

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

1-87
1-7-86
1-C-122 Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-25-79		MAY 1 1979	
Company GULF OIL ENERGY & MINERALS Corp.				Connection AIR		O. C. C. ARTESIA, OFFICE	
Pool UNDESIGNATED				Formation ATOKA		Unit E	
Completion Date		Total Depth 12710		Plug Back To 12670		Elevation 3021	
Csg. Size 7		Wt. 26		Set At 12710		Perforations: From 11945 To 11965	
Tbg. Size 2 3/8		Wt. N/ 80		Set At 11904		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple DUAL GAS WELL				Packer Set At 11904		County EDDY	
Producing Thru TBG.		Reservoir Temp. °F 180 @ 11904		Mean Annual Temp. °F 60°		Buro. Press. - P _g 13.2	
L 11904		R 11904		G _g .790		% CO ₂ 1.05	
				% N ₂ .83		% H ₂ S	
				Prover		Meter Run 4 "	
						FLG.	

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
1.	4	X	.750	440	2.0	86	1895				72 Hr.
2.	4	X	.750	480	6.0	84	1680				30 Min.
3.	4	X	.750	460	12.0	86	1465				30 Min.
4.	4	X	.750	460	1.0	86	960				1 Hr.
5.							460				15 Min.

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, Mscf
1	2.661	30.11	453.2	.9759	1.125	1.061	93
2	2.661	54.40	493.2	.9777	1.125	1.068	170
3	2.661	75.36	473.2	.9759	1.125	1.064	234
4	2.661	21.75	473.2	.9759	1.125	1.064	67
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf./Cbl.
1.	.68	546	1.30	.888	DRY	
2.	.74	544	1.29	.876	A.P.I. Gravity of Liquid Hydrocarbons	
3.	.71	546	1.30	.884	Specific Gravity Separator Gas .790	
4.	.71	546	1.30	.884	Specific Gravity Flowing Fluid	
5.					Critical Pressure 666 P.S.I.A.	
					Critical Temperature 421 °R	

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²
1		1693.3	2867.2	774.0
2		1478.5	2186.0	1455.2
3		974.3	949.2	2692.0
4		473.4	224.1	3417.1
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.353$

ADP = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = .284$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.214$

Paul H. Davis
4-25-79
Additional gas comp.

Absolute Open Flow	284	Mcf/d @ 15.025	Angle of Slope α	57.25	Slope, n	.642
Remarks:						

Approved By Commission:	Conducted By: JOHN DAVIS	Calculated By: LARRY DAVIS	Checked By:
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