

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12/28/79	
Company Amoco Production Company		Connection Gas Company of New Mexico	
Pool WEST TONTO <i>R-6449 Buffalo Penn</i>		Formation PENN	
Completion Date 06/05/79		Total Depth 13689.	Plug Back TD 13640.
Elevation 3675.		Farm or Lease Name Bondurant Federal	
Csg. Size 5.500	Wt. 20.0	d 4.778	Set At 13689.
Perforations: From 13326. To 13341.		Well No. 5	
Tubg. Size 2.375	Wt. 4.7	d 1.995	Set At 13178.
Perforations: From 0. To 0.		Unit Sec. Twp. Rge. J 12 19S 32E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 13112.
Producing Thru Tubing		Reservoir Temp. °F 95.6	Mean Annual Temp. °F 60.0
Baro. Press. - P _a 13.2		State New Mexico	
L 13334.	H 13334.	G _g 0.628	% CO ₂ 0.60
% N ₂ 0.48	% H ₂ S 0.	Prover 0.	Meter Run 2.1
Taps Flange			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
SI							2670.	2670.			46.0
1.	2.07 x 1.500			450.	9.0	53.	1442.	51.	0.	0.	1.0
2.	2.07 x 1.500			440.	4.0	65.	1296.	54.	0.	0.	1.0
3.	2.07 x 1.500			450.	8.4	70.	1090.	54.	0.	0.	1.0
4.	2.07 x 1.500			475.	8.4	71.	850.	54.	0.	0.	1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.76	64.57	463.2	1.0068	1.2619	1.0460	1095.
2	12.76	42.58	453.2	0.9952	1.2619	1.0419	711.
3	12.76	62.41	463.2	0.9905	1.2619	1.0415	1037.
4	12.76	64.08	488.2	0.9896	1.2619	1.0434	1065.
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.69	513.	1.41	0.914	35.3	
2	0.67	525.	1.44	0.921	56.6	
3	0.69	530.	1.45	0.922		
4	0.73	531.	1.46	0.919		
5.						

A.P.I. Gravity of Liquid Hydrocarbons		56.6		Deg.	
Specific Gravity Separator Gas		0.628		X X X X X X X X	
Specific Gravity Flowing Fluid		X X X X X		0.703	
Critical Pressure		673.		P.S.I.A.	
Critical Temperature		365.		°R	
				669. P.S.I.A.	
				389. °R	

P _r 2547.0	P _r ² 6487.	
NO	P _r ²	P _w ²
1	2118.	1578.
2	1714.	1368.
3	1217.	1239.
4	745.	1036.
5		

$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.6226$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2753$	
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1396.$			

Absolute Open Flow	1396.	Mcf @ 15.025	Angle of Slope θ	63.3	Slope, n	0.503
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Remarks:			

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
<i>John W. Magnus</i>	John West Engrg.	W. D. Magness	R. Whitten

0+4 WMOD - H 1-Hou 1-Susp 1-WDM 1-DLB 1-BD