

NEW MEXICO GEOLOGICAL SURVEY COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

DEC 7 1976

RECEIVED

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Type Test ☒ Initial ☐ Annual ☐ Special		Company Coguina Oil Corporation		Connection None		Test Date 11-5-76		DEC 1 1976	
Well Well # 1		Formation Bone Springs		Plug back TD 6246		Elevation 3200		Form or Lease Name Wagner Federal	
Completion Date 11-5-76		Total Depth 10804		Perforations: From 6084 To 6147		Well No. 2		Unit Sec. Twp. Rge. I 29 20 27	
Csg. Size 5 1/8		Wt. 17#		Set At 10804		Perforations: From open To end		County Eddy	
Tub. Size 2 7/8		Wt. 6.5		Set At 6054		Packer Set At 6054		State New Mexico	
Type Well - Single - Bradenham - G.G. or G.O. Multiple Single		Producing Thru 133'		Reservoir Temp. °F 6054 (est.)		Mean Annual Temp. °F 60		Bero. Press. - P ₀ 13.2	
L 6054		H 6054		G _g .698		% CO ₂		% N ₂	
						% H ₂ S		Prover	
								Meter Run 4"	
								Taps 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	1.125	220	7.00	82	2105	Pkr.			72 hrs.
2.	4	x	1.125	225	10.50	102	1715	Pkr.			1 hr.
3.	4	x	1.125	225	9.50	112	1415	Pkr.			1 hr.
4.	4	x	1.125	225	38.00	114	1105	Pkr.			1 hr.
5.							922	Pkr.			1 hr.

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 _{sp}	Rate of Flow Q, Mscf
1	6.031	40.40	233.2	.9795	1.197	1.023	292
2	6.031	50.01	238.2	.9619	1.197	1.022	355
3	6.031	47.57	238.2	.9535	1.197	1.019	334
4	6.031	95.14	238.2	.9518	1.197	1.019	666
5							

NO.	P ₁	Temp. °R	T ₁	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	.35	542	1.40	.956	181.3	52.0° @ 60°	.698	XXXXXX	669	388
2	.35	562	1.45	.958				XXXXXX	668	395
3	.35	572	1.47	.963				XXXXXX		
4	.35	574	1.48	.963						
5										

NO.	P ₁	P _w	P ₁ ²	P _w ²	(1) $\frac{P_1^2}{P_1^2 - P_w^2}$	(2) $\left[\frac{P_1^2}{P_1^2 - P_w^2} \right]^n$
1			2987.2	1499.6	1.243	1.243
2			2040.6	2446.2		
3			1251.1	3235.7		
4			877.8	3609.0		
5						

AOF = Q $\left[\frac{P_1^2}{P_1^2 - P_w^2} \right]^n = .828$

POSTER ID-2 11-10-76

Absolute Open Flow 828		Mscf @ 15.025		Angle of Slope @ 45		Slope, n 1.000	
------------------------	--	---------------	--	---------------------	--	----------------	--

Remarks: Made 6.30 Mscf; condensate during test. Poor point alignment slope of 1.000 drawn through high rate of flow.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reggie Reston	Joe B. Murray	

COQUINA OIL (SEPP)
 WAGNER FARM NO. 112
 L-29-20-27
 BDDY COUNTY, TEXAS
 11-5-76

