

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Jalmat Formation Yates County Lea
Initial _____ Annual _____ Special X Date of Test 11-12 to 11-16-56
Company R. Olsen Oil Company Lease King "SE" Well No. 1
Unit 0 Sec. 1 Twp. 23 S Rge. 36 E Purchaser El Paso Natural Gas Company
Casing 7 Wt. 20 I.D. 6.456 Set at 2978 Perf. _____ To _____
Tubing 2 Wt. 4.7 I.D. 1.995 Set at 1570 Perf. _____ To _____
Gas Pay: From 3108 To 3448 L 1570 xG .655 -GL 1028 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: 5-17-50 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (XXXXXX) (XXXXXX) (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						842				72
1.	4	1.000	762	8.41	90	762				24
2.	4	1.000	726	16.81	89	727				24
3.	4	1.000	713	22.09	82	714				24
4.	4	1.000	688	39.69	80	690*				24
5.										

FLOW CALCULATIONS

No.	Coefficient f _{lg} (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.	6.135	83.52		.9723	.9571	1.069	510
2.	6.135	116.90		.9732	.9571	1.067	713
3.	6.135	126.64		.9795	.9571	1.066	776
4.	6.135	166.80		.9813	.9571	1.063	1,022
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.936 (1-e^{-s}) .068

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 855.2 P_c 731.4

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	Q Q	XXX XXX
1.	775.2	600.9	5.07	25.70	1.75	602.7	128.7		
2.	740.2	547.9	7.08	50.13	3.41	551.3	180.1		
3.	727.2	528.8	7.71	59.44	4.04	532.8	198.6		
4.	703.2	494.5	10.15	103.02	7.01	501.5	229.9		
5.									

Absolute Potential: 2,750 MCFPD; n .960COMPANY R. Olsen Oil CompanyADDRESS 2805 Liberty Bank Building, Oklahoma City, OklahomaAGENT and TITLE Philip Randolph, Vice President

WITNESSED _____

COMPANY _____

REMARKS

*Not enough draw down because of small chokes.

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 .

R. Olsen Oil Co.
 King SE #1
 Sec. 1-7235-R36E Lea N.M.
 11-16-56

