

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

Form C-122
Revised 9-1-65

File
122 file

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-22-77		RECEIVED	
Company C & K Petroleum Inc.				Connection Transwestern Pipe Line Co.					
Pool South Carlsbad				Formation Marrow				Unit S. C. C.	
Completion Date 8-18-77		Total Depth 11,700		Plug Back TD 11,580		Elevation		Farm or Lease Name Carlsbad "12"	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11699	Perforations: From 11483 To 11561		Well No. 1			
Tbg. Size 2 7/8	Wt. 6.50	d 2.331	Set At 11367	Perforations: From Open To End		Unit Sec. Twp. Rge. 0 12 22-S 26-E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11367		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 198 @ 11522		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2		State NM	
L .78	H 11483	G _g .585	% CO ₂ 1.04	% N ₂ .55	% H ₂ S .06	Prover	Meter Run 4.026	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3606	75	Pkr.	75	
1.	4.026	x	1.250	300	7	76	3440	77	"	77	60 min.
2.	"	"	"	305	16	72	3290	82	"	82	"
3.	"	"	"	310	30	69	3100	86	"	86	"
4.	"	"	"	315	52	65	2770	88	"	88	"
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	46.8230	313.2	.9850	1.307	1.021	460
2.	"	71.3526	318.2	.9887	"	1.022	704
3.	"	98.7725	323.2	.9915	"	1.022	974
4.	"	130.6384	328.2	.9952	"	1.022	1297
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons <u>None</u> Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 3619.2 P _c ² 13,099				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		3453.2	11,925	1174
2		3303.2	10,911	2188
3		3113.2	9,692	3407
4		2783.2	7,745	5353
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.4470$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8476$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2396$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2396$$

Absolute Open Flow <u>2396</u> Mcfd @ 15.025	Angle of Slope <u>55.5</u>	Slope, n <u>.686</u>
Remarks:		

Approved By Commission:	Conducted By: C. Allen Dorsey	Calculated By: C. Allen Dorsey	Checked By:
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