

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10/25/73		OCT 30 1973	
Company Amoco Production Company				Connection None				D.C.C. UNARTESIA, OFFICE
Pool Logan Draw Morrow				Formation Morrow				
Completion Date 10/25/73		Total Depth 9778'		Plug Back TD 9716'		Elevation 3492' RDB		Farm or Lease Name Hondo Fed. Gas Com.
Csq. Size 5 1/2"	Wt. 15.5#-17#	d -	Set At 9778'	Perforations: From 9314' To 9545'		Well No. 1		
Thg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 9239'	Perforations: From To		Unit Sec. Twp. Rge. J 27 17 27		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9236'		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 150° @ 9770'		Mean Annual Temp. °F 65		Baro. Press. - P _a 13.2		State New Mexico
L 9314	H 9314	G _g 0.640	% CO ₂ -	% N ₂ -	% H ₂ S -	Prover -	Meter Run 4"	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	
SI							2772				66
1.	4	x	1.750	820	100	79	1098	73	910	Pkr	1
2.	4	x	1.750	806	81	68	1481	75	910	Pkr	1
3.	4	x	1.750	772	31	71	2080	77	910	Pkr	1
4.	4	x	1.750	428	21	72	2362	77	910	Pkr	1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	14.93	288.600	833.2	0.9822	1.250	1.075	5,687
2	14.93	257.580	819.2	0.9924	1.250	1.079	5,147
3	14.93	156.015	785.2	0.9896	1.250	1.075	3,098
4	14.93	96.243	441.2	0.9887	1.250	1.042	1,850
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 54,323 Mcf/bbl.
1.	1.24	539	1.45	0.865	A.P.I. Gravity of Liquid Hydrocarbons 54 Deg.
2.	1.22	528	1.42	0.859	Specific Gravity Separator Gas 0.640 XXXXXXXXX
3.	1.17	531	1.43	0.865	Specific Gravity Flowing Fluid XXXXX 0.695
4.	0.66	532	1.43	0.921	Critical Pressure 670 P.S.I.A. 669 P.S.I.A.
5.					Critical Temperature 372 °R 388 °R

P _c *3815 P _c ² 14,554						
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_r^2 - P_w^2} = \frac{14,554}{8,956}$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.625$
1		2,047	4,190	10,364	AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 8,364$	<i>Tested 11-2-73</i>
2		2,366	5,598	8,956		
3		2,948	8,691	5,863		
4		3,251	10,569	3,985		
5						

Absolute Open Flow 8,364 Mcfd @ 15.025	Angle of Slope 45°	Slope, n 1.000
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Remarks: * Pressures recorded with bottom hole pressure recorder. Unable to get test with flow in increasing order because of slugs of fluid.

Approved By Commission:	Conducted By: Dewey Taylor	Calculated By: Edward J. Snook	Checked By:
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