

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual		Test Date 12/15/82		RECEIVED							
Company Pogo Producing Company ✓		Connection None		JAN 11 1983							
Pool Undesignated		Formation Atoka		Unit MIDLAND							
Completion Date 12/15/82		Total Depth 14928'		Plug Back TD 14330'							
Elevation 3642' KB-21'		Farm or Lease Name SCL Federal		Well No. 2							
Csg. Size 7 5/8" 5"		Wt. 29.7 18.0		Perforations: From 13646 To 13652							
Trq. Size 2 3/8"		Wt. 4.7		Perforations: Open Ended To							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 13545'		County Eddy							
Producing Thru Tubing		Reservoir Temp. °F 60		Baro. Press. - P _g 13.2							
L 13649		H -		G _g 0.6081							
% CO ₂ 1.675		% N ₂ 0.716		% H ₂ S -							
Prover -		Meter Run 2.900		Taps F							
FLOW DATA											
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							4061	60	PACKER		18.5 hrs
1.	2.900	4/64	1.00	495	7	90	3696	60			1.0 hr
2.	2.900	5.5/64	1.00	515	18	90	3170	60			1.0 hr
3.	2.900	7/64	1.00	540	28	90	2391	60			1.0 hr
4.	2.900	9/64	1.00	500	16	90	1715	60			1.0 hr
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, F _{pv}	Rate of Flow Q, Mcd				
1	4.801	59.64	508.2	0.9723	1.282	1.034	369.04				
2	4.801	97.51	525.2	0.9723	1.282	1.035	603.96				
3	4.801	124.46	553.2	0.9723	1.282	1.038	773.12				
4	4.801	90.62	513.2	0.9723	1.282	1.035	561.29				
5											
NO.	R	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio 480.710 Mcd/bbl.						
1	0.75	550	1.56	0.935	A.P.I. Gravity of Liquid Hydrocarbons 52 Deg.						
2	0.78	550	1.56	0.933	Specific Gravity Separator Gas 0.6081 XXXXXXXXXX						
3	0.82	550	1.56	0.929	Specific Gravity Flowing Fluid XXXXX						
4	0.76	550	1.56	0.934	Critical Pressure 678 P.S.I.A. - P.S.I.A.						
5					Critical Temperature 353 °R - °R						
P _c 5487.2 P _c 230109.4											
NO.	P ₁ ²	P _w *	P ₂ ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.36$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.62$						
1		5037.2	25373.4	4736.0	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1335.9$						
2		4555.2	20749.8	9359.6							
3		4040.2	16323.2	13786.2							
4		3169.2	10043.8	20065.6							
5											
Absolute Open Flow 1336 Mcd @ 15.025					Angle of Slope 55° 13'			Slope, n 0.695			
Remarks: * BOTTOM HOLE PRESSURE @ (-10007) 13649' USED FOR PRESSURE CALCULATIONS											
WELL PRODUCED 0.2 BBLS CONDENSATED IN 4.0 HOURS = 1.20 BC/D & 13.2 BW/D											
TOP 5" LINER @ 11503'											
Approved By Division		Conducted By		Calculated By		Checked By: PE #2208					
		J. ARRELL WELL TESTING INC		Joe A Coleman		Joe A. Coleman					

Post ID-2
1-14-83
Camp & BK