

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AN NE POINT BACK PRESSURE TEST I GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-13-77			
Company Phillips Petroleum Co.				Connection Phillips Petroleum Company					
Pool Undesignated				Formation Morrow				Unit --	
Completion Date 11-5-57		Total Depth 13,264'		Plug Back TD 13,246'		Elevation 4172' RKB		Farm or Lease Name Michel	
Csg. Size 5 1/2"	Wt. 17#	20#	4.778"	Set At 13,264	Perforations: From 13062' To 13,200'		Well No. 1		
Tub. Size 2-3/8"	Wt. 4.7	1.995"	12,990'	Set At	Perforations: From To		Unit C	Sec. 13	Twp. 16S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At 12,990'		County Lea	
Producing Thru tubing		Reservoir Temp. °F @		Mean Annual Temp. °F		Baro. Press. - P _a 13.2		State New Mexico	
L	H	Gg .708	% CO ₂ --	% N ₂ --	% H ₂ S --	Prover	Meter Run 4"	Taps	

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.	
SI							1682	60	Packer	
1.	4 X 1.5			28.8	5.8	61	1446	64		1 hr.
2.	4 X 1.5			42.0	12.3	65	1184	65		1 hr.
3.	4 X 1.5			65.2	17.6	45	1141	68		1 hr.
4.	4 X 1.5			138.9	31.4	46	975	71		1 hr.
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	10.84	15.61	42.0	.9990	1.188	1.015	204
2	10.84	26.06	55.2	.9952	1.188	1.015	339
3	10.84	37.15	78.4	1.015	1.188	1.017	494
4	10.84	69.11	152.1	1.014	1.188	1.020	921
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 5.67 Mcf/bbl.
1.	.06	521	1.32	.970	A.P.I. Gravity of Liquid Hydrocarbons 52.8 Deg.
2.	.08	525	1.33	.970	Specific Gravity Separator Gas .708 XXXXXXXXXX
3.	.12	505	1.28	.967	Specific Gravity Flowing Fluid XXXXX 1.175
4.	.23	506	1.28	.962	Critical Pressure 668 P.S.I.A. 649 P.S.I.A.
5.					Critical Temperature 395 R 547 R

P _c 1695.2 P _c ² 2873.7				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.515$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.515$	
NO	P _i ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1395$		
1	2129.3	1462.1	2137.7	736			
2	1433.3	1200.5	1441.2	1432.5			
3	1332.2	1158.6	1342.2	1531.5			
4	976.5	988.7	977.4	1896.3			
5							

Absolute Open Flow 1395 Mcfd @ 15.025		Angle of Slope @ 45	Slope, n 1
Remarks: calculations made by computer			
Orig. Signed by			
Approved By Commission Jerry Sexton Dist. L. Supv.	Conducted By: Don Thorp	Calculated By: S. D. Justus	Checked By: D.E. Simpson