

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

Form C-122
Revised 9-1-65

RECEIVED

API # 30-015-23287

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-25-81		JUN 08 1981	
Company Phillips Petroleum Co.		Connection El Paso Natural Gas		O. C. D.	
Pool Malaga-Morrow (Gas)		Formation Morrow		Unit ARTESIA, OFFICE	
Completion Date 11-22-80		Total Depth 13,050	Plug Back TD 13,009	Elevation 3016' GR	Farm or Lease Name Malaga "A"
Csq. Size 5-1/2"	Wt. 17,20,23	d 4.778	Set At 13,050	Perforations: From 12,246 To 12,394	Well No. 2
Tqg. Size 2-7/8"	Wt. 6.40	d 2.441	Set At 12,170	Perforations: From To	Unit Sec. Twp. Rge. D 2 24-S 28-E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At	County Eddy
Producing Thru Tubing		Reservoir Temp. °F @	Mean Annual Temp. °F	Baro. Press. - P _a	State New Mexico
L 12,320	H 12,320	Gg .588	% 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							2775	60	packer		48 hrs
1.	4:00		.750	580	96	70	2450	70	packer		1 hr
2.	4:00		.750	590	97	72	1700	70	packer		1 hr
3.	4:00		.750	590	94	75	1190	70	packer		1 hr
4.	4:00		.750	590	67	75	740	70	packer		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 Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	2.661	238.64	593.2	.9905	1.304	1.040	853
2	2.661	241.89	603.2	.9887	1.304	1.040	863
3	2.661	238.12	603.2	.9859	1.304	1.040	847
4	2.661	201.03	603.2	.9859	1.304	1.040	715
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.78	530	1.51	.924	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.79	532	1.52	.925	Specific Gravity Separator Gas .588 X X X X X X X X
3	.80	535	1.53	.924	Specific Gravity Flowing Fluid X X X X X
4	.80	535	1.53	.924	Critical Pressure 672 P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 350 R _____ R

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{7774.1}{6291.3}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.236$
1	6067.4	2464.9	6075.7	1698.4	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,066$	
2	2935.1	1783.6	3181.2	6291.3		
3	1447.7	1206.5	1455.6	6318.5		
4	567.3	757.2	573.3	7200.8		
5						

Absolute Open Flow 1,066 Mcfd @ 15.025		Angle of Slope @ 45	Slope, n 1
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Remarks: Calculations made by computer. Program based on New Mexico Manual for back-pressure listing of Natural Gas wells.

*Form C-105 filed 2-11-81

Approved By Commission:	Conducted By: Robert Lee	Calculated By: D. E. Simpson	Checked By: <i>[Signature]</i>
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