

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 5/21/01			
Company PHILLIPS PETROLEUM CO.				Connection Conoco, Inc.					
Pool Wildcat - Atoka				Formation ATOKA				Unit	
Completion Date 05/10/01		Total Depth 13,450'		Plug Back TD 12,838'		Elevation 3672' GL		Farm or Lease Name STATE "R"	
Csg. Size 5-1/2"	Wt. 17&20#	d	Set At 13,449'	Perforations: From 12,348' To 12,357'				Well No. 1	
Tbg. Size 2-3/8"	Wt.	d	Set At 12,279'	Perforations: From To				Unit Sec. Twp. Rgc 6 1 21-S 34-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12,281'		County LEA	
Producing Thru TUBING		Reservoir Temp. °F 160 @ 12338		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2		State NM	
L 12338	H 12338	G _g 0.617	% CO ₂ 0.24	% N ₂ 1.03	% H ₂ S	Prover	Meter Run 3.068	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							7880	160			72
1.	3.068		1.000	667	9.8	76	7552	160			1.0
2.	3.068		1.000	667	39.9	78	6474	160			1.0
3.	3.068		1.000	677	63.7	75	5451	160			1.0
4.	3.068		1.000	666	110.0	77	3994	160			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 Fg	Super. Compress. Factor Fpv	Rate of Flow Q, Mcfd
1.	4.789	81.62	679.7	0.9847	1.2727	1.0107	495
2.	4.789	164.71	679.9	0.9832	1.2727	1.0107	998
3.	4.789	209.62	689.8	0.9859	1.2727	1.0108	1273
4.	4.789	273.25	678.8	0.9840	1.2727	1.0107	1656
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
1.	1.01	536	1.48	0.897	A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
2.	1.01	538	1.49	0.898	Specific Gravity Separator Gas 0.6174
3.	1.03	535	1.48	0.894	Specific Gravity Flowing Fluid XXXX
4.	1.01	537	1.49	0.897	Critical Pressure 670 P.S.I.A. 670 P.S.I.A.
5.					Critical Temperature 361 R 361 R

P _c 6371.2	P _c ² 40593	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2779$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1486$
NO.	P _r ²	P _w ²	P _c ² - P _w ²
1.	6071	36852	3740
2.	5093	25941	14652
3.	4190	17558	23035
4.	2971	8828	31765
5.			

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1902$

Absolute Open Flow 1902 Mcfd @ 15.025	Angle of Slope n 60.5	Slope, n 0.565
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Remarks: BOTTOMHOLE PRESSURE IS RECORDED @ 12338' BY GAUGE # T97

Approved By Commission: Orla Signed by Paul Montz Crd. 10	Conducted By: ARC PRESSURE DATA INC	Calculated By: CHAD MAJOR	Checked By:
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AUG 06 2001