

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 9-13-76		SEP 17 1976	
Company Champlin Petroleum Company				Connection El Paso Natural Gas Co.					
Field East Carlsbad				Location Wolfcamp				Unit O. C. C. ARTESIA, OFFICE	
Completion Date 9-17-75		Total Length 12,000'		Plan Back TD 9899'		Elevation 3140 DF		Farm or Lease Name Toothman Gas Comm.	
Csg. Size 5-1/2" &	Wt. 15.5 & 17.0	d	Set At 11,999'	Perforations: From 9677.5 To 9777		Well No. 1			
Teg. Size 2-7/8"	Wt.	d	Set At 2,441 9515'	Perforations: From To		Unit Sec. Twp. Rge. L 25 21-S 27-E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single Gas						Packer Set At 9506'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 150 @ 9677'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 9677	H 9677	G _g 0.683	% CO ₂ 0.12	% N ₂ 0.8	% 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							2262				28
1.	4.026 x 1.0			6.70	2.3	75	2065				1
2.	4.026 x 1.0			6.70	4.0	75	1752				1
3.	4.026 x 1.0			6.75	5.1	75	1562				1
4.	4.026 x 1.0			6.75	7.2	75	1222				1
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	15.03	15.40	448.9	0.9858	1.21	1.0456	289
2	15.03	26.80	448.9	0.9858	1.21	1.0456	502
3	15.03	34.42	455.6	0.9858	1.21	1.0463	646
4	15.03	48.60	455.6	0.9858	1.21	1.0463	912
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	11.247 Mcf/bbl.
1.	0.67	535	1.40	0.914	A.P.I. Gravity of Liquid Hydrocarbons	56 Deg.
2.	0.67	535	1.40	0.914	Specific Gravity Separator Gas	0.683 XXXXXXXXXX
3.	0.68	535	1.40	0.913	Specific Gravity Flowing Fluid	XXXXX 0.927
4.	0.68	535	1.40	0.913	Critical Pressure	668 P.S.I.A. 660 P.S.I.A.
5.					Critical Temperature	382 R 464 R

P _c 2275.2 P _c ² 5176.5				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	4318.9	2078.3	4319.5	856.9
2	3115.9	1765.6	3117.4	2059.0
3	2481.2	1576.2	2484.4	2692.0
4	1525.7	1237.6	1531.8	3644.7
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.420$$

$$Q = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,295$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.420$$

Absolute Open. Flow	1,295 Mcfd @ 15.025	Angle of Slope	45°	Slope, n	1.0
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Remarks: Flow data readings from L-10 chart. Range 1000 psi - 100 in.

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