

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial _____ Annual X Special _____ Date of Test 1-14/1-18-58

Company Continental Oil Company Lease Jack B-30 Well No. 1

Unit H Sec. 30 Twp. 24 Rge. 37 Purchaser El Paso Nat. Gas Company
open hole

Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 2833 Perf. 2833 To 3372

Tubing None Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____

Gas Pay: From 2950 To 3372 L 2833 xG .655 -GL 1856 Bar.Press. 13.2

Producing Thru: Casing X Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 10-18-47 Packer None Reservoir Temp. 90°

OBSERVED DATA

Tested Through (~~Roadbox~~) (~~Choke~~) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Roadbox) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								601		72
1.	4"	1.250	554	39.69	86			556		24
2.	4"	1.250	543	49.00	85			545		24
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient Flange (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.	9.643	150.02	567.2	.9759	.9571	1.052	1.441
2.	9.643	165.06	556.2	.9768	.9571	1.049	1.561
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

P_c .9002 (1-e^{-s}) .120

Specific Gravity Separator Gas .655

Specific Gravity Flowing Fluid _____

P_c 614.2 P_c^2 377.2

No.	xP_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.	569.2	324.8	1.30	1.69	.20	325.0	52.2	570.1	92.81
2.	558.2	312.5	1.41	1.99	.24	312.7	64.5	559.2	91.04
3.									
4.									
5.									

Absolute Potential: 6,100 MCFPD; n .771COMPANY Continental Oil CompanyADDRESS Box 68, Eunice, New MexicoAGENT and TITLE D. R. K. K.

WITNESSED _____

COMPANY _____

REMARKS

2nd attempt to test. Average slope of .771 drawn thru highest rate of flow.

NMO/C-3 EWW HLJ RLA File-2

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 .