

HOBBS OFFICE OCC

ELVIS A. UTE
GAS ENGINEER

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Bumont Formation Queen 1956 OCT 3 PM 2:19 County Lea

Initial _____ Annual X (retest) Special _____ Date of Test 8/25 thru 9/3/56

Company The Ohio Oil Company Lease State "A" 3071-D Well No. 1

Unit J Sec. 28 Twp. 198 Rge. 37E Purchaser Permian Basin Pipeline Co.

Casing 5.5 Wt. 170 I.D. 4.892 Set at 3849 Perf. 3550-3602 X 3640-3702

Tubing 2.375 Wt. 4.70 I.D. 1.995 Set at 3520 Perf. 3525 To 3528

Gas Pay: From 3550 To 3702 L 3525 xG 0.675 -GL 2379 Bar.Press. 13.2

Producing Thru: Casing _____ Tubing X Type Well Single

Date of Completion: 4/25/55 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. --

OBSERVED DATA

Tested Through (Packer) (Choke) (Meter) Type Taps Pipe

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Packer) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI								
1.	4"	3"	450.7	5.8	84	861.6	84	71-3/4 hr. 8.1.
2.	4"	2"	451.3	11.5	73	804.9	--	84 hr.
3.	4"	2"	453.2	21.5	64	742.4	--	23-3/4 hr.
4.	4"	2"	458.1	25.4	67	651.2	--	23-1/2 hr.
5.						724.4	--	24-1/2 hr.

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	29.92	51.87	463.9	0.9777	0.9427	1.045	1495
2.	29.92	73.09	464.5	0.9877	0.9427	1.048	2134
3.	29.92	100.14	466.4	0.9942	0.9427	1.052	2940
4.	29.92	109.41	471.3	0.9933	0.9427	1.050	3210
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.

Gravity of Liquid Hydrocarbons -- deg.

F_c Pv measured (1-e^{-s}) --

Specific Gravity Separator Gas --

Specific Gravity Flowing Fluid --

P_c 877.0 P_c 769.1

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.	856.1					692.1	70.0		95.34
2.	805.5					648.8	130.3		91.85
3.	782.3					581.1	188.0		86.92
4.	737.6					544.1	225.0		84.10
5.									

Absolute Potential: 7262 MCFPD; n 0.661971

COMPANY The Ohio Oil Company

ADDRESS Box 2107, Hobbs, New Mexico

AGENT and TITLE Thomas O. Webb - Petroleum Engineer

WITNESSED Mr. L. L. West

COMPANY Permian Basin Pipeline Co.

REMARKS

Well was blown on 8/25/56. Above re-test giving good point alignment,
good spread and pulldown.

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} = Supercompressibility 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 .

COMPANY The Ohio Oil Company
 WELL State "A"-3071-D, No. 1
 POOL Eumont Gas Pool
 LOCATION J 28-19S-37E
 COUNTY Lea County, New Mexico
 DATE September 3, 1956

