NEW MEXICO OIL CONSERVATION COMMISSION

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 2-26-59

Company R. Olsen Oil Company Lease Gregory Well No. B-1

Unit E Sec. 28 Twp. 26S Rge. 37E Purchaser El Paso Natural Gas Company

Casing 7" Wt. 23# I.D. ____ Set at 3354 Perf. 2992 To 3110

Tubing 2" Wt. 4.7 I.D. ____ Set at 2968 Perf. ____ To ____

Gas Pay: From 2992 To 3110 L 2968 xG .650 -GL ____ Bar.Press. 13.2

Producing Thru: Casing ____ Tubing X Type Well Single

Date of Completion: 2-26-59 Packer NO Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. ____

OBSERVED DATA

Tested Through (Prover) (Choke) (Orifice) 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						1063		1070		72
1.	2	1.50	8		63	872		882		3
2.	2	1.50	18		65	770		812		3
3.	2	1.50	31		64	610		725		3
4.	2	1.50	39		59	590		680		3
5.	2	1.50	29		61	690		780		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.	54.3653		21.2	.9971	.9608	Neg.	1104
2.	54.3653		31.2	.9952	.9608	Neg.	1622
3.	54.3653		44.2	.9962	.9608	Neg.	2300
4.	54.3653		52.2	1.0010	.9608	Neg.	2679
5.	54.3653		42.2	.9990	.9608	Neg.	2202

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 181,818 cf/bbl.
Gravity of Liquid Hydrocarbons 32.7 deg.
F_c Measured $(1-e^{-s})$ ____

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid ____
P_c 1083.2 P_c^2 1173.3

No.	Pt (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	885.2	783.6				801.4	371.9	895.2	.8264
2.	783.2	613.4				681.0	492.3	825.2	.7618
3.	683.2	388.4				544.9	628.4	738.2	.6815
4.	603.2	363.9				480.5	692.8	693.2	.6399
5.	703.2	494.5				629.2	544.1	793.2	.7323

Absolute Potential: 4,800 MCFPD; n 1,000 Slope greater than 1,000 slope of 1,000 drawn thru 24 hr. point

COMPANY R. Olsen Oil Company
ADDRESS Box 691 Jal, New Mexico
AGENT and TITLE Engineer Dewey Watson
WITNESSED H. H. Kerby
COMPANY El Paso Natural Gas 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.