

3-OCC
1-WD
1-Dallas
1-Parrish
1-File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 11/7/60
Company Southwest Production Co. Lease Edgar Federal Well No. #2
Unit G Sec. 1 Twp. 27N Rge. 12W Purchaser El Paso Natural Gas Co.
Casing 5 1/2 Wt. 15.5 I.D. 4.990 Set at 6532 Perf. 6410 To 6430
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 6416 Perf. _____ To 6416
Gas Pay: From 6410 To 6430 L 6416 xG .67 -GL 4298 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single-Gas
Single-Bradenhead-G. G. or G.O. Dual _____
Date of Completion: 10/26/60 Packer - Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXXXX) (Choke) (XXXXXX) 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.	
1.		3/4"	281		74	1920	74	7-Days
2.						640		3-Hrs.
3.								
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.	12.3650		292	.9868	.9463	1.029	3,469
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1932 P_c² 3732.2
P_w 652 P_w² 425.1

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 P _c
1.						425.1	3307.1		.296
2.									
3.									
4.									
5.									

Absolute Potential: 4.197 MCFPD; n .75
COMPANY Southwest Production Company
ADDRESS 162 Petroleum Center Bldg., Farmington, New Mexico
AGENT and TITLE George L. Hoffman, Production Foreman
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} = Supercompressability 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 .

STATE OF NEW MEXICO	
OIL CONSERVATION COMMISSION	
AZTEC DISTRICT OFFICE	
NUMBER OF COPIES RECEIVED	
D. S. 12	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
PRODUCTION	
OPERATOR	