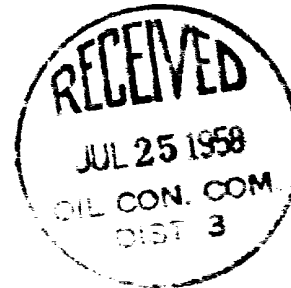


El Paso Natural Gas Company

El Paso, Texas

July 16, 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 Storey No. 11-C (PM) is located 1748 feet from the North line and 1750 feet from the East line of Section 34, Township 28 North, Range 9 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 200 sacks of cement circulated to the surface.
2. 7 5/8" intermediate casing set at 4926 feet and cemented in two stages: 200 sacks at the base of the casing and 150 sacks across the Pictured Cliffs formation.
3. 5 1/2" liner set from 4833 feet to 5474 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 three intervals and fractured with water and sand.
6. The Pictured Cliffs formation was perforated in one interval 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 4882 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.
9. 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.

C O P Y

010019

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.

Since El Paso Natural Gas Company holds all leases immediately adjacent to the drilling block, approval to dually complete this well has not been requested from any other operator. 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 N/2 of Section 34, Township 28 North, Range 9 West to the Mesa Verde formation and the NE/4 of Section 34, Township 28 North, Range 9 West to the Pictured Cliffs formations.

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

Yours very truly,

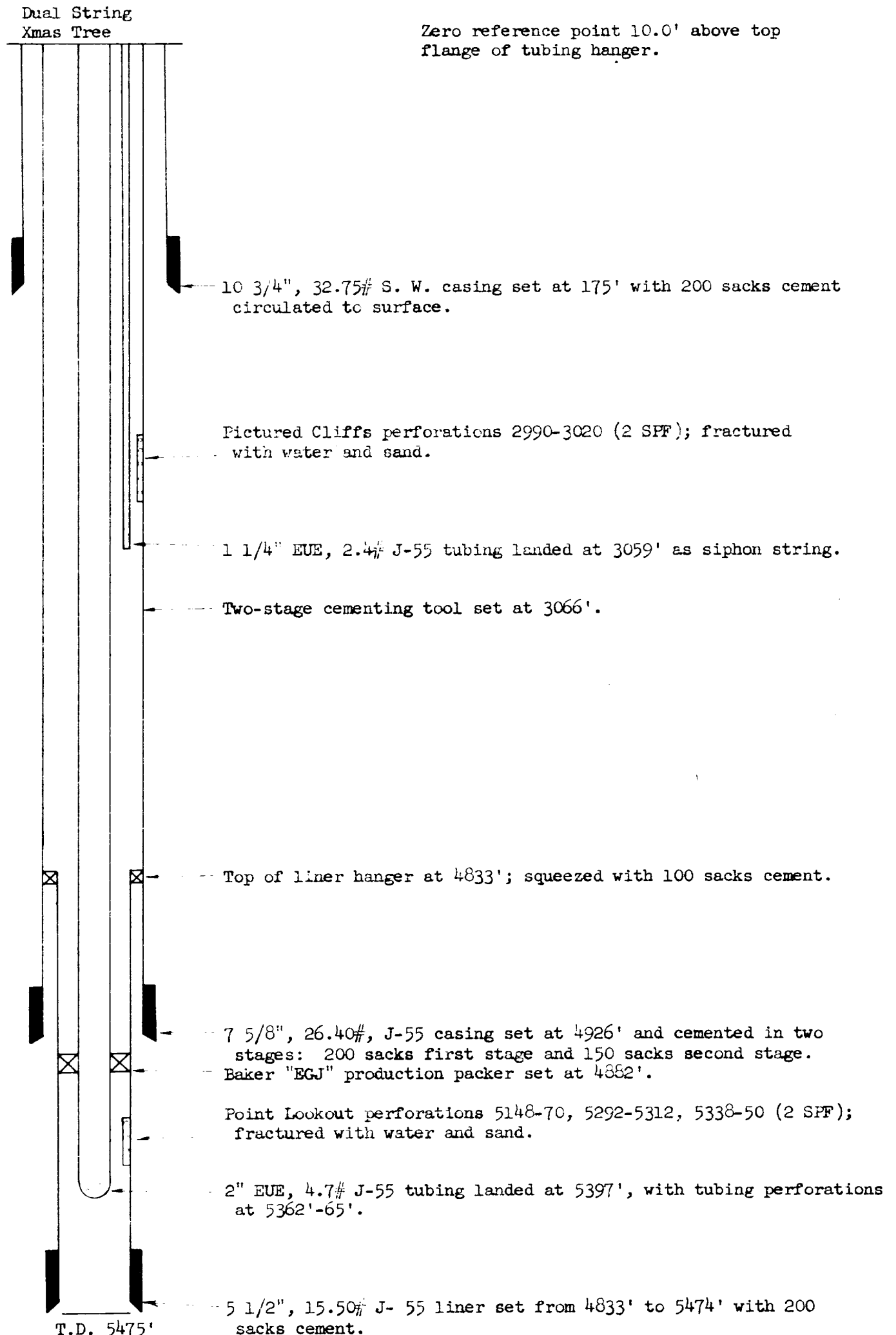
ORIGINAL SIGNED E. S. OBERLY

E. S. Oberly,
Division Petroleum Engineer

ESO:dgb

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

SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. Storey No. 11-C (PM)
NE/4, Section 34, T-28-N, R-9-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
June 15, 1958, I was called to the location of the El Paso Natural
Gas Company Storey No. 11-C (RM) Well located in the SWNE/4 of
Section 34, Township 26 North, Range 9 West, N.M.P.M., for advisory
service in connection with installation of a production packer. In
my presence, a Baker Model "EG" Production Packer was set in this
well at 4,022 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 16th day of July, 1958.

Don A. MacLachlan
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
Birmingham, New Mexico

July 7, 1958

Mr. E. C. Arnold
Oil Conservation Commission
1001 Rio Arriba Road
Albuquerque, New Mexico

Re: Packer Test on the El Paso Natural Gas
Company Well, Storey No. 11-C (PM), 1748N,
1750E; 34-28-9, San Juan County, 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 5853 feet. The Mesa Verde zone was tested through a 3/4" choke for three hours June 30, 1958 with the following data obtained:

OC SIC 715 psig; Shut-in 15 days
PC SIC 715 psig;
WC SIC 982 psig; Shut-in 15 days

Time Minutes	(MV) Flowing Pressure Tubing psig	(PC) SIC (C) psig	() Working Pressure, psig	Perm. %
15	426	717		63
30	386	718		64
45	366	718		65
60	351	718		65
120	309	718		66
180	293	718		67

The choke volume for the Mesa Verde was 3568 MCF/D with an AOF of 5045 MCF/D.

The Pictured Cliffs zone was tested July 7, 1958 with a 3/4" choke for 3 hours with the following data obtained:

OC SIC 731 psig; Shut-in 22 days
PC SIC 731 psig;
WC SIC 996 psig; Shut-in 15 days

Storey No. 11-C (PM)

Page Two

July 7, 1958

Time Minutes	(PC) Working Pressure Casing	(PC) Working Pressure Tubing	MV	(T) (psi)	(PC) Working Pressure Tubing, psi	Temp, F
15	490			998		62
30	445			1002	452	64
45	399			1003		66
60	373			1004	383	68
120	308			1005	319	68
180	273			1005	282	68

The casing pressure test for Pictured Cliffs test was 3474 (CPI) with an ADP
of 4015 (CPI).

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

Very truly yours,

R. R. Davis
Gas Engineer

RRD/nb

cc: Mr. J. H. Rodgers,
E. A. Oberly,
File

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE June 30, 1958

Operator El Paso Natural Gas		Lease Storey 11-C (M)	
Location 1748N, 1750E; 34-28-9		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing Diameter 7-5/8	Set At Feet 4915	Tubing Diameter 2	Set At Feet 5388
Flow Zone From 5248	To 5350	Total Depth 5475 c/o 5438	Shut-in 6/15/58
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, inches .75		Packer Depth, ft 12.365		Packer at 5853 5-1/2 liner 4833 - 5475	
Shut-in Pressure, psig (PC) 715	Flowing Pressure, psig 293	Flowing Rate, bbl/d 305	Days Shut-in 15	Shut-in Pressure, Tubing (MV) 982	Flowing Rate, bbl/d 994
Temperature, °F 67		Viscosity, cp .75		Working Pressure, Flow Calc. 604	Flowing Rate, bbl/d 604
				Flow From Tables 1.036	Gravity .710

Final SIPC (PC) = 718 psig

CHOKE VOLUME $Q = Q_c \times R_c \times F_c \times F_g \times F_v$

$$Q = 12.365 (305) (.9933) (.9193) (1.036) \times 3568 \text{ MCF/D}$$

$$Q = Q_c \left(\frac{P_c}{P_w} \right)^n$$

$$\left(\frac{988036}{623220} \right)^n$$

$$(1.5853)^{.75} \times 3568 = 1.4140 \times 3568$$

5045

MCF/D

R. R. Davis

Lewis D. Galloway
L. D. Galloway

OPEN FLOW TEST DATA

DUAL COMPLETION

July 7, 1958

El Paso Natural Gas Company

Storey 11-C (P)

1748N, 1750E; 34-28-9

San Juan

New Mexico

Pictured Cliffs

South Blanco P.C.

7-5/8

4915

1-1/4

3049

2990

3020

5475 c/o 5438

Shut-in 6/15/58

Sand Water Frac

X

.75

12.365

5-1/2 liner 4833 - 5475

(PC) 731

743

22

(PC) 731

743

273

285

282

294

68

.85

1.026

.640

Initial SIPT (MV) = 996

2" at 5388

Final SIPT (MV) = 1005

Packer at 5853

(12.365)(285)(.9924)(.9682)(1.026)

3,474

552049
465613

$1.1856^{.85} (3474) = 1.1558 (3474)$

4015

R. R. Davis

L. D. Galloway