NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

RECEIVED 10 AM 10 44

Revised 12-1-55

Pool Jalmat Formation Yates County Lea

Initial ____ Annual X Special ____ Date of Test 5-28-58

Company Continental Oil Company Lease Sholes A-13 Well No. 3

Unit P Sec. 13 Twp. 25 Rge. 36 Purchaser El Paso Nat. Gas Company

Casing 5 1/2 Wt. 14# I.D. 5.012 Set at 3097 Perf. 2864 To 2950

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

Gas Pay: From 2864 To 2955 L 2864 xG .675 -GL 1647 Bar.Press. 13.2

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

Date of Completion: 1-4-51 Packer None Reservoir Temp. 900

OBSERVED DATA

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

No.	Flow Data ~~(Prover)~~ (Line) Size	Flow Data ~~(Choke)~~ (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI										
1.	4"	.500	122	4.41	56			318		72
2.								123		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.	1.525	24.40	135.2	1.0039	.9427	1.013	36
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.

Gravity of Liquid Hydrocarbons ____ deg.

P_c ____ $(1-e^{-s})$ ____

Specific Gravity Separator Gas ____

Specific Gravity Flowing Fluid ____

P_c 331.2 P_c^2 109.7

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2 (1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	136.2	18.6	---	Negative	---	18.6	91.1		41.12
2.									
3.									
4.									
5.									

Absolute Potential: 41.5 MCFPD; n .771

COMPANY Continental Oil Company

ADDRESS Box 68, Eunice, New Mexico

AGENT and TITLE J B Parks

WITNESSED ____

COMPANY ____

REMARKS

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.