

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

Form C-123
Revised 9-1-66

NOV - 5 1973

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-25-73	
Company Charles A. Dean			Connection Natural Gas Pipeline		
Well Wildcat			Formation Morrow		
Completion Date 10-18-73		Total Depth 8936'		Plug Back TD 4229 G.L.	
Csg. Size 4.5		Wt. 13.50		Set At 8932'	
Perforations From 8747 To 8761		Well No. 1-Y			
Perforations From To		Unit Sec. Twp. Rge. K-28-20 S. - 23 E.			
Type Well - Single - Brdenhead - G.O. or G.O. Multiple Single				Packer Set At 8687'	
Producing Thru Tubing				State New Mexico	
Reservoir Temp. °F 143 @ 8754		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 8687		H 8687		Cg .611	
% CO ₂ .62		% N ₂ 2.29		% H ₂ S Nil	
Prover 4.026		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. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							2595	68	Packer		72 hrs.
1.	4.026 x 1.000			507	22	96	2362	69			1 hr.
2.	4.026 x 1.000			510	50	68	2191	70			1 hr.
3.	4.026 x 1.500			510	24.5	87	1809	70			1 hr.
4.	4.026 x 1.500			520	37	87	1339	71			1 hr.
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, F _{sp}	Rate of Flow Q, Mcfd
1	4.753	106.98	520.2	.9671	1.279	1.035	651
2	4.753	161.74	523.2	.9924	1.279	1.042	1017
3	10.84	113.22	523.2	.9750	1.279	1.038	1589
4	10.84	140.46	533.2	.9750	1.279	1.038	1971
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	1433	Mcf/bbl.
1.	.77	556	1.57	.934	A.P.I. Gravity of Liquid Hydrocarbons	57.5	Deg.
2.	.78	528	1.49	.921	Specific Gravity Separator Gas	.611	XXXXXXX
3.	.78	547	1.54	.929	Specific Gravity Flowing Fluid	XXXXX	.613
4.	.79	547	1.54	.928	Critical Pressure	672	P.S.I.A.
5.					Critical Temperature	355	R

P _c 2608.2 P _c ² 6802.7				(1) $\frac{P_c^2}{R^2 - R_w^2} = 3.542$		(2) $\left[\frac{R^2}{R^2 - R_w^2} \right]^n = 2.512$	
NO.	P _c ²	P _w	R _w ²	P _c ² - R _w ²			
1							
2							
3							
4							
5							

Absolute Open Flow		2,555	NOV 5 1973	Angle of Slope	54.0	Slope, n	.729
Remarks							
Approved By Commission							
Conducted By CONE & KERLEY, INC.				Calculated By Bill Kerley			