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 12-3 to 12-7-56

Company R. Olsen Oil Company Lease Courtland Meyer Well No. 1

Unit J Sec. 6 Twp. 24 S Rge. 37 E Purchaser El Paso Natural Gas Company

Casing 7 Wt. 23# I.D. ____ Set at 3476 Perf. ____ To ____

Tubing 2½ Wt. 6.5 I.D. ____ Set at 3585 Perf. ____ To ____

Gas Pay: From 3064 To 3191 L 3064 xG .650 -GL 1992 Bar.Press. 13.2

Producing Thru: Casing X Tubing ____ Type Well G.O. Dual

Date of Completion: 8-24-54 Packer ____ Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Prover)~~ ~~(Choke)~~ (Meter) Type Taps ____

No.	Flow Data ~~(Prover)~~ (Line) Size	~~(Choke)~~ (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI								907		72
1.	4	1.000	539	39.7	102			757		24
2.	4	1.000	557	58.5	100			723		24
3.	4	1.000	540	82.8	104			685		24
4.	4	1.000	535	91.2	100			670		24
5.										

FLOW CALCULATIONS

No.	Coefficient ~~(24-Hour)~~ flg. (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	148.02		.9618	.9608	1.042	874
2.	6.135	182.64		.9636	.9608	1.045	1,085
3.	6.135	214.00		.9602	.9608	1.042	1,263
4.	6.135	223.56		.9636	.9608	1.042	1,323
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____

Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____

P_c 0.865 $(1-e^{-s})$ 0.128 P_c 920.2 P_c^2 846.8

No.	~~P_w~~ P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	~~P_w~~ P_t	~~P_w~~ P_t
1.	770.2	593.2	0.8	0.6	0.08	593.3	253.5		
2.	736.2	542.0	0.9	0.8	0.10	542.1	304.7		
3.	698.2	487.5	1.1	1.2	0.20	487.7	359.1		
4.	683.2	466.8	1.1	1.2	0.20	467.0	379.8		
5.									

Absolute Potential: 2,900 MCFPD; n .987

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.