

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

Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 4-1-73		APR 26 1973	
Company Union Oil Co. of California				Connection None				
Pool Und. Morrow Gas				Formation Morrow				Unit O.E.G. ARTESIA, OFFICE
Completion Date 3-31-73		Total Depth 11765'		Plug Back TD 11690'		Elevation 3084 GR		Farm or Lease Name Calvani Com.
Csg. Size 5 1/2"	Wt. 17 & 20	d 4.76-4.65	Set At 11762'	Perforations: From 11356 To 11628'		Well No. 1		
Tbg. Size 2-3/8"	Wt. 4.7	d 1.901	Set At 11200	Perforations: From To		Unit Sec. Twp. Rge. K 9 22-S 27-E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 11200'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 175 @ 11.765		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico
L 13356	H 13356	G _g .590	% CO ₂ 0	% N ₂ .35	% H ₂ S 0	Prover	Meter Run 4"	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	4		1.000	690	33	86	690	86			9-3/4 hrs
1.											
2.											
3.											
4.											
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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.753	152.4	703.2	.9759	1.3019	1.049	970
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio dry gas Mcf/bbl.
1.	1.04	546	1.54	.9072	A.P.I. Gravity of Liquid Hydrocarbons dry Deg.
2.					Specific Gravity Separator Gas .590 XXXXXXXXXX
3.					Specific Gravity Flowing Fluid XXXXX dry gas
4.					Critical Pressure 672 P.S.I.A. P.S.I.A.
5.					Critical Temperature 356 R R

$P_c^* 4827.2$ $P_c^2 23302$					$(1) \frac{P_c^2}{P_c^2 - R_w^2} = 1056$	$(2) \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 1056$
NO.	P _i ²	P _w	P _w ²	P _c ² - R _w ²		
1		1120.2	1255	22047*		
2						
3						
4						
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 1056 \text{ MCF}$		
Absolute Open Flow 1056 Mcfd @ 15.025		Angle of Slope 45°
		Slope, n 1

Remarks: ***BHP was recorded throughout test by means of a pressure bomb @ 11340' - BH pressures extrapolated to mid perf datum @ 11472'. Rate of flow calculations utilized well head pressures.**

Approved By Commission:	Conducted By: J. L. White L. Harmon	Calculated By: D. L. Watkins	Checked By: J. D. Roe
-------------------------	---	--	---------------------------------