

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea
Initial _____ Annual _____ Special X Date of Test 4-8/4-12-57
Company R. Olsen Oil Company Lease Blankenship Well No. 1
Unit J Sec. 18 Twp. 24 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 5 1/2 Wt. 15.5 I.D. _____ Set at 3445 Perf. _____ To _____
Tubing 2 Wt. 4.7 I.D. _____ Set at 3180 Perf. _____ To _____
Gas Pay: From 3152 To 3205 L 3180 xG .655 -GL 2083 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 8/16/46 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Pressure) (Gauge) (Meter) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						867				72
1.	4	1.000	513	9.6	56	762				24
2.	4	1.000	528	14.4	62	703				24
3.	4	1.000	509	25.0	65	635				24
4.	4	1.000	512	36.0	62	567				24
5.										

FLOW CALCULATIONS

No.	Coefficient / Flange (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.	6.135	71.10		1.0039	.9571	1.057	444
2.	6.135	88.38		.9990	.9571	1.059	549
3.	6.135	114.24		.9952	.9571	1.051	702
4.	6.135	137.48		.9981	.9571	1.055	850
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.936 (1-e^{-s}) 0.134
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 880.2 P_c² 774.8

No.	XXX 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	XXX P _c	XXX P _w
1.	778.2	605.6	4.411	19.46	2.61	608.2	166.6		
2.	716.2	512.9	5.455	29.76	3.99	516.9	257.9		
3.	648.2	420.2	6.975	48.65	6.52	426.7	348.1		
4.	580.2	336.6	8.446	71.33	9.56	346.2	428.6		
5.									

Absolute Potential: 1,400 MCFPD; n .849

COMPANY R. Olsen Oil Company

ADDRESS 2805 Liberty Bank Building, Oklahoma City, Oklahoma

AGENT and TITLE Philip Randolph, Vice President

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 .