

MEXICO OIL CONSERVATION COMMI.

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation County Lea

Initial Annual Special X Date of Test 6-1-56

Company Sun Oil Company Lease J. A. Jones Well No. 6

Unit I Sec. 3 Twp. 215 Rge. 301 Purchaser

Casing 5 1/2 Wt. 17 I.D. 4.862 Set at 3728 Perf. 3620 To 3415

Tubing 2 1/2 Wt. 5.5 I.D. 2.441 Set at 3603 Perf. 3609 To 3693

Gas Pay: Room 2420 To 3415 L 2420 xG .70 -GL 2472 Bar.Press. 13.2

Producing Thru: Casing Tubing X Type Well Single

Date of Completion: 10-1-51 Packer Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp.

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	4"	1.50"	185	4.5	57	344				72
2.	4"	1.50"	211	8.41	58	736				24
3.	4"	1.50"	193	15.21	60	636				24
4.	4"	1.50"	205	33.64	74	542				24
5.						221				24

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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	28.14		1.29	.943	1.021	381.4
2.	13.99	43.40		1.31	.943	1.24	58.8
3.	13.99	55.42		1.33	.943	1.021	756.5
4.	13.99	45.63		1.38	.943	1.021	1142
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
Gravity of Liquid Hydrocarbons deg.
F_c 5.00 (1-e^{-s}) 6

Specific Gravity Separator Gas
Specific Gravity Flowing Fluid
P_c 607.2 P_c 823

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	749.2	561.3	2.237	5.004	.7036	561.35	200.9	749.6	.83
2.	649.2	421.5	3.454	11.93	1.861	423.36	399.6	650.5	.73
3.	555.2	308.2	4.438	19.70	3.073	311.27	511.7	558.6	.62
4.	235.2	55.3	6.406	41.04	6.402	11.7	761.3	248.8	.27
5.									

Absolute Potential: 1230 MCFPD; n 1.000

COMPANY Sun Oil Company
ADDRESS Box 2792
AGENT and TITLE Ronald R. Lawrence - Engineer
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} = Supercompressibility 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_f must be calculated by adding the pressure drop due to friction within the flow string to P_t .