

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Paul Case Lease Lechner

Well No. 1 Unit Letter F S 30 T 29N R 10W Pool Astec - Fruitland

County San Juan Kind of Lease (State, Fed. or Patented) Patented

If well produces oil or condensate, give location of tanks: Unit S T R

Authorized Transporter of Oil or Condensate _____

Address _____

(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas El Paso Natural Gas Co.

Address _____

(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

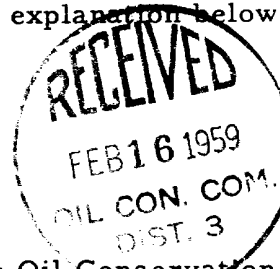
Reasons for Filing: (Please check proper box) New Well ()

Change in Transporter of (Check One): Oil () Dry Gas () C'head () Condensate ()

Change in ~~XXXXXXXXXX~~ Operator (X) Other ()

Remarks: _____ (Give explanation below)

Elvis Roberts previous operator



The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 11th day of February 19 59

By J. A. Rugga

Approved FEB 16 1959 19 59

Title Consulting Engineer

OIL CONSERVATION COMMISSION

Company Paul Case

By Original Signed Emery C. Arnold

Address 1007 N. Dustin
Farmington, New Mexico

Title Supervisor Dist. 3

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3 HMOCC
1 Case
1 Roberts
1 Empire States
1
1 File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Astec Formation Fruitland County San Juan
Initial X Annual _____ Special _____ Date of Test 2-9-59
Company Paul Case Lease Lochner Well No. 1
Unit F Sec. 30 Twp. 29N Rge. 10W Purchaser El Paso Natural Gas Co.
Casing 2-7/8 Wt. 6.5 I.D. _____ Set at 1587 Perf. 1500 To 1538
Tubing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 1500 To 1538 L 1500 xG .600 -GL 900 Bar.Press. _____
Producing Thru: Casing X Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 1-30-59 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXXX) (Choke) (XXXXX) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								647		
1.										
2.										
3.		3/4	226		50					3 hrs.
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.							
3.	12.3650		238	1.0098	1.000	1.020	3031
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c 5.551 (1-e^{-s}) 0.066
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 699 P_c 434

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /F _c
1.									
2.									
3.	238	56.64	16.84	284	18.71	75.35	358.65		1.210
4.									
5.									

Absolute Potential: 3565 MCFPD; n .85 1.176

COMPANY Paul Case
ADDRESS 1007 N. Dustin, Farmington, New Mexico
AGENT and TITLE T. A. Dugan, Consultant Chg. Signed by T. A. Dugan
WITNESSED _____
COMPANY _____

REMARKS



INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia

P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressibility factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

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