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NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

SEP 2 1978

Revised 7-65

O. C. C.
ARTESIA, OFFICEC & K PETROLEUM, INC
Midland, Texas

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-14-78		SPUD DATE: N/A							
Company C & K Petroleum Company		Connection El Paso Natural Gas Company									
Pool White City Penn (Morrow)		Formation Morrow		Unit J							
Completion Date 6-17-78		Total Depth 12,000'		Plug Back TD 11795							
Elevation C K Federal		Form or Lease Name									
Csg. Size 5 1/2	Wt. 17#	d 12,000'	Set At 11250	Perforations: From 11307 To 11319	Well No. 1						
Tbg. Size 2 7/8	Wt. 6.5	d 11250	Set At 11250	Perforations: From open To end	Unit Sec. Twp. Rge. J 8 24 26						
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11246							
Producing Thru Tbg.		Reservoir Temp. °F 187 @ 11300 (Est)		Mean Annual Temp. °F 74							
Baro. Press. - P _a 13.2		State New Mexico									
L 11250	H 11250	Gg .579	% CO ₂	% N ₂	% H ₂ S						
Prover		Meter Run 4"		Taps Flg.							
FLOW DATA			TUBING DATA		CASING DATA						
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	Duration of Flow
SI							3882				72 hrs.
1.	4 x	1.500		4.00	74	3485					1 hr.
2.	4 x	1.500		8.12	78	3238					1 hr.
3.	4 x	1.500		14.82	76	2905					1 hr.
4.	4 x	1.500		25.00	76	2471					1 hr.
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_{fn}}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	10.84	45.44	516.2	.9868	1.314	1.041	665				
2	10.84	65.18	523.2	.9831	1.314	1.031	941				
3	10.84	88.48	528.2	.9850	1.314	1.032	1,281				
4	10.84	115.46	533.2	.9850	1.314	1.032	1,672				
5											
NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio TSTM Mcf/bbl.						
1	.77	534	1.54	.923	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2	.78	538	1.55	.940	Specific Gravity Separator Gas .579 X X X X X X X X						
3	.79	536	1.55	.939	Specific Gravity Flowing Fluid X X X X X						
4	.79	536	1.55	.939	Critical Pressure 672 P.S.I.A. _____ P.S.I.A.						
5					Critical Temperature 346 R _____ R						
$P_c = 3895.2$ $P_c^2 = 15172.6$											
NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.693$						
1		3499.6	12247.2	2925.4	$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.556$						
2		3252.0	10575.5	4597.1							
3		2922.0	8538.1	6634.5							
4		2492.5	6212.6	8960.0							
5											
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.602$											
Absolute Open Flow 2,602 Mcfd @ 15.025				Angle of Slope 50				Slope, n 840			
Remarks: Fluid measurement too small to measure.											
Approved By Commission:			Conducted By: Reggie Doston			Calculated By: J. R. Minnerv			Checked By:		