

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-12

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-51

Pool Basin Formation Dakota County San Juan
 Initial ✓ Annual ✓ Special ✓ Date of Test 6/29/61
 Company Agua Oil & Gas Co. Lease Caine Well No. 12-D
 Unit A Sec. 16 Twp. 28N Rge. 10W Purchaser ✓
 Casing 4 1/2 in. 9.5 I.D. 4.090 Set at 6660 Perf. 6410 To 6518
 Tubing 2 in. 4.7 I.D. 1.995 Set at 6383 Perf. P.W. C.D. To ✓
 Gas Pay: From 6410 To 6518 1.6383 0.70 ✓ Bar. Press. 12
 Producing thro: Casing ✓ Tubing ✓ Type Well Single
 Date of Completion: 6/29/61 Packer ✓ Single-Bradenhead-G. G. or G.J. Dual
 Reservoir Tempo. ✓

OBTAINED DATA

Tested Through (1.6383) (Choke) (1.6383)

Type Tests ✓

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Proven) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. T_w	Press. psig	Temp. T_w	
1.						1955	1955	70 days
2.						1335	1335	3 hrs.
3.								
4.								
5.								

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_F}$	Pressure psia	Flow Temp. Factor T_F	Gravity Factor G_F	Compress. Factor F_{pr}	Rate of Flow Q-MCFD @ 15.025 psia
1.	12.365		650	2.9113	0.9258	1.072	7828
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 0.1/100
 Gravity of Liquid Hydrocarbons 0.85
 $P_c = (1 - e^{-0.85})$

Specific Gravity Separator Gas 0.67
 Specific Gravity Flowing Fluid 0.67
 $P_c = 1.967$ $P_c^2 = 3.869$ $P_c^3 = 7.599$

No.	P_w (psia)	P_c^2	P_c^3	$(P_c Q)^2$	$(P_c Q)^2 (1 - e^{-2})$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	P_w / P_c
1.	1347					1.834	2.054	1.380	
2.									
3.									
4.									
5.									

Absolute Potential: 12.580 HOPPO: 0.35

COMPANY Agua Oil & Gas Co.

ADDRESS Demora, S.D.

AGENT and TITLE ORIGINAL SIGNED BY L. M. STEVENS

WITNESSES W. H. Stevens, Engineer

COMPANY ✓

REMARKS

