N EXICO OIL CONSERVATION COM

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Jalmat** Formation **Yates** County **Lea**

Initial **X** Annual _____ Special _____ Date of Test **10-25-60**

Company **Olsen Oils, Inc.** Lease **Meyers "B"** Well No. **3**

Unit **C** Sec. **13** Twp. **24** Rge. **36** Purchaser **None**

Casing **7** Wt. **23.0** I.D. _____ Set at **3704** Perf. **3002** To **3226**

2 joints 1½" bottom

Tubing **2** Wt. **4.7** I.D. _____ Set at **3256** Perf. _____ To _____

This well has 2 strings of tbg.

Gas Pay: From **3002** To **3226** L _____ xC ***.665** =GL _____ Bar.Press. **13.2**

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

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: **10-7-60** Packer **3570** Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data (Prover) (~~Line~~) Size	Flow Data (~~Choke~~) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						454		463		48
1.	2	.250	414		90	416		437		3
2.	2	.375	360		83	365		398		3
3.	2	.500	283		78	289		365		1½
4.	2	.625	210		63	228		336		3
5.	2	.500	255		71	260		348		24

FLOW CALCULATIONS

No.	Coefficient **Prover** (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.	1.4030		427.2	.9723	.9498	~~1.037~~	~~574.0~~
2.	3.0691		373.2	.9786	.9498	1.033	1,099
3.	5.5233		296.2	.9831	.9498	1.026	1,567
4.	8.3555		223.2	.9971	.9498	1.023	1,807
5.	5.5233		268.2	.9896	.9498	1.025	~~1,426~~

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio *None* cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

F_c **Measured** $(1-e^{-s})$ _____

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c **476.2** P_c^2 **226.8**

No.	~~P_w~~ P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	429.2	184.2				202.7	24.1	450.2	.94
2.	378.2	143.0				169.1	57.7	411.2	.86
3.	302.2	91.3	----------	MEASURED	----------	143.0	83.8	378.2	.79
4.	241.2	58.2				121.9	104.9	349.2	.73
5.	268.2	71.9				130.5	96.3	361.2	.75

Absolute Potential: **3,100** MCFPD; n **.790**

COMPANY **Olsen Oils, Inc.**

ADDRESS **P. O. Box 691 - Jal, New Mexico**

AGENT and TITLE _____

WITNESSED **Jack O. Whitling**

COMPANY **El Paso Natural Gas Company**

REMARKS

***Gravity taken from Annie Meyers B No. 2**

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.