

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3-14-79		MAR 19 1979	
Company Champlin Petroleum Co.				Connection El Paso Natural Gas				G.C.C.
Pool East Carlsbad Morrow				Formation Morrow				Unit ARTESIA OFFICE
Completion Date 2-18-79		Total Depth 11,800		Plug Back TD 11,624		Elevation 3131 KB		Farm or Lease Name E.J. Garner
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11,800	Perforations: From 11,471 To 11,616		Well No. 1		
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11,400	Perforations: From To		Unit Sec. Twp. Rge. P 26 21 27		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 11,400		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 190 @ 11,543		Mean Annual Temp. °F 60		Baro. Press. -- P _a 13.2		State New Mexico
L 11,543	H 11,543	G _g 0.6	% CO ₂ 1.07	% N ₂ 0.27	% H ₂ S 0	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							3617	60	PKR	-	504
1.	4.026 x 1.25			476.8	2.2	73	3560	60	PKR	-	1
2.	4.026 x 1.25			476.8	9.0	68	3430	60	PKR	-	1
3.	4.026 x 1.25			476.8	20.2	70	3170	60	PKR	-	1
4.	4.026 x 1.25			476.8	30.2	66	3030	60	PKR	-	1
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	7.469	33.20	490	0.9877	1.2910	1.0384	328
2	7.469	66.41	490	0.9924	1.2910	1.0400	661
3	7.469	99.61	490	0.9905	1.2910	1.0394	989
4	7.469	121.75	490	0.9943	1.2910	1.0407	1215
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature	Mcf/bbl. Deg.
1.	0.72	533	1.50	0.927			0.6		677	356	XXXXXX
2.	0.72	528	1.48	0.925				XXXXX			0.6
3.	0.72	530	1.49	0.926					P.S.I.A.	P.S.I.A.	
4.	0.72	526	1.48	0.923					R	R	
5.											

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²
1	3630.2	3576	12788	390
2		3447	11879	1300
3		3187	10159	3019
4		3048	9291	3887
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.3901$$

$$AOP = 0 \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2431$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0010$$

Absolute Open Flow	2431	Mcf/d @ 15.025	Angle of Slope	60	Slope, n	0.5774
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Remarks: Calculations made by computer program using stepwise method

Approved By Commission:	Conducted By: T.J. Ragan	Calculated By: K.W. Lewis	Checked By: K.W. Lewis
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