

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates-7-Rivers County Lea
Initial Annual Special X Date of Test 4/21-25/58
Company SOUTHERN CALIFORNIA PETROLEUM CORPORATION Lease Dabbs Well No. 1
Unit M Sec. 34 Twp. 25 Rge. 37 Purchaser El Paso Nat'l Gas Co.
Casing 7 Wt. 23 I.D. 6.366 Set at 2550 Perf. To
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 2803 Perf. Open end To
Gas Pay: From 2717 To 2782 L 2803 xG .665 -GL 1864 Bar.Press. 13.2
Producing Thru: Casing Tubing X Type Well Single
Re- Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 1-23-57 Packer 2460 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						529				72
1.	4	1.500	134	4.0	86	205				24
2.	4	1.500	130	15.21	83	139				24
3.	4	1.500	107	24.01	76	153				24
4.	4	1.500	117	33.64	74	132				24
5.										

FLOW CALCULATIONS

No.	Coefficient (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.	13.99	24.25	147.2	.9759	.9571	1.012	321
2.	13.99	46.64	143.2	.9786	.9571	1.012	618
3.	13.99	53.67	120.2	.9850	.9571	1.010	715
4.	13.99	66.13	130.2	.9868	.9571	1.011	883
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons deg.
P_c 9.936 (1-e^{-s}) .120

Specific Gravity Separator Gas .665
Specific Gravity Flowing Fluid
P_c 542.2 P_c 294.0

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.	218.2	47.6	3.19	10.17	1.22	48.8	245.2		
2.	152.2	23.2	6.14	37.70	4.52	27.7	266.3		
3.	166.2	27.6	7.10	50.41	6.05	33.7	260.3		
4.	145.2	21.1	8.77	76.91	9.23	30.7	263.7		
5.									

Absolute Potential: 980 MCFPD; n .771
COMPANY SOUTHERN CALIFORNIA PETROLEUM CORPORATION
ADDRESS Box 1071, Midland, Texas
AGENT and TITLE Division Engineer 5-2-58
WITNESSED Tested by Whitling & Murray
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 .