

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

Form C-122
Revised 9-1-65

Type of Test ☒ Initial ☐ Annual		RECEIVED		Date 9-17-79	
Company GULF OIL CORP.			Operator NONE SEP 20 '79		
Well UNDESIGNATED			MORROW		
Completion Date 9-14-79		Total Depth 13045		OIL CONSERVATION DIV. 13020	
Casing Size 5 1/2		Set At 13045		From 12889 To 12895	
Tubing Size 2 3/8		4.7		1.995 12820	
Well No. # 1		Unit K		Sec. 33	
Twp. 18		Range 32		County LEA	
State NEW MEXICO		Producing Interval TUBING		Reservoir Temp. °F 202 ^a 12820	
Mean Annual Temp. °F 60		Tubing Pressure - P _g 13.2		Factor Set At 12820	
L 12820		H 12820		G _g .650	
% CO ₂ .56		% N ₂ .30		% H ₂ S .09	
Pretest 4"		Meter Run FLANGE		Type SINGLE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Pretest Line Size	X	Crifice Size	Press. p.s.i.g.	Diff. hwy	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	4	X	1.750	600	2.0	100	3460				1 Hr.
2.	4	X	1.750	600	4.0	112	3330				1 Hr.
3.	4	X	1.750	610	8.0	110	3120				1 Hr.
4.	4	X	1.750	610	16.0	94	2818				1 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Comp. Factor, F _{sp}	Rate of Flow Q, Mhd
1.	14.93	35.02	613.2	.9636	1.240	1.050	656
2.	14.93	49.53	613.2	.9535	1.240	1.045	914
3.	14.93	70.61	623.2	.9551	1.240	1.047	1307
4.	14.93	99.86	623.2	.9688	1.240	1.052	1884
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Wt./Vol.
1.	.92	560	1.49	.907	9.017	
2.	.92	572	1.53	.915	52 @ 60	
3.	.93	570	1.52	.912		
4.	.93	554	1.48	.904		
5.						

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²	Eq. 1	Eq. 2
1.	3933.2	15470.1	3478.4	12099.3	3730.8	$\frac{P_r^2}{P_r^2 - P_w^2} = 2.129$	$\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.129$
2.			3351.5	11232.6	4237.5		
3.			3148.9	9915.6	5554.5		
4.			2864.5	8205.4	7264.7	$\frac{P_r^2}{P_r^2 - P_w^2} = 4.011$	
5.							

Absolute Cfm Flow	4.011	Pressure, P _r (psia)	45	Flow, q _{sc}	1.000
Remarks: WELL MADE 22 BBLS OF OIL AND 8 BBLS OF WATER DURING TEST					
Approved By Commission	Conducted By:	Checked By:	Checked By:		
	JOHN R. DAVIS	LARRY C. DAVIS			

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RECEIVED

SEP 20 1970

O.C.D. HOBBS, OFFICE