

NEW MEXICO OIL CONSERVATION COMMISSION

Aug 10 8 52 AM '65

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Bluitt Formation San Andres County Roosevelt
Initial 1 Annual _____ Special _____ Date of Test 7-30-65
Company Fulmont Oil Corporation Lease Federal Well No. 1
Unit J Sec. 10 Twp. 8 - 3 Age. 37 - 3 Purchaser None
Casing 4 1/2 Wt. 9.5 I.D. _____ Set at 4282 Puff. 4410 To 4526
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 4366 Puff. Open Ended To _____
Gas Pay: From 4410 To 4526 L. 11.65 M. 11.65 Bar. Press. 13.2
Producing Thru: Casing _____ Tubing 1 Type Well Single
Single-Bradenhead-G. G. or G.O. Dual _____
Date of Completion: 7-5-65 Packer None Reservoir Temp. 11

OBSERVED DATA

Tested Through (Prover) (Choke) (Motor) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	72 hours									
1.	2"	1/2"	72		12	1243	76	1243	76	1 hr
2.	2"	1"			12	1155	78	1165	78	1 hr
3.	2"	1"			12		79	1020	79	1 hr
4.	2"	1"			12	500	80	800	80	1 hr
5.							80	752	80	1 hr

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wPF}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	5.542		82.2	1.117	0.8944	1.000	425.7
2.	22.0662		9.2	1.0250	0.8944	1.000	79.3
3.	22.0662		50.2	1.0157	0.8944	1.000	1004.2
4.	22.0662		28.2	1.0117	0.8944	1.000	561.1
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio None cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
Specific Gravity Separator Gas 0.750
Specific Gravity Flowing Fluid _____
F_c _____ (1-s⁻⁸) P_c 1373

$$F_c = 1443.2 P_c^{0.85}$$

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	F _t F _g F _{pv} (F _t F _g F _{pv}) ²	P _t ² F _t F _g F _{pv} (P _t ² F _t F _g F _{pv}) ²	F _t ² F _g ² F _{pv} ² (F _t ² F _g ² F _{pv} ²) ²	Cal. P _w	P _w P _c
1.	Bottom Hole Pressure Recorded				1443.2	2082			
2.	with Aneroid BPG-3 Gauge				1359.2	1247	236		
3.	Back Pressure Curve 1s P _t ² -P _c ²				1188.2	1412	671		
4.					1020.2	1077			
5.					877.2	1278			

Absolute Potential: 1550 MCFPD; n _____
COMPANY Fulmont Oil Corporation
ADDRESS Box 1255 Midland, Texas
AGENT and TITLE R. C. Reynolds
WITNESSED Richard Turner
COMPANY Easteller, Inc.

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 .