

El Paso Natural Gas Company

El Paso, Texas

August 7, 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 Tapacito Pictured Cliffs Pool. The El Paso Natural Gas Company San Juan 27-5 Unit No. 36 (PM) is located 1650 feet from the North line and 1665 feet from the East line of Section 36, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba 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 173 feet with 150 sacks of cement circulated to the surface.
2. 7 5/8" intermediate casing set at 4108 feet with 150 sacks of cement. Top of the cement is at 3250 feet, which is above the top of the Pictured Cliffs at 3919 feet.
3. 5 1/2" liner set from 4042 feet to 6271 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 five 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 "ECJ" production packer on 2" EUE tubing at 4092 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 this well have been notified of the El Paso Natural Gas Company's intention to dually complete the well, and these offset operators have waived all objections to such plans. Enclosed are copies of the 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.

Copies of the electrical and radioactive logs will be sent to you under separate cover.

It is intended to dedicate the E/2 of Section 36, Township 27 North, Range 5 West to the Mesa Verde formation and the NE/4 of Section 36, Township 27 North, Range 5 West to the Pictured Cliffs formation.

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

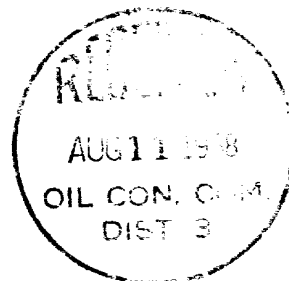
Yours very truly,

ORIGINAL SIGNED E. S. OBERLY

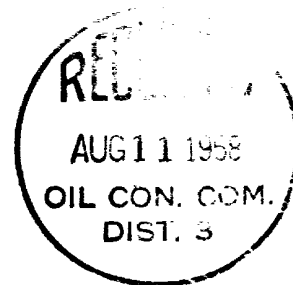
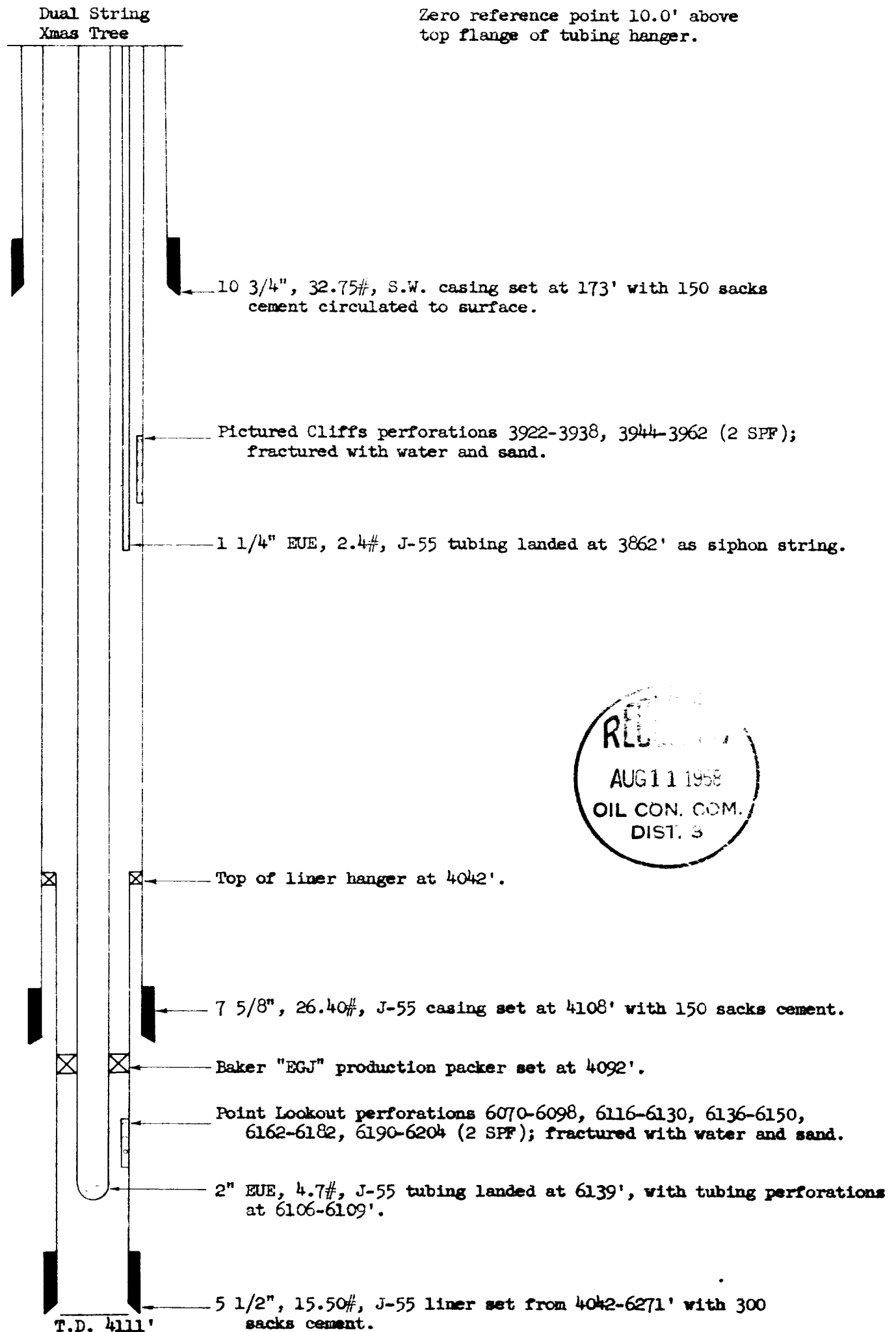
E. S. Oberly
Division Petroleum Engineer

ESG:bjn

cc: NMCCC (2) (Emery Arnold)
Sam Smith
USGS (Phil McGrath)
File



SCHEMATIC DIAGRAM OF DUAL COMPLETION
EL PASO NATURAL GAS COMPANY SAN JUAN 27-5 UNIT NO. 36 (PM)
NE/4 Section 36, T-27N, R-5W



STATE OF NEW MEXICO

COUNTY OF SAN JUAN

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

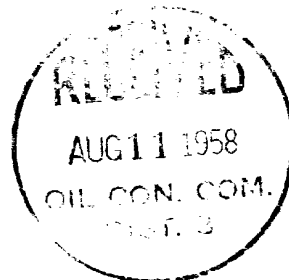
I am an employee of Baker Oil Tools, Inc., and that on July 11, 1958, I was called to the location of the El Paso Natural Gas Company San Juan 27-5 Unit No. 36 (PM) Well located in the SWNE/4 of Section 36, Township 27 North, Range 5 West, N.M.P.M., for advisory service in connection with installation of a production packer. In my presence, a Baker Model "ECJ" Production Packer was set in this well at 4092 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 9 day of Aug, 1958.

Paul MacCall
Notary Public in and for San Juan County,
New Mexico

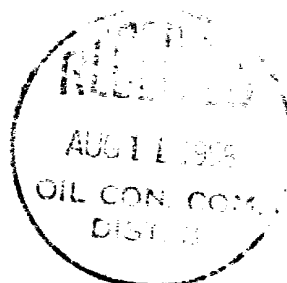
My commission expires February 24, 1960.



EL PASO NATURAL GAS COMPANY

P. O. Box 907
 Carlsington, New Mexico

July 28, 1958



Mr. F. C. Arnold
 Oil Conservation Commission
 1000 Rio Arriba Road
 Alameda, New Mexico

Re: Packer Leakage Test on the El Paso Natural Gas
 Company well, San Juan 27-5 Unit 36 (PM), 1650N,
1665E; 36-27-5, Rio Arriba Co., New Mex.
 (Name - Location - Company)

Dear Mr. Arnold:

The subject well was finally completed in the Pictured Cliffs and Mesa Verde
 zones and a packer was set at 4092 feet. The Pictured Cliffs zone was tested
 through a 3/4" choke for three hours July 21, 1958 with the following data obtained:

IC SIC	<u>893</u>	psig; Shut-in	<u>10</u>	days
PC SIC	<u>895</u>	psig;		
CV SIC	<u>1086</u>	psig; Shut-in	<u>10</u>	days

Time Minutes	PC Flowing Pressure Casing Psig	MV SIC (T) Psig	(MV) Working Pressure, Psig	Temp ° F
0		1086		
15	717	1082		
30	644	1083		64
45	623	1084		65
60	606	1084	623	66
180	452	1086	479	68

The choke volume for the Pictured Cliffs was 5626 MCF/D with an AOF of
7555 MCF/D.

The Mesa Verde zone was tested July 28, 1958 with a 3/4" choke
 for 4 hours with the following data obtained:

IC SIC	<u>992</u>	psig; Shut-in	<u>7</u>	days
PC SIC	<u>994</u>	psig;		
CV SIC	<u>1086</u>	psig; Shut-in	<u>17</u>	days

OPEN FLOW TEST DATA

DUAL COMPLETION

July 28, 1958

El Paso Natural Gas

San Juan 27-5 Unit 36 (M)

1650N, 1665E; 36-27-5

Rio Arriba

New Mexico

Mesa Verde

Blanco MV

7-5/8

4108

2"

6129

6070

6204

6286 c/o 6214

Shut-in 7/11/58

Sand Water Frac

X

.75

12.365

5-1/2 liner 4042 - 6271

(PC) 992

1004

17 (MV)

(MV) 1086

1098

191

203

Calc.

417

65

.75

1.019

650

Initial SIPT (PC) = 994 psig

Packer at 4092

Final SIPC (PC) = 995 psig

12.365 x 203 x 9952 x 9608 x 1.019

2446

1205604
1031715

$(1.1685)^{.75} \times 2446 = 1.1239 \times 2446$

2749

Richard Proctor



Checked By

S. V. Roberts

Lewis D. Galloway
L. D. Galloway

DUAL COMPLETION

July 21, 1958

El Paso Natural Gas

San Juan 27-5 Unit 36 (P)

1650N, 1665E; 36-27-5

Rio Arriba

New Mexico

Pictured Cliffs

Tapacito

7-5/8

4108

1-1/4

3852

3922

2962

6286 c/o 6214

Shut-in 7/11/58

Sand Water Frac.

X

.75

12.365

Packer at 4092

(PC) 893

905 10

(PC) 895

907

452

464

479

491

58

.85

1.052

.68

Initial SIPT (MV) 1086 psig

Final SIPT (MV) 1086 psig

 $12.365 \times 464 \times .9924 \times .9393 \times 1.052$

5626

822649
581568 $1.4145^{.85} (5626) = 1.3428 (5626)$

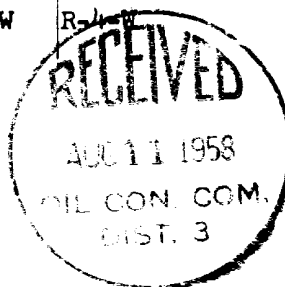
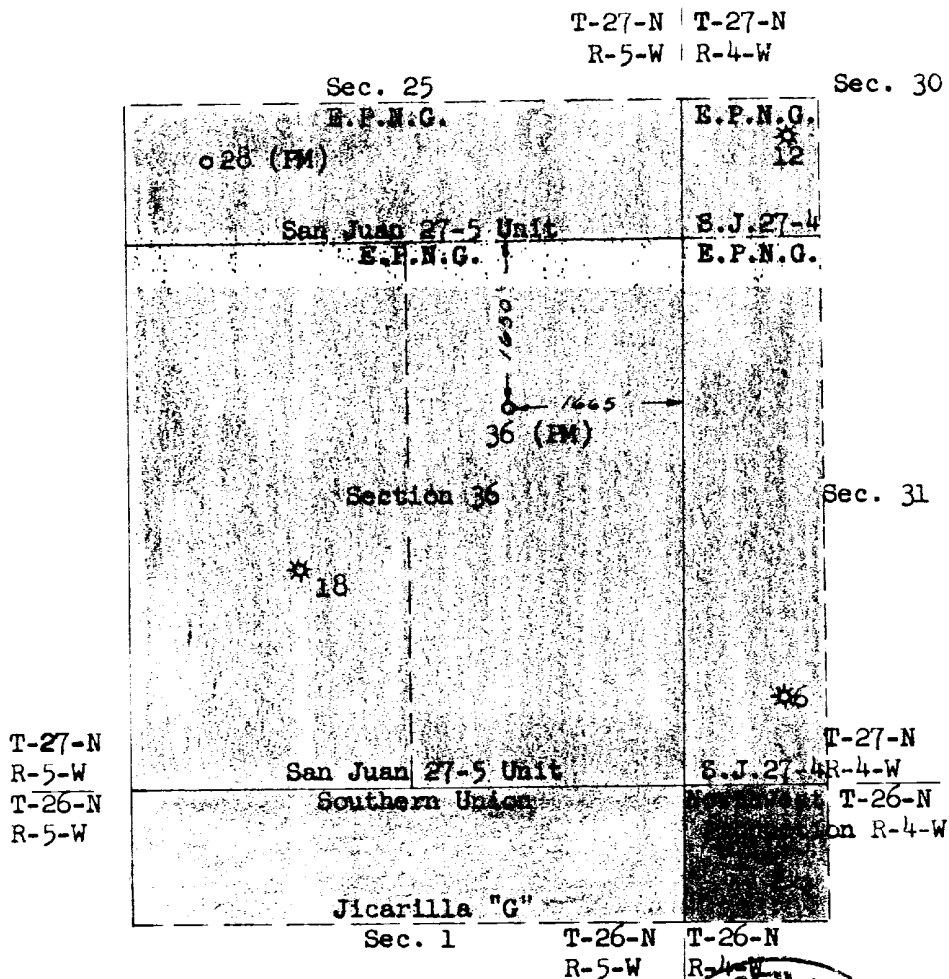
7555

M. W. Rischard

Checked By Tom Grant

Lewis D. Galloway
L. D. Galloway

PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. San Juan 27-5 Unit No. 36 (FM)
and Offset Acreage



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE	DATE	No.
DRAWN BY	CHECKED BY	