

NEW MEXICO OIL CONSERVATION COMMISSION

MAIN OFFICE OCC

HOBBSS OFFICE OCC

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmit 1958 SEP 25 AM 8:16 Formation Intes - 7 Rivers County LeaInitial _____ Annual _____ Special X Date of Test 9-15/9-19-58Company El Paso Natural Gas Company Lease Moberly C Well No. 3Unit E Sec. 21 Twp. 26 Rge. 37 Purchaser El Paso Natural Gas CompanyCasing 5 1/2 Wt. 17.0 I.D. _____ Set at 3097 Perf. _____ To _____Tubing 2 Wt. 4.7 I.D. _____ Set at 3130 Perf. _____ To _____Gas Pay: From 3104 To 3126 L _____ xG .684 -GL _____ Bar.Press. 13.2Producing Thru: Casing X Tubing _____ Type Well SingleDate of Completion: 4-11-58 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						597		597		72
1.	4	1.750	506	2.56	64	584		579		24
2.	4	1.750	509	4.84	62	577		567		24
3.	4	1.750	515	9.00	63	564		555		24
4.	4	1.750	516	19.80	64	545		531		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.	19.27	36.46	519.2	.9962	.9366	1.064	698
2.	19.27	50.23	521.2	.9981	.9366	1.064	963
3.	19.27	68.95	528.2	.9971	.9366	1.064	1,320
4.	19.27	102.36	529.2	.9992	.9364	1.062	1,953
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-s})Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 610.2 P_c 372.3

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.	591.2	349.5				354.6	15.7		.98
2.	580.2	336.2				348.3	24.0		.97
3.	572.2	326.3	*****	MEASURED*****	537.3	39.1			.94
4.	544.2	296.2				312.0	60.3		.91
5.									

Absolute Potential: 7,900 MCFPD; n .761COMPANY El Paso Natural Gas CompanyADDRESS P. O. Box 1384, Jal, New MexicoAGENT and TITLE R. T. Wright - Petroleum EngineerWITNESSED Jack O. WhittingCOMPANY 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 .