, (sig)	Total
0				
15	204	1103	218	57
30	136	1104	142	61
45	117	1104	122	61
60	108	1105	111	65
180	80	1105	82	66

The results of the tests for the Pictured Cliffs test was 1100 (PC) 0 with an air  
1118 (MV) 0.

The results of the flow tests indicate there is no water leakage.

Very truly yours,

Frank Clark  
Gas Technician

FC/nb

cc: Mr. Bolack  
D. S. Clark (1)  
File

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE July 8, 1958

El Paso Natural Gas Company

960S, 800W; 29-27-8

Mesa Verde

7-5/8

4630

Sand Water Frac.

Bolack No. 13-C (M)

San Juan

New Mexico

Blanco

2"

4830 c/o 4780

Set At: Feet

4751

Shut-in 6/24/58

X

.75

12.365

5-1/2 liner 4374 - 4825

(PC) 673

685

14

(MV) 1113

PSIG 12 PSIA

1125

170

182

PSIG 12 PSIA

341 (Calc.)

76

.75

1.020

.722

Final SIPC (PC) 676

Packer at 4441

1-1/4" at 2413

Q = 12.365 (182) (.9850) (.9129) (1.020)

2064

MCF/D

1265625  
1149344

(1.1011)<sup>.75</sup> (2064) = (1.0749)(2064)

2219

R. R. Davis

Lewis D. Galloway  
L. D. Galloway

# OPEN FLOW TEST DATA

Dual Completion

DATE July 17, 1958

<b>El Paso Natural Gas</b> 960S, 800W; 29-27-8 <b>Pictured Cliffs</b> 7-5/8 2378 <b>Sand Water Frac.</b>		<b>Bolack 13-C (P)</b> San Juan South Blanco 1-1/4 2413 4830 x/o 4780 <b>Shut-in 6/28/58</b> X	
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.75 (PC) 677 80 66	12.365 689 92 .85	19 82 1.007	689 94 .645
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Initial (MV) SIPT = 1105 psig  
 Final (MV) SIPT = 1105 psig

Packer at 4441

CHECK VOLUME  $C \times R_1 \times F_1 \times F_2 \times F_3 \times F_4$

$$12.365 \times 92 \times .9943 \times .9645 \times 1.007$$

1100

SCFD

474721  
 465885

$$1.0189^{.85} \times 1100 = 1.0160 \times 1100$$

1118

Frank Clark

Checked By Tom Grant

*Lewis D. Galloway*  
 L. D. Galloway

SCALE

DATE

No.

DRAWN BY

CHECKED BY