

MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalisco Formation Yates County 32 Loc 32
 Initial Annual Special X Date of Test 10/29/56
 Company Sun Oil Company Lease Feeless Well No. 1
 Unit C Sec. 22 Twp. 22 S Rge. 36 E Purchaser BING
 Casing 7 Wt. 23 I.D. 6.366 Set at 3492 Perf. 3350 To 3478
 Tubing 2 Wt. 4.7 I.D. 1.995 Set at 3329 Perf. Open End To
 Gas Pay: From 3350 To 3478 L 3329 xG .665 -GL 2214 Bar.Press. 13.2
 Producing Thru: Casing Tubing X Type Well Single
 Date of Completion: 1-20-54 Packer None 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						776				72
1.	4"	1.250	600	3.61	83	736				24
2.	4"	1.250	598	7.29	90	715				24
3.	4"	1.250	589	15.21	83	687				24
4.	4"	1.250	591	34.81	77	622				24
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wP_f}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.643	17.04		.987	.9498	1.056	441
2.	9.643	36.74		.9725	.9498	1.054	627
3.	9.643	25.69		.9766	.9498	1.053	903
4.	9.643	111.99		.9840	.9498	1.059	1384
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio cf/bbl.
 Gravity of Liquid Hydrocarbons deg.
 F_c 9.936 (1-e^{-s}) 0.111
 Specific Gravity Separator Gas
 Specific Gravity Flowing Fluid
 P_c 789.2 P_c² 622.8

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.	742.2	551.3	4.38	19.18	2.7	554.0	58.8	750.9	.95
2.	728.2	530.3	6.23	38.81	5.5	535.8	87.0	751.9	.93
3.	700.2	490.3	8.97	80.46	11.3	501.6	121.2	768.2	.90
4.	635.2	403.5	13.7	189.06	26.7	436.2	192.6	660.0	.84
5.									

Absolute Potential: 4300 MCF/D MCFPD; n .970

COMPANY Sun Oil Company
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 AGENT and TITLE Donald 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} = 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 .