

NEW MEXICO OIL CONSERVATION COMMISSION

MAR 7 PM 3:10

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Jalmat Formation Iates County Lea

Initial Annual Special X Date of Test 2-4/2-8-1957

Company R. Olsen, Personal Lease Dyer Well No. 3

Unit H Sec. 31 Twp. 25 Rge. 37 Purchaser KPMO

Casing 65/8 Wt. 19.5 I.D. Set at 2792 Perf. To

Tubing 2 1/2 Wt. 6.5 I.D. Set at 2960 Perf. To

Gas Pay: From 2945 To 2977 L 2960 xG 0.670 GL 1983 Bar. Press. 13.2

Producing Thru: Casing Tubing X Type Well Single

Date of Completion: 7-11-1954 Packer None Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp.

OBSERVED DATA

Tested Through (Gauge) (Gauge) (Meter)Type Tag Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psia	Diff. ΔP	Temp. $^{\circ}F$	Press. psig	Temp. $^{\circ}F$	Press. psig	Temp. $^{\circ}F$	
SI						355				72
1.	4	1.500	164	10.2	60	218				24
2.	4	1.500	174	12.3	62	188				24
3.	4	1.500	153	15.2	64	171				24
4.	4	1.500	*							
5.										

FLOW CALCULATIONS

No.	Coefficient Flange (41.400)	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	42.57	1.000	.9463	1.018	574
2.	13.99	47.86	.9981	.9463	1.019	644
3.	13.99	50.25	.9962	.9463	1.018	673
4.						
5.						

Pressure at the well

Gas Liquid Conversion Ratio cc/lb.

Gravity of Liquid Hydrocarbons deg.

F_c 5.866 $(1-e^{-B})$ 0.128

Specific Gravity of Gas 0.670

Specific Gravity, Slowing Flow

P_1 368.2 P_2 135.6

No.	P_1	P_2	ΔP	$(\Delta P)^2$	P_1^2	P_2^2	$P_1^2 - P_2^2$	C_d	F
1.	231.2	53.5	3.37	11.36	1.45	54.9	80.7	231.3	.61
2.	201.2	40.5	3.78	14.29	1.83	42.3	93.3	205.7	.53
3.	184.2	33.9	3.95	15.60	1.99	35.9	99.7	189.5	.48
4.									
5.									

Absolute Potential 850 P_{atm} .763

COMPANY R. Olsen-Howard Olsen

ADDRESS Drawer 2, Jal., N.M.

AGENT and TITLE J.W. Payne, Jr.

WITNESSED H.R. Kerby

COMPANY KPMO

REMARKS

* The Subject well is produced with a plunger lift and was impossible to secure a four point test with a good spread.

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 .