

Pool Subart Formation Yates County Lea  
Initial \_\_\_\_\_ Annual \_\_\_\_\_ Special X Date of Test 12-22-56/2-4-57  
Company R. Olson (Personal) Lease Jack Well No. 1  
Unit B Sec. 8 Twp. 24 Rge. 37 Purchaser EPMS  
Casing 5 1/2" Wt. 27.0 I.D. \_\_\_\_\_ Set at 340 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Tubing 2" Wt. 4.7 I.D. \_\_\_\_\_ Set at 330 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 2864 To 2904 L 2864 xG 0.440 -GL 1000 Bar.Press. 13.2  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well G.O. Dual  
Date of Completion: 1-8-1958 Packer 3405 Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (~~Flowmeter~~) (~~Choke~~) (Meter) Flange

Flow Data										Duration of Flow Hr.
No.	(Flowmeter) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	T °F.	psig	°F.	psig	°F.	
SI										
1.	4	1.900	805	12.76	96			805		24
2.	4	1.900	790	12.20	77			790		24
3.	4	1.900	785	11.10	76			785		24
4.	4	1.900	690	49.00	75			690		24
5.										

FLOW CALCULATIONS

No.	Coefficient Flange (24-Hour)	$\sqrt{h_{wp} P_f}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	102.76		.9833	.9935	1.007	1.434
2.	13.99	102.08		.9833	.9935	1.007	1.434
3.	13.99	102.08		.9833	.9935	1.007	1.434
4.	13.99	102.08		.9833	.9935	1.007	1.434
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
P<sub>c</sub> 1.022 (1-e<sup>-s</sup>) 0.122  
Specific Gravity Separator Gas .640  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 921.2 P<sub>c</sub> 843.6

No.	P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> P <sub>c</sub>
1.	921.2	848502.4	1.4	1.96	0.6	872.9	176.7	921.2	0.887
2.	921.2	848502.4	1.3	1.69	1.3	912.4	207.8	921.2	0.882
3.	921.2	848502.4	1.2	1.44	1.9	924.9	203.7	921.2	0.782
4.	690.0	476100.0	1.0	1.00	2.6	690.0	776.2	671.2	0.722
5.									

Absolute Potential: 4,300 MCFPD; n .698  
COMPANY R. Olson (Personal)  
ADDRESS Donner 2, 2nd, N.M.  
AGENT and TITLE J.N. Rogers, Jr.  
WITNESSED WPI G. Smith  
COMPANY EPMS

REMARKS

*[Handwritten notes and signatures]*

## 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  $P_t$ .