

MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Copy 0.51
Form 0-122
Revised 9-1-65

RECEIVED

Type Test: ☒ Initial ☐ Annual ☒ Special				Test Date: 10-29-75		NOV 14 1975	
Company: Corinne Grace				Connection:		O. C. C.	
Pool: Hades . Cabin Lake Morrow				Formation: Morrow		Unit: ARTESIA, OFFICE Livingston Ridge	
Completion Date: 10-29-75		Total Depth: 13785		Plug Back TD: 13740		Elevation: 3238.7	
Casing Size: 2 7/8		Set At: 13,287		Perforations: From 13,318 To 710		Well No. 1-Y	
Tubing Size: 2 7/8		Set At: 13,287		Perforations: From Open Ended To		Unit Sec. Twp. Rge. L 36 21S 30E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At: 13,270		County: Eddy	
Producing Thru Tubing: L 13,270		Reservoir Temp. °F: 186 @ 13,270		Mean Annual Temp. °F: 13.2		State: New Mexico	
H 13,270		Gg .585		% CO ₂ 1.29		% H ₂ S Nil	
				% N ₂ .568		Prover X	
						Meter Run	
						Taps	

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							34.99	60	34.99	60	4.25 Hr.
1.	2	x	1/4	700		21	700	62	2654	62	1 hr.
2.	2	x	7/32	1000		49	1000	64	1855	64	1 hr.
3.	2	x	3/16	1059		73	1059	64	1290	64	1 hr.
4.	2	x	1/8	1056		76	1056	64	1056	64	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, Fpv	Rate of Flow Q, Mcfd
1	1.087		713.2	1.040	1.307	1.075	1,133
2	.8393		1013.2	1.011	1.307	1.090	1,225
3	.6082		1072.2	.9877	1.307	1.075	905
4	.2648		1069.2	.9850	1.307	1.075	392
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
1.	1.053	481	1.386	1.075	Dry	Dry	.585	X X X X X X X X	677	347
2.	1.196	509	1.454	1.090				X X X X X		
3.	1.583	533	1.536	1.075						
4.	1.579	536	1.544	1.075						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	2667.2	7114	5,222	
2	1868.2	3490	8,846	
3	1303.2	1698	10,938	
4	1069.2	1143	11,193	
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.362$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,741$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5369$

Absolute Open Flow: 1,750 Mcfd @ 15.025	Angle of Slope: 63.5	Slope, n: 500
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Remarks: 1 string of tubing landed open ended in the dual packer @ 12802. One string was used for the flow.

Approved By Commission:	Conducted By: John Brooks	Calculated By: R. W. Harrington	Checked By:
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