

NE MEXICO OIL CONSERVATION COMMS: J
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

JAN 22 1974

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-16-74		JAN 22 1974	
Company Phillips Petroleum Company		Connection El Paso Natural Gas Company		O. C. C. ARTESIA, OFFICE	
Pool Cisco		Formation Cisco		Unit K	
Completion Date 10-13-73 (perf) 12-21-73 (1st prod)		Total Depth 12,125'		Plug Back TD 10,752'	
Elevation 3205' Gr. 3225' DE		Farm or Lease Name Drag-C Com			
Csg. Size 5-1/2"	Wt. 15.5#	Set At 12,125'	Perforations: From 9952' To 10,063'		Well No. 1
Tbg. Size 2-7/8"	Wt. 6.5#	Set At 9969'	Perforations: From To		Unit Sec. Twp. Rge. K 19 23 32
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 9900'		County Eddy
Producing Thru tbg.		Reservoir Temp. °F 140 @ 10,000	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State New Mexico
L 9969	H 9969	Gg 660	% CO ₂	% N ₂	% H ₂ S
Prover			Meter Run 4"		Taps Flg.

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							3137		Packer		24 hrs.
1.	4	x	.750	353	6	68	2824	72			1 hr.
2.	4	x	.750	372	13	78	2537	78			1 hr.
3.	4	x	.750	380	34	81	2310	79			1 hr.
4.	4	x	.750	376	53	77	1885	74			1 hr.
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	2.661	46.87	366.2	.9924	1.231	1.037	158
2	2.661	70.76	385.2	.9831	1.231	1.037	237
3	2.661	115.62	393.2	.9804	1.231	1.038	385
4	2.661	143.62	389.2	.9840	1.231	1.038	481
5.							

NO.	F _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.55	528	1.40	.930	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.57	538	1.42	.930	Specific Gravity Separator Gas .660 X X X X X X X X
3	.59	541	1.43	.929	Specific Gravity Flowing Fluid X X X X X
4	.58	537	1.42	.929	Critical Pressure 670 P.S.I.A. P.S.I.A.
5.					Critical Temperature 378 R R

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.571$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.524$
1	3150.2	9923.8	8050.0	1873.8			
2			6504.1	3419.7			
3			5398.7	1525.1			
4			3605.5	6318.3			
5							

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .733$

Absolute Open Flow	733	Mcf @ 15.025	Angle of Slope	47.0	Slope, n	.933
Remarks:						
Approved by Commission:						
Conducted By:		Randy Kiker		Calculated By:		Randy Kiker
Checked By:						