

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS AM 10:11

Revised 12-1-55

Pool Jalant Formation Seven Rivers County Lea
Initial _____ Annual _____ Special X Date of Test 1-7 to 1-11-57
Company The Atlantic Refining Company Lease State 24 Well No. 1
Unit II Sec. 32 Twp. 24-S Rge. 37-E Purchaser El Paso Natural Gas Company
Casing 5 1/2 Wt. 17# I.D. 4.892 Set at 3332 Perf. _____ To _____
Tubing 2 1/2 Wt. 6.5 I.D. 2.4441 Set at 3446 Perf. _____ To _____
Gas Pay: From 3470 To 3546 L 3446 xG 0.685 -GL 2361 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10-20-43 Packer None Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(<u>Proven</u>) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	1"	2.000	46.3	2.72	60	303				72
2.	1"	2.000	51.9	3.32	60	263				24
3.	1"	2.000	38.4	4.52	60	242				24
4.	1"	2.000	49.1	5.62	60	206				24
5.						119				24

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.	25.58	20.825		1.000	0.9359	-----	499 498.6
2.	25.58	26.598		1.000	0.9359	-----	626 636.8
3.	25.58	32.324		1.000	0.9359	-----	774 773.8
4.	25.58	44.201		1.000	0.9359	-----	1059 1058.2
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c 5.866 (1-e^{-s}) .150

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 316.2 P_c 100.0

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.	276.2	76.3	2.92	8.53	1.28	77.4	22.6	278.2	88.0
2.	255.2	65.1	3.74	13.99	2.10	67.2	32.8	259.2	82.0
3.	219.2	48.0	4.54	20.61	3.09	51.1	48.9	226.0	71.5
4.	162.2	26.3	6.21	38.56	5.78	32.1	67.9	179.2	56.7
5.									

Absolute Potential: 1,320 MCFPD; n 0.656COMPANY The Atlantic Refining CompanyADDRESS P.O. Box 1038 Denver City, TexasAGENT and TITLE M.A. Carr, Dist. Supt.

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 .