## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

or file

7-3-58

# APPLICATION FOR DUAL COMPLETION

	Manco M. V & Sc	outh Blanco P.	. c.	County Rio Arr		october 9, 1958
perator	El Pago Matural	Gas Company	Lease Rincon			11 No.
ocation	Unit	Section		wnship	Ra	107 (PM)
f Well	K	19		EIT	1	
Has th	e New Mexico Oil Conse		heretofore author		ion of a well in	these same pools or in the same
zones	within one mile of the st	ubject well? YES	NO 👗	· ·		and the pools of make same
	wer is yes, identify one s				ease and Wall	No ·
	, ,			, operator, i	Lease, and wen	140,:
The fo	llowing facts are submitt	ted:				
			Upper Zon	e		Lower Zone
o. Nat	me of reservoir	Pietur	ed Cliffs		Maga	Verde
b. Top	and Bottom of		· · · · · · · · · · · · · · · · · · ·		hych Lean	(Cliff House)
F	Pay Section		_		1416-5138	(Manager)
(	Perforations)	3100-3	160		5306-5492	(Point Lockout)
c. Typ	e of production (Oil or C	Gas) Gas			(foe	
d. Met	hod of Production					
(1	Flowing or Artificial Life	t) Flowin	<b>6</b>		71.cm	ine
The fol	llowing are attached. (P	lease mark YES of N	(O)			
	tervals, tubing strings	s, including diamete	rs and setting de	t casing strings, inclu- pth, location and type	of packers and so	etting, top of cement, perforated side door chokes, and such othe
	tervals, tubing strings	s, including diamete	rs and setting de	oth. location and type	of package and st	side does shake a sale at
Yes	information as may be	e pertinent.		•••	•	and dear one control and back of the
	b. Plat showing the loc	cation of all wells or	n applicant's lea	se, all offset wells on	offset leases.	and the names and addresses of
_	operators of all lease	e offeetting applica-		•	,	and names and addresses of
		a orracting applicat	nt's lease.			
<b>D</b>				fset operator, or in lie	u thereof. evide	nce that said offset operators h
		to such dual complet	tion from each of	fset operator, or in lie	u thereof, evide	nce that said offset operators h
No No	c. Waivers consenting a been furnished copies	to such dual complete of the application.	tion from each of			
	c. Waivers consenting a been furnished copies d. Electrical log of the thereon. (If such log	to such dual complet of the application.' well or other accep is not available at t	tion from each of t table log with to he time applicati	ps and bottoms of prod on is filed, it shall be	lucing zones and	l intervals of perforation indicat
	c. Waivers consenting a been furnished copies d. Electrical log of the thereon. (If such log	to such dual complet of the application.' well or other accep is not available at t lease on which this	tion from each of table log with to he time applicati well is located to	ps and bottoms of prod on is filed, it shall be	lucing zones and	l intervals of perforation indicat
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Vere all of such CERTIF r my su	been furnished copies d. Electrical log of the thereon. (If such log l offset operators to the l l Paco Hattara  operators listed in Item notification  FICATE: I, the undersign operators and direction and directi	to such dual complete of the application. well or other accept is not available at the lease on which this lease on the lease on which this lease on the le	table log with to he time applicati well is located to is unit conditions. The located to is unit conditions and the located to the located to a unit conditions and the located therein are to company an applications.	by of this application?  The said company to make true, correct and complete true, correct and c	VES NO  of the Signature approval, the	Intervals of perforation indicate rovided by Rule 112—A.)  ess.  958  COMMENT OF THE PROPERTY
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Vere all f such EERTIF r my su Sho Con afte	been furnished copies d. Electrical log of the thereon. (If such log l offset operators to the l language of the language of t	to such dual complete of the application. well or other accept is not available at the lease on which this lease on which the lease on the lease of the leas	table log with top he time applicati well is located to is unit con  d furnished a cop the lam authorized b ated therein are to company an applic od of twenty (20) nest for hearing is	by of this application?  The said company to make true, correct and compileration for administrative days from date of recess received by the Santa	of the Signature approval, the cipt by the Commanda Fe office, the	Intervals of perforation indicatorovided by Rule 112—A.)  ess.  958  COMMENT OF THE PROPERTY O



I, Mack M. Makaffey, being first duly swern upon my onth depose and may as follows:

I am an amployee of Bahar Oll Tools, Inc., and that on Jame 12, 1978, I was called to the location of the El Faco Natural One Company Risson Unit No. 107 (PM) Well located in the HHM/A of Section 19, Township 27 North, Range 6 West, H.M.P.M., for advisory service in ecomoction with installation of a production packer. In my presence, a Rahar Model "HSJ" Broduction Packer was set in this well at 1989. Feet in accordance with the usual practices and customs of the industry.

Mark M. Wahaffy

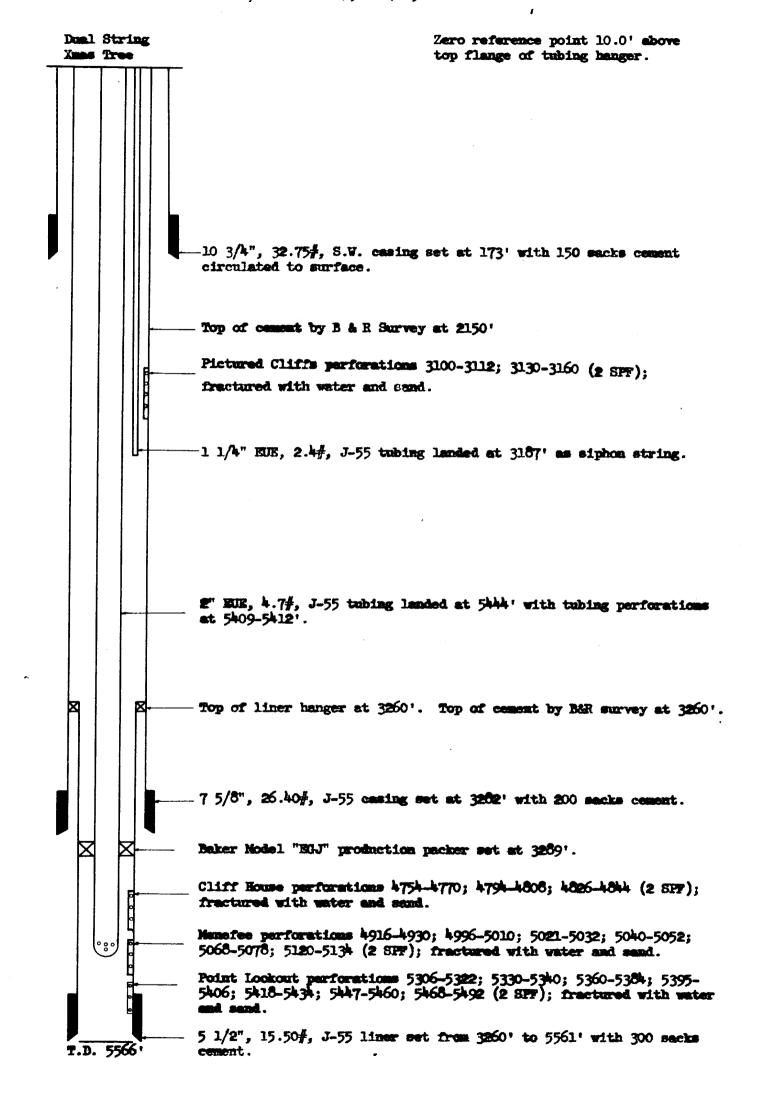
Subscribed and summ to before me, a Notary Public in and for San Jan.
County, New Maxieo, the 22nd day of Ook. 19 P

Hotory Milita in and for San July ...

My consission expires February 24, 1960.

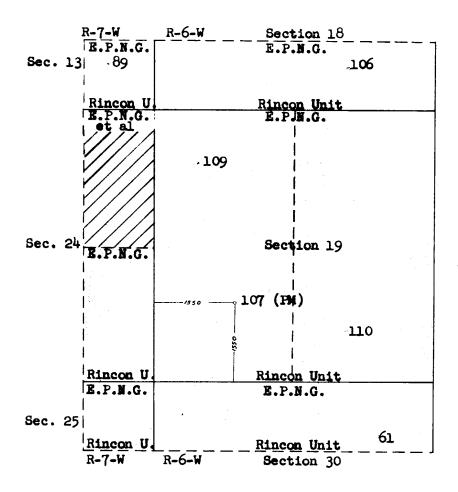
RIGHTED OCT 27 1958 COM.

# SCHEMATIC DIAGRAM OF DUAL COMPLETION El Paso Natural Gas Company Rincon Unit No. 107 (FM) SW/4 Section 19, T-27-N, R-6-W



### PLAT SHOWING LOCATION OF DUALLY COMPLETED El Paso Natural Gas Co. Rincon Unit No. 107 (PM) and Offset Acreage

T-27-N, R-6-W



Not committed to Unit.

EL	PASO NATURAL GAS			
SCALE	DATE	No.		
DRAWN BY	CHECKED BY			

FORM 7-132 (10-56)

#### EL PASO NATURAL GAS COMPANY

965

966

966

968

968

966

psig; Shut-in 11 days

Mr. E. C. Arnold

Dear Mr. Arnold:

Time

15

30

45

60

120

180

3256 MCF/D.

The Pictured Cliffs

Minutes

1000 Rio Brazos Road Aztec, New Mexico

Oil Conservation Commission

PC SIPT 963 raig;

MV SIPT 1103

(MV) Flowing Pressure

402

369

333

317

266

228

for 3 hours with the following data obtained:

PC SIPT 967

MV SIPT 1089

psig;

Tubing Psig

P. O. Box 997

Farmington, New Mexico

September 16, 1958 Packer Leakage Test on the El Paso Natural Gas Company Well, Rincon 107 (PM), 1550S, 1550W; 19-27-6, Rio Arriba County, New Mexico (Name - Location - Company) The subject well was dually completed in the Pictured Cliffs and Mesa Verde zones and a packer was set at 3289 feet. The Mesa Verde zone was tested through a 3/4" choke for three hours Sept. 5, 1958 with the following data obtained: PC SIPC 963 psig; Shut-in 45 days psig; Shut-in 45 days (MV) Working (PC) SIP (C) Psig Temp C F Fressure, Psig 62 63 63 64 64 Calc. 462 The choke volume for the Mesa Verde was 2803 MCF/D with an AOF of zone was tested Sept. 16, 1958 with a 3/4" choke PC SIPC 967 psig; Shut-in 56 days

Time Minutes	(PC) Flowing Pressure Casing Psig	(MV) SIP (T) Psig	(PC) Working Pressure, Psig	Temp OF
15	460	1089		54
<b>3</b> 0	<b>35</b> 4	1090		55
	301	1090		<b>5</b> 6
<b>45</b> 60	266	1090		57
180	1 <b>5</b> 5	1091	157	62

The choke volume for the Pictured Cliffs test was 2040 MCF/D with an AOF of 2093 MCF/D.

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

Very truly yours,

H. L. Kendrick Gas Engineer

HLK/nb

cc: W. M. Rodgers

E. S. Oberly (6)

File

#### OPEN FLOW TEST DATA

DUAL CO	MPI	ETI	ON
---------	-----	-----	----

DATE September 5, 1958

Operator			Lease	
El Paso Na	tural Gas		Rincon 107 (M)	
Cocation			County	State
15508, 155	50W; Sec. 19-27-6		Rio Artiba	New Mexico
normation			Pool	
Mesa Verde	•		Blanco MV	
Casing Diameter	√ Šet Ati	ent	Tubing: Diameter	Set At: Feet
	7-5/8	326 <del>9</del>	2"	5434
a, Zone: From			Total Depth	T
	4754	5492	5566 c/o 5517	Shut-in 7/22/58
tinu in Method			Flow Through Casing	Flow Through Tubing
Sand Water	r Frac.		di	x

TOP HE DIER, LIEVES	Criske Consta	nt _		
•75		12.365	5-1/2 liner 3260 -	5561
1	PSIS 1 PSIA	Daik Shut-In	Shut-In Pressure, Tubing PSIG	
963	(PC) 975	45	1103 (MV)	1115 (MV)
!	PSIG 12 FKA		Working Pressure Fw PSIG	+ 12 - PSIA
228.	( MV)	240 (MV)	Calc.	474
, Temperature: T	F -		Fov (From Tables)	. Gravit,
6 <b>5</b>		• 75	1.026	.700

Initial SIPT (PC) = 963 psig Final SIPC (PC) = 966 PSIG

Packer at 3289 1-1/4" at 3177

CHONE VOLUME OF C x P. x H x Fg x For

Q = 12.365 x 240 x .9952 x .9258 x 1.026 2803 MCF D

$$QF(D_{i}) = 1 \times \text{mof} \quad Q \qquad \qquad D_{i} \qquad D_{i}$$

 $(1.2206)^{.75} \times 2803 = 1.1615 \times 2803$ 

\* 3256 MCF D

Jesse B. Goodwin

Checked By M. W. Rischard

A 15,8 St 12 38

#### EL PASO NATURAL GAS COMPANY

#### OPEN FLOW TEST DATA

DUAL COMPLETION

DATE September 16, 1958

Cl Paso Natural	Ges	Rincon 107 (P)	
15508, 1550W; 19	-27-6	County Rio Artiba	State New Mexicô
Formation Pictured Cliffs		South Blanco	
Casing: Diameter 7-5/8	Set At: Feet	Tubing: Diameter 1-1/4	Set At: Feet 3177
Pay Zone: From 3100	т. 3160	Total Depth: <b>55</b> 66	Shut in 7/22/58
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing

Choke Size, Inches		Choke Constant: C 12.365		5-1/2" liner 3260 -	5561
Shut-In Pressure, Casing, 967	PSIG	- 12 = PSIA 979	Days Shut-In <b>5</b> 6	Shut-In Pressure, Tubing PSIC 967	3 + 12 = PSIA <b>979</b>
Flowing Pressure: P	PSIG	- 12 = PSIA	167	Working Pressure: Pw PSIG	+ 12 = PSIA 169
Temperature: T	°F	n =	85	Fpv (From Tables) 1.014	Gravity .631

Initial SIPT (MV) = 1089 PSIG Final SIPT (MV) = 1091 PSIG Packer at 3289

CHOKE VOLUME = Q = C x P, x F, x Fg x Fpv

 $Q = 12.365 \times 167 \times .9981 \times .9759 \times 1.014$ 

2040 MCF/D

OPEN FLOW = Aof = Q 
$$\begin{pmatrix} 2 & \\ P_c & \\ P_c - P_w \end{pmatrix}$$

Acf = 
$$\left(\frac{958441}{929880}\right)^n = (1.0307)^{.85} = 1.0260 \times 2040$$

Aof = 2093 MCF/D

TESTED BY Jesse B. Goodwin

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

Checked By S. V. Roberts

L. D. Galloway