

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

Form C-122
Revised 9-1-65
7/28/8

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 8-25-75		SEP 15 1975	
Company Champlin Petroleum Company				Connection		O. C. C.	
Pool East Carlsbad Wolfcamp - Gas				Formation Wolfcamp		Unit ARTESIA, OFFICE	
Completion Date 6-30-75		Total Depth 10,043'		Plug Back TD 9,941'		Elevation 3139 KB	
Farm or Lease Name Wilson Gas Com.		Well No. 1		Perforations: From 9,457' To 9,920'		Csg. Size 4-1/2" Wt. 11.6#	
Thq. Size 2-3/8" Wt. 4.6#		Set At 10,043'		Perforations: From To		Unit Sec. Twp. Rge. G 1 22S 27E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9400'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 145° @ 10040		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 9360		H 9360		Gg .740		% CO ₂ 0.08	
				% N ₂ 1.04		% H ₂ S 0.00	
				Prover 2"		Meter Run Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. Choke in	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	2" CFP 5/8" plate						2398		Pkr @ 9400'		161 hrs
1.	"	"		13	6/64"		2140	74			1 hr.
2.	"	"		35	7/64"		1775	71			1 hr.
3.	"	"		40	8/64"		1487	70			1 hr.
4.	"	"		45	10/64"		1142	68			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	6.473		26.2	.9887	1.162	1.0	195
2	6.473		48.2	.9896	1.162	1.0	359
3	6.473		53.2	.9905	1.162	1.0	396
4	6.473		58.2	.9924	1.162	1.0	434
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	.039	534	1.3834	1	A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2.	.057	531	1.3756	1	Specific Gravity Separator Gas	XXXXXXX	
3.	.080	530	1.3731	1	Specific Gravity Flowing Fluid	XXXXX	
4.	.087	528	1.3679	1	Critical Pressure	665	P.S.I.A.
5.					Critical Temperature	402	R

P _c 2411.2 P _w 5813.9				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.222$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4906$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²			
1	2153.2	4636.2	1177.7				
2	1783.2	3197.6	2616.3				
3	1500.2	2250.6	3563.3				
4	1155.2	1334.5	4479.4				
5							

Absolute Open Flow 535 Mcfd @ 15.025				Angle of Slope @ 63° 26'		Slope, n .50	
Remarks: Slope of back pressure curve less than 0.50. Used slope of .50 thru lowest point of three rates which established straight line.							
Approved By Commission:		Conducted By: Joe Ragan		Calculated By: Don Condie		Checked By:	