

NEW MEXICO OIL CONSERVATION COMMISSION

MOD 33 OFFICE OCC

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST

Pool Jalmat Formation Yates County Lea

Initial _____ Annual X Special _____ Date of Test 3-7-58

Company Continental Oil Company Lease State A-32 Well No. 4

Unit F Sec. 32 Twp. 22 Rge. 36 Purchaser El Paso Nat. Gas Company

Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 3638 Perf. 3384 To 3550

Tubing 2" Wt. 4.7 I.D. 1.995 Set at 3337 Perf. _____ To _____

Gas Pay: From 3384 To 3550 L 3337 xG .660 -GL 2202 Bar.Press. 13.2

Producing Thru: Casing _____ Tubing X Type Well Single

Date of Completion: 2-11-57 Packer None Reservoir Temp. 90°

OBSERVED DATA

Tested Through (Flowmeter) (Orifice) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Flowmeter) (Line) Size	(Orifice) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						637		637		72
1.	4"	1.250	454	5.29	77	460		479		24
2.										
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient Flange (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	49.70		.9840	.9535	1.048	470
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

P_c Measured (1-e^{-s})

Specific Gravity Separator Gas .660

Specific Gravity Flowing Fluid _____

P_c 650.2 P_c 422.8

No.	P_c 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.	492.2	242.3		Measured		242.3	180.5		75.69
2.									
3.									
4.									
5.									

Absolute Potential: 900 MCFPD; n 0.771

COMPANY Continental Oil Company

ADDRESS Box 68, Eunice, New Mexico

AGENT and TITLE J. R. Parker

WITNESSED _____

COMPANY _____

REMARKS

During the regular Multi-point testing schedule, a rate of flow could not be obtained. However, the data used here was taken from the deliverability test conducted 3-7-58. The average Jalmat slope of .771 was drawn thru the highest rate of flow.

NMOCC-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 .