

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

Form C-122
Revised 9-1-65

RECEIVED

*Copy to SF
C-122*

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-2-74		JUN 2 1975	
Company THE PETROLEUM CORPORATION				Connection TO AIR			
Pool Parkway West				Formation MORROW		Unit O.C.C. ARTESIA, OFFICE	
Completion Date 12-2-74		Total Depth 11,475'		Plug Back TD // 370 11,389'		Elevation 18' 3305 KB	
Csg. Size 5 1/2"	Wt. 17# + 20#	d 4.892 + 4.778	Set At 11,475 11,422	Perforations: From 11,110' To 11,149'		Well No. 2	
Tbg. Size 2 3/8"	Wt. 4.7#	d	Set At 11,000	Perforations: From OPEN To ENDED		Unit Sec. Twp. Rge. G 29 19S 29E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 11,000'		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 169° @ 10,955'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2#	
L 11,130'		H 11,130'	Gg 0.6702	% CO ₂ 0.520	% N ₂ 0.60	% H ₂ S NONE	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							3352.0		PARKER	CHOKE	
1.	4"	x	1.50"	400.0	6.0	74	2657.0	58		6/64"	60 MIN.
2.	4"	x	1.50"	400.0	13.5	70	2344.0	60		8/64"	60 MIN.
3.	4"	x	1.50"	400.0	24.0	68	1792.0	61		12/64"	60 MIN.
4.	4"	x	1.50"	400.0	34.0	72	1082.0	61		16/64"	60 MIN.
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	10.84	49.79	413.2	.9868	1.222	1.042	678
2	10.84	74.69	413.2	.9905	1.222	1.043	1022
3	10.84	99.58	413.2	.9924	1.222	1.045	1368
4	10.84	118.53	413.2	.9887	1.222	1.043	1619
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 69.747 Mcf/bbl.
1	0.62	534	1.40	.921	A.P.I. Gravity of Liquid Hydrocarbons 53.2 Deg.
2	0.62	530	1.39	.919	Specific Gravity Separator Gas 0.6702 X X X X X X X X
3	0.62	528	1.38	.916	Specific Gravity Flowing Fluid X X X X X
4	0.62	532	1.39	.919	Critical Pressure 669 P.S.I.A. P.S.I.A.
5					Critical Temperature 382 R R

P _r 4635.2 P _s 21485				
NO.	P _r ²	P _s ²	P _s ²	P _r ² - P _s ²
1	7130	3777.2	14267	7218
2	5556	3340.2	11157	10328
3	3259	2559.2	6550	14935
4	1199	1638.2	2684	18801
5				

$$(1) \frac{P_r^2}{P_r^2 - P_s^2} = 1.1428$$

$$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_s^2} \right]^n = 1801$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_s^2} \right]^n = 1.1127$$

Absolute Open Flow 1801 Mcfd @ 15.025	Angle of Slope 51.3°	Slope, n 0.800
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Remarks: BOTTOM HOLE PRESSURES MEASURED W/ AMERADA GAUGE @ 10955

Approved By Commission:	Conducted By: D.T.	Calculated By: R. WEST	Checked By: J.W.W.
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